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# Gorongosa: A History of an African Landscape, 1921-2014

Domingos João Muala  
*Utah State University*

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GORONGOSA: A HISTORY OF AN AFRICAN LANDSCAPE, 1921-2014

by

Domingos João Muala

A thesis submitted in partial fulfillment  
of the requirements for the degree

of

MASTER OF ARTS

in

History

Approved:

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Christopher Conte, PhD  
Major Professor

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Claudia Radel, PhD  
Committee Member

---

James Sanders, PhD  
Committee Member

---

Mark McLellan, PhD  
Vice President for Research and  
Dean of the School of Graduate Studies

UTAH STATE UNIVERSITY  
Logan, Utah  
2015

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## ABSTRACT

Gorongosa: A History of an African landscape, 1921-2014

by

Domingos João Muala, Master of Arts

Utah State University, 2015

Major Professor: Dr. Chris Conte  
Department: History

Gorongosa: a history of an African landscape, 1921-2014, focuses on changes in the Gorongosa ecosystem, in central Mozambique, southeastern Africa. Environmental changes result from natural, non-human causes and from the activities of humans. I describe four socioecological events: African and Portuguese interactions, Gorongosa National Park, the effects of Mozambique's civil war, and the Park's restoration in the aftermath of the civil war. Prior to European partition of Africa in 1884-85, Mozambique did not exist as clearly a demarcated territory as it is now. Today, the sense of *Mozambicanhood* bears traces of Portuguese colonial era experience. The demarcation of Mozambique's boundaries and the reshaping of the colony until 1975 was a painful process that both the Africans and Portuguese colonialists endured; these physical and social separations from the rest of southern Africa represented the first human-induced changes in southern Africa. The endeavors to reshape Mozambique did not end with political boundaries. Painful processes, including the reshaping of Gorongosa National Park in the Gorongosa



ecosystem, continued after border demarcations. Countless Mozambican and Portuguese lives were lost in the long trajectory within the colony as the Africans and the Europeans all developed a sense of unity in diversity while reshaping their attitude of and about Mozambique. After independence in 1975, internal transformations and wars continued reshaping Mozambique and Mozambicans, as different nationalists sought to maintain their colonial experience. These dynamics marked the environmental history of the Mozambican and Portuguese peoples and are often reflected in the prevalence of high sympathy, which the two peoples share toward one another. GORONGOSA: A HISTORY OF AN AFRICAN LANDSCAPE, 1921-2014, critically celebrates these collective achievements.

(140 pages)

*Key words:* Gorongosa ecosystem, environmental changes, natural resources, human activities, conservation, and sustainability.

## PUBLIC ABSTRACT

## Gorongosa: A History of an African Landscape, 1921-2014

Domingos João Muala,

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To Dr. Al Forsyth

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## CHAPTER 1, INTRODUCTION

### *Creating an Imagined Wilderness in Gorongosa*

“... this sojourn by the Sungue (Urema Plains) will remain one of the most vivid of my memories. The thousands of animals, scattered over the arid plains, the flocks of wading, web-footed, and many other kinds of birds which fly over at sunrise to feed; the peaceful, solemn, yet imposing landscape, bounded on the blue horizon by the mountains of Gorongosa and Chiringoma; all these things will remain graven on my memory.”<sup>1</sup>  
[W. VASSE, Hunter-naturalist, 1904]

The footprint on Haliloa Rock at the top of Mount Gorongosa belongs to Kangamy, a giant and very strong man. Kangamy lived on top of the Mountain. He had a wife. We asked our parents, “Where did the giants come from?” they answered: “From the ancient people. Long, long ago all men were giants, tall, and huge. When they walked, they took huge steps and the earth shook.” In the old days, we had to do a ceremony before we could cross the Mountain where the rock is. There is a tree called “nyakamboli” [*Markhamia zanzibarica*]. Each person who wanted to pass by the Mountain had to take a stick from this tree. When they arrived near Haliloa, they would hold up the stick, so that they wouldn’t die from the storm. The forest was so thick and it was very cold.” [Told by Jordani Dique, in Sadjungira, Gorongosa, 22 August 2009]

The quotations at the beginning of this thesis represent the views over the years of two different groups of people toward changes in the same Gorongosa. One group, represented by the French naturalist Vasse, valued and coveted natural resources in Gorongosa more than they valued the native people.<sup>2</sup> On the other hand, native people like Dique, focused more on community dynamics and on human interplay with the local environment in fact and myth.

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<sup>1</sup> William Vasse, *Three Years' Sport in Mozambique*, (London: Sir Isaac Pitman & Sons, Ltd., 1909), 121.

<sup>2</sup> Vasse, 3-5; Kenneth Tinley, “Framework of the Gorongosa Ecosystem” (D.Sc. Dissertation. South Africa: University of Pretoria, 1977), 81-88, 148-157.



The former group comprises outsiders: initially colonials and naturalists. Later, that former group split in two opposing interest teams: conservationists, supported by environmental scientists, who argued for resource preservation in Gorongosa formed one block, and resource exploiters or entrepreneurs who defended the use of land and natural resources for purely economic purposes formed the contrary block. The latter group has been always the African peoples themselves.

Today, these three groups and their perceptions are clearly reflected in and around Gorongosa National Park (GNP).



Figure 1: Map showing Gorongosa National Park, Gorongosa Mountain on the northwest and some research sites I reached out to often.

The kind of perceptions that Vasse and Dique represented inform this thesis, which traces cultural clashes that have affected the Gorongosa ecosystem from 1921, the year colonial authorities started dispossessing indigenous people of their lands.<sup>3</sup> This thesis explores (1) how different people interacted with the Gorongosa ecosystem, (2) what changes such interactions produced on the landscape, and (3) how the varied interactions with the Gorongosa ecosystem reflected distinct but enduring perceptions.

Ecologists who have studied the Gorongosa region have claimed that its surface features are the richest in elevation gradients and in biodiversity in southern Africa. The region includes Gorongosa Mountain, Gorongosa-Barue Plateau, and Cheringoma Plateau. These three elevated areas constitute the main features of the southernmost trough of the African Rift Valley.<sup>4</sup>

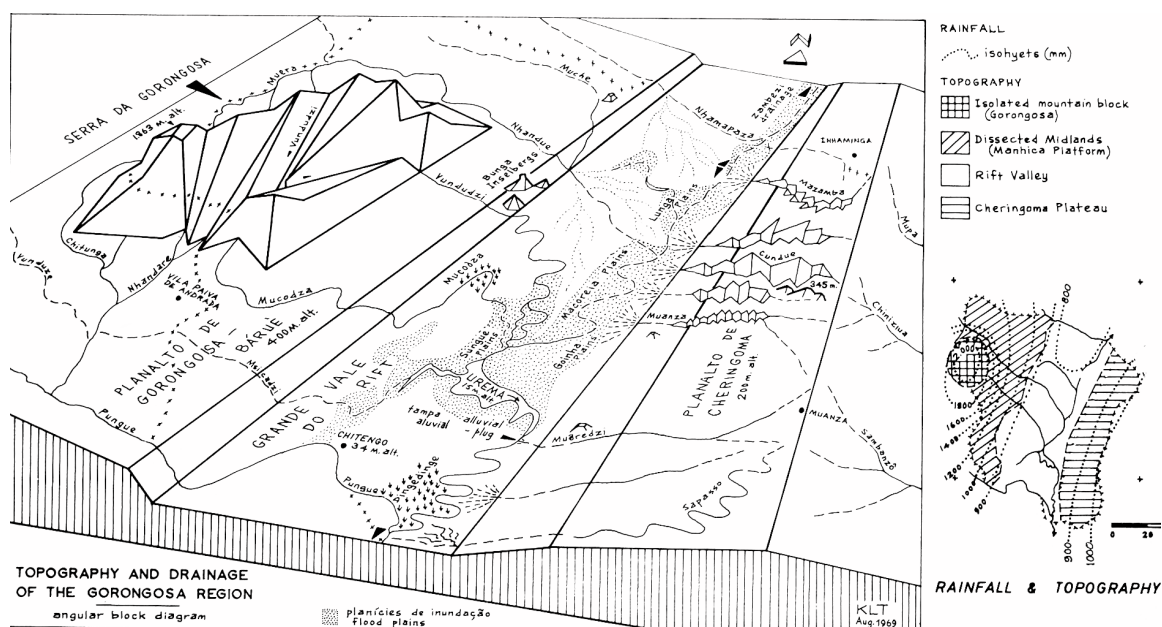


Figure 2. Topographical map of the Gorongosa Region. Source: Tinley (1977)

<sup>3</sup> Silvio Marcus de Souza Correa, “Caça esportiva e preservacionismo na África colonial,” *XI Congresso Luso Afro Brasileiro de Ciências Sociais UFBA – Salvador (BZ)* (Agosto, 2011), 1-18.

<sup>4</sup> Tinley, 24.

When ecologists conducted the first landmark survey of the area in the 1960s and 1970s, they noted these different zones of vegetation, which ranged from rainforests on Gorongosa Mountain to mopane in the Plateau, miombo (brachystegia) forests in the slopes, and vast savannas in the Floodplain. These various formations have sheltered thousands of species in Gorongosa.<sup>5</sup>

Such a rich environment was subject to two agents of change, toward which the environmental scientists held two attitudes. Of course, natural forces (e.g., climate, geological processes, and biota) changed the ecosystem: this was unavoidable and acceptable to the scientists. But the scientists were less accepting of changes from the agricultural activities of indigenous human populations and of colonial entrepreneurs.<sup>6</sup> The scientists held a view of a “natural” ecosystem that was indigenous-free. They claimed that indigenous activities and those of exploiters-entrepreneurs were threats to a “wilderness” environment that they valued highly.<sup>7</sup> Consequently, they advocated restricting the activities of indigenous people and of entrepreneurs and the poachers from both groups, even going so far as to evict those peoples from within the boundaries of the Gorongosa Floodplain in order to preserve an “imagined wilderness.”<sup>8</sup>

Based on lived experiences in the Gorongosa ecosystem and building on oral tradition, interviews with evictees and other villagers, former Park officials and staff, tourists, and by examining Portuguese colonial (archival) documents and Mozambique’s

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<sup>5</sup> *Ibid.*, 158-221.

<sup>6</sup> *Ibid.* 148-157; Edward O. Wilson, “The Rebirth of Gorongosa,” *National Geographic Magazine* (June, 2013): 104-117; For general discussions of indigenous activities, see Laura Westra, *Environmental Justice and the Rights of Indigenous Peoples: International and Domestic Legal Perspectives* (London, UK: Earthscan, 2008) and Daryll Forde, “Introduction,” in Daryll Forde *African Worlds: Studies in the Cosmological Ideas and Social Values of African People*, (Great Britain: Oxford University Press, 1963).

<sup>7</sup> For a discussion of this process in Tanzania, see Roderick Neumann, *Imposing Wilderness: Struggles over Livelihood and Nature Preservation in Africa*, (Berkeley: University of California Press, 1998).

<sup>8</sup> Tinley, 24-29.

post-colonial records, I examine four forces for change in the Gorongosa environment: natural forces, indigenous subsistence activities, entrepreneurs, and the intervention of scientists from outside who interacted with the indigenous human players and the ecosystem.

Throughout history, life in Gorongosa, from every perspective, has had to cope with natural and cultural challenges as insiders (Africans) and, ultimately, outsiders clashed, and evolved. This paper provides important historical lessons about how past socioecological dynamics shaped and reshaped the ecosystem and its human actors. It describes the groups' major forms of natural resource use, the effects of indigenous historical exclusion from traditional lands, the civil war and consequent wildlife decline, and the restoration activities that have marked the Gorongosa ecosystem. Ultimately, this thesis argues that a gradual but mutually agreeable integration of both indigenous' and preservationists' concerns and priorities is essential to improving current levels of resource conservation and sustainability, while respecting the perspectives of both Africans and outsiders who are committed to the viability of Gorongosa.

### *Thesis Structure*

This thesis is comprised of five chapters, including the Introduction. Chapter 2 compares forms of natural resource use between indigenes and Portuguese colonials. This begins with brief reviews, first, of indigenous settlement of the Gorongosa ecosystem and the shaping and reshaping of local perceptions, followed by other actors' definitions of Gorongosa. The chapter demonstrates how different ethno-linguistic peoples developed common ways of using land, flora, and fauna before the major socioecological

disruptions, resulting from Portuguese imperialism, which in Gorongosa intensified in 1921, and lasted until 1975. Chapter 2 also provides a background for understanding this period and the present. I employ colonial archives, secondary sources, interviews, and oral tradition in order to argue that the people who became indigenous to Gorongosa had multiple origins. The Gorongosa ecosystem reshaped the newcomers, despite their varied origins. In return, the new inhabitants reshaped the ecosystem: they humanized wild landscapes with land clearing and cultivation; hunted fauna and harvested trees; managed micro-ecosystems with fires; named different territories with eponyms and toponyms; and adopted totems (an animal or plant each clan adopted as part of its family and therefore did not eat nor kill it, eating other species) to protect and balance resource consumption, practices which they often conducted after performing Mbhamba rituals to their ancestral spirits. This chapter demonstrates how some of these forms of land and resource interaction and use converged and intersected with colonial patterns of land and resource use in the Gorongosa ecosystem before 1921.

Chapter 3 traces the period from 1921, with the creation of Gorongosa Game Hunting Reserve and subsequent boundary expansions, to 1975, when Mozambique gained political independence from Portugal. The chapter's focus is Gorongosa under colonialism. The chapter describes how the greater Gorongosa ecosystem became a land of multiple human claims, resulting in intense disputes among indigenous peoples, the Portuguese colonial regime, and many other resource exploiters from outside Gorongosa. These disputes disrupted prior claims to land and resource ownership. The colonialists, who upon arrival were the first resource poachers and self-proclaimed resource owners, then criminalized the former owners, the indigenous people, to prevent their access to the

land and its resources. Based on local experience, interviews, colonial archives, and oral traditions, this chapter demonstrates how locals' retaliations varied, including but not limited to law breaking, connivance with resource exploiters, and silence and passivity instead of denouncing the transgressors. I will argue that indigenous repeated wildlife poaching, tree felling, trespassing, and arson have resulted in a new understanding of and attitude toward human-environment interactions within the Gorongosa ecosystem.

Chapter 4 covers the period between 1976 and 1992. Mozambique experienced a civil war, causing major disruptions to native life and to the Gorongosa ecosystem. Nationwide, about a million Mozambicans died directly in the war. Thousands of others died from problems related to the war. The war drove other thousands of people into refugee camps within Mozambique's neighboring countries. And since Gorongosa was the key battlefield, the ecosystem, the people, and Gorongosa's diverse wildlife suffered considerable slaughtering and associated trauma.<sup>9</sup> This chapter analyzes why Gorongosa became the hub of the civil war and consequently, how the ecosystem was severely stressed and the people traumatized.

Chapter 5 narrates the reconstruction of the Gorongosa ecosystem in the aftermath of the civil war and describes concerns about ethical issues regarding the park management and sustainability. It covers the period between 1993 and 2014. The major events that marked this period included the initial attempts to restore Gorongosa National Park from 1995 to 2004 followed by a more ambitious public and private restoration program conceived by the government and a foreign sponsor. Despite improved communications (networks of roads, telephone, television, radio, etc.), electricity, the

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<sup>9</sup> For a good description, see David Alexander Robinson, "A Curse on the Land: A History of the Mozambican Civil War" (PhD dissertation. University of Western Australia, 2006).

municipalization of Gorongosa town, and local elections, 2013 saw a resurgence of civil and military unrest in Gorongosa. Perceptions of landscape are evolving and violence continues to foster more changes within the ecosystem. This chapter argues that by encouraging indigenous needs for resource conservation, the current level of natural resource restoration, conservation, and sustainability improves when Gorongosa National Park's adaptive restoration programs include: (1) a gradual integration of the indigenous Gorongosans into conservation activities; and (2) an increased sharing of leadership responsibilities at all structural levels of the ecosystem and biodiversity management in Gorongosa.

## CHAPTER 2, THE ERA OF AFRICAN PREDOMINANCE, 1850S-1921

*How Did the Ecosystem Change When African Agencies Predominated?*

Whether through the consecutive migrations of the Khoisan or Bantu peoples to southern Africa, Africans were the first to settle in the Gorongosa ecosystem. Depending on seasonal abundance or scarcity of flora and wildlife resources, these Africans hunted and gathered all around the Gorongosa ecosystem. They cooperated, conflicted, and competed among themselves over the use and control of natural and cultural resources. As these human-ecosystem dynamics unfolded in Gorongosa, both the ecosystem and the humans transformed each other while the human agency established and evolved. Let us take Chitengo's migrations and resettlements for examples. Chitengo was an African warlord. He migrated from the south to central Mozambique.<sup>1</sup>

Sometime in the early 1800s, Chitengo resettled in Barue, an area northwest of Gorongosa District. Then, he moved to resettle in Massara, northwestern Gorongosa Mountain, presumably in the late 1850s.<sup>2</sup> Between 1897 and 1900 Chitengo migrated from Gorongosa Mountain and resettled with his people near Pungue River in the Rift Valley Trough, about 15 to 80 meters above sea level.<sup>3</sup> By the River, Chitengo obtained his piece of land from two local headmen, Chicare and Nhanguo. While Chitengo readjusted to the Valley, about 33° C from November to early March, the owners of the land competed to influence him.

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<sup>1</sup> Interview with João Alface Nkungu Chitengo, descendant of Chitengo. Magoe-Gorongosa. June 2008.

<sup>2</sup> Jorge Luis P. Fernandes, *República [Popular] de Moçambique: Alterações Toponímicas e os Carimbos do Correio* (Portugal: Edições Húmus Lda., 2006), 105.

<sup>3</sup> Kenneth Tinley, "Framework of the Gorongosa Ecosystem" (D.S.C. Dissertation. South Africa: University of Pretoria, 1977), 5.





Figure 3: In 1903, Chitengo and his family resettled in the Floodplain. Picture courtesy Vasco Galante (Gorongosa National Park).

Manecas Chicare, Chuva Nhanguo, and João Alface Nkungu Chitengo, descendants of the former three headmen, remembered that the dispute settled when Chitengo married a daughter of Nhanguo and Chicare married a daughter of Chitengo.<sup>4</sup> From 1948, the Portuguese colonists also migrated from the coastal region of the Indian Ocean to the hinterland. They resettled the Chitengo area and turned it into their main headquarter in the Gorongosa Floodplain.

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<sup>4</sup> Interview with Chuva Nhanguo, Manecas Chicare, and João Alface Nkungu Chitengo. Chitengo-Gorongosa National Park, April 2009.

This chapter argues that the Gorongosa ecosystem reshaped settlers despite their varied origins, and that, by cooperating and competing to access the resources, the immigrants humanized Gorongosa's wild landscapes with their subsistence activities. Emmanuel Kreike argued that landscapes, whether in African or modern conception, were social constructions. He claimed that landscapes were invented and reinvented whenever needed. Kreike studied Angola, Namibia, and Mozambique, focusing on human mobilities in the late precolonial, colonial, and postcolonial era, when indigenous, European, and nationalist agencies consecutively moved and cast familiar landscapes in the new environments they resettled. Kreike criticized much portrayal of indigenous peoples as victims of European agency and argued that Africans pioneered, re-creating "Eden" wherever they resettled.<sup>5</sup> For Matthew D. Turner, the way people (indigenous, environmentalists, and scientists) understand, utilize, and protect nature reflects their environmental knowledge, which is often perceived, inspired, produced, and circulated by the politics of those who have the needs and the abilities to legitimize certain environmental practices at expense of other actions.<sup>6</sup> As various settlers in Gorongosa readjusted to new micro-ecosystems, their naming of places, land cultivation, and other activities recreated humanized landscapes, defining particular ways of socioecological interactions.

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<sup>5</sup> Emmanuel Kreike, *Re-Creating Eden: Land Use, Environment, and Society in Southern Angola and Northern Namibia* (Portsmouth, NH: Heinemann, 2004), 1-2.

<sup>6</sup> Matthew D. Turner, "Introduction of Environmental Knowledge: Scientists, Complex Nature, and the Question of Agency," in Maria J. Goldman *et al* (eds.) *Knowing Nature: Conservation at the Intersection of Political Ecology and Science Studies* (Chicago & London: The university of Chicago Press, 2011), 25-29.

*Different Voices about Gorongosa, Co-operations, and Contradictions*

From immemorial times, different people have discovered, settled, and turned Gorongosa into a human habitat, ultimately enriching our understanding of dynamics in the ecosystem. Each group inhabiting and working in Gorongosa over the years brought with it its own perspective, unique to its circumstances. Together, they have indicated the existence of many different Gorongosas.

Native peoples (Gorongosans) have defined Gorongosa in ways essential to their existence. Their perceptions of Gorongosa were the most varying and I trust the examples I have chosen across the spectrum of their perspectives help emancipate their voices, joining them to well known political and scientific perceptions of Gorongosa.

Starting with local gold miners, for example, their perceptions of Gorongosa evolved around alluvial gold mining. They loved a rainy Gorongosa, from November/December to early March, which generated fast running streams. This season eased the digging of stones, washing them right away. Mining zones like Tsiquir, Seventy-Six, Muera, Vunduzi, Macossa among others in the Greater Gorongosa Ecosystem defined the Gorongosa that miners envisioned.<sup>7</sup> Of course, for shifting agriculturalists rainfall also defined their Gorongosa.<sup>8</sup>

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<sup>7</sup> Interview with Ezequiel Sozinho, Matucudur-Gorongosa, December 2012.

<sup>8</sup> Interview with Mirione Joanota, Sabite Elicha, João Manejo, Gorongosa, June 2011.



Figure 4: Gold miners in Tsiquir, Gorongosa. 27 December 2014. Photo courtesy João Fava.

Homebuilders benefited from ecological degradation and erosions. Stream sand-miners defined Gorongosa through rain. They needed rain to erode more sandy soils from denuded plots upstream so that they had enough sand to dig and sell. This desire for soil erosion included builders who encouraged the soil digging economy. More sand deposited in riverbeds meant an attractive Gorongosa to dwellers related to cement building activities.<sup>9</sup>

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<sup>9</sup> Interview with Mateus, Mapombue-Gorongosa, December 2012.





Figure 5: Sand miners along Mapombue-Ndoco River. Mapombue-Gorongosa. 25.01.2012. Photo by Domingos Muala.

Park managers and rangers defined Gorongosa through the challenges to protect the contested resources within Gorongosa National Park. For example, for Celestino Gonçalves and Mendes Sequeira, both former chiefs of rangers in the GNP, Gorongosa invoked memories of walking about 500 kilometers on foot patrolling against poachers and other outlaws.<sup>10</sup>

For some ecologists, Gorongosa included Mount Gorongosa, Gorongosa-Barue Plateau, Cheringoma Plateau, and the Rift Valley Trough to which those elevated gradients drain water and detritus.<sup>11</sup> Geologists told stories about Gorongosa that began

<sup>10</sup> Interview with Celestino Gonçalves, Lisbon, Portugal, 10 July 2014.

<sup>11</sup> J. M. Mafalacuser and M. R. Marques, *O Potencial dos Recursos Agrários do Distrito de Gorongosa e Possibilidades de Desenvolvimento*, República de Moçambique, Direcção Provincial de Agricultura e Desenvolvimento Rural de Sofala, Programa de Desenvolvimento Rural, Sifala, Maio 2000, p. 20.

with Gorongosa Mountain. They argued that the forested Mountain, comprising of seven main peaks, derived from tectonic occurrences started in the Triassic. Geologists claimed that major tectonic occurrences, such as the formation of the Rift Valley and Mountain ranges, which affected Gorongosa geology, were extensive to Eastern Africa.<sup>12</sup>

In the eyes of some conservationists Gorongosa was a green island massif, occupying an area of about 640 square kilometers. The mountain provided Gorongosa's wildlife with water and vegetation. Gorongosa Mountain was much greener compared to wider expanses of deciduous forests and savannas surrounding the massif. The savannas appeared striped with stream water draining into the African Rift Valley Trough. Below Gorongosa Mountain the landscape was tinted with uneven green patches, ascending smokes, and clayish soils.<sup>13</sup>

For hydrologists like Richard Beilfuss, Gorongosa was defined through a set of crucial natural streams, water basins, and aquifers. In this Gorongosa, rivers such as Nhandar, Vunduzi, Chitunga, all rising on Gorongosa Mountain, mattered the most because they distributed enriching water to the plains below.<sup>14</sup> Vasse even viewed the far away great Zambezi River as crucial to the Gorongosa ecosystem.<sup>15</sup> Over a century later, Allen Isaacman claimed that Zambezi damming at Cahora Bassa in the 1960s indeed

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<sup>12</sup> AHU- A. Vasconcelos Pinto Coelho, "Estudos, Ensaios e Documentos 42: Primeiro Reconhecimento Petrográfico da Serra da Gorongosa (Moçambique) (Lisboa: Ministério to Ultramar, 1958), Conta A/805.

<sup>13</sup> Edward O. Wilson, "The Rebirth of Gorongosa," *National Geographic Magazine* (June, 2013): 104-117; Interview with Felisberto Chombe, Vila Gorongosa, 21 July 2013.

<sup>14</sup> Richard Beilfuss and Franziska Steinbruch, "Gorongosa, Long-Term Hydrological Research Plan FINAL" (Gorongosa National Park: Scientific Department Services, 2007), 1-26.

<sup>15</sup> William Vasse, *Three Years' Sport in Mozambique* (London: Sir Isaac Pitman & Sons, Ltd., 1909), p. 153.

altered ecosystems, including Gorongosa, that depended on the natural flow of the Zambezi on the way to the Indian Ocean.<sup>16</sup>

Since the end of the civil war in the early 1990s, ethnohistorians viewed Gorongosa through human actions on the landscape, mainly human struggles for survival. Their Gorongosa was a resilient landscape under a process of restoration, which began about 1995 guided by recollections of wildlife dynamics before a disruptive civil war. Memories of a socially peaceful prewar past served as a basis for war survivors to reconstruct their disturbed common landscape.<sup>17</sup> Anthropologists sometimes perceived Gorongosa through the lens of gender. In Gorongosa, local women overcame war traumas and traditional chores that kept them housebound by adopting new Christian religions, which offered messages of hope in the aftermath of the civil war.<sup>18</sup>

Tourists defined Gorongosa landscapes differently. One of the tourists I interviewed, Andrew Henry Misdorp, focused on flora and fauna interactions in the reshaping of the ecosystem. Back in the 1950s and 1960s, Misdorp had seen a Gorongosa that teemed with megafauna that used to browse sprouting flora in the Gorongosa National Park. And the Gorongosa his ancestors had experienced in the 1930s was considerably more treeless than the landscape is today. Misdorp revisited Gorongosa in 2011. He described an ecosystem in which a civil war had depleted the megafauna, a Gorongosa that was a lost Eden busily turning miles and miles of open savannas into closing forests. Worse still, the forests closed tourist routes, which in the 1930s through

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<sup>16</sup> Allen Isaacman and Barbara Isaacman, *Dams, Displacement, and the Delusion of Development: Cahora Bassa and Its Legacies in Mozambique, 1965-2007* (Athens: Ohio University Press, 2013), 40-44, 124-135.

<sup>17</sup> For an excellent work describing this process, see Todd Jeffrey French, "Like Leaves Fallen by Wind: Resilience, Remembrance, and the Restoration of Landscapes in Central Mozambique" (PhD dissertation, Boston University, 2009).

<sup>18</sup> For a excellent work on gender and Christianity, see Christy K. Schuetze, *The World is Upside Down: Women's Participation in Religious Movements in Mozambique.* " (PhD dissertation, University of Pennsylvania, 2010).

1950s accessed open spaces.<sup>19</sup> By contrast, Misdorp's overgrown Gorongosa was perceived by National Geographic as a success story about the restoration of war-torn ecosystems.<sup>20</sup>

Renamo (Mozambique National Resistance) soldiers interpreted Gorongosa, especially Gorongosa's Mountain ecology, as a natural ally in their conflict with the Frelimo government, as Frelimo once did in their own war of liberation with the Portugal. They each adopted Gorongosa Mountain as a strategic hub for their military. Whenever armies have clashed on the Mountain, no matter their allegiance, the result has been the same – the mountains ablaze – flora and fauna devastated by gunfire and explosives.

Keeping in mind Matthew D. Turner's argument (the way people understand, utilize, and protect nature reflects their environmental knowledge, which is often perceived, inspired, produced, and circulated by the politics of those who have the needs and the abilities to legitimize certain environmental practices at expense of other actions), of all the perspectives I have presented about Gorongosa, only the environmental politicians, the Mozambicans who legislate how Gorongosa land, flora, and fauna must be used, and the environmental scientists, the people who study Gorongosa ecosystem, have spread their propaganda over the others, legitimizing their perceptions through press, mass media, and modern education.

### *The Earliest Settlers*

The people who became indigenous to Gorongosa had multiple origins.<sup>21</sup> Scholars who studied the Gorongosa ecosystem and the East African environments drew similar

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<sup>19</sup> Interview with Andrew Henry Misdorp, Gorongosa National Park, 27 August 2011.

<sup>20</sup> National Geographic, "Gorongosa: Africa's Lost Eden," *National Geographic Film* (2008).

<sup>21</sup> French, 109.



conclusions about multiple migrations.<sup>22</sup> Some of them argued that West and Central African peoples migrated to occupy the Southern Africa territories many thousands of years ago.<sup>23</sup> Others concluded that already settled African pastoralists and warlords from southern African, pressured by environmental and social constraints, moved about and resettled different ecologies in the southeastern region, especially from the sixteenth century.<sup>24</sup> Other scholars used historical linguistics to help tell how different ethnolinguistic groups spread from East African environments to Southern and Central Africa a thousand years B.C and 400 years A.D in search for better ecosystems.<sup>25</sup>

Late in the 1880s, Portuguese colonial officials exploring Gorongosa for future colonial exploitation claimed that Gorongosa did not possess indigenous settlements.<sup>26</sup> The truth is that, in terms of food availability, Gorongosans settlements used to be seasonal and highly mobile, always following seasonal abundance of plants, fruit, tubers, wildlife, fish, and other natural resources. Politically, Gorongosans settlements depended on good political relationship with their own leaders and with powerful neighbors. Ecologically, Gorongosans settlements depended on how their bodies reacted to certain eco-regions they settled. For example, if settling by Urema Lake, next to a pond or by any stagnant water made them vulnerable to malaria and other water born diseases and, consequently, some of their family members died, a few days after the burial Gorongosans moved to resettle other eco-regions. This nomadic lifestyle eluded the Portuguese whose settlements and land property tenure were permanent. Obviously,

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<sup>22</sup> Christopher A. Conte, *Highland Sanctuary: Environmental History in Tanzania's Usambara Mountain* (Athens: Ohio University Press, 2004), 18-32.

<sup>23</sup> Erik Gilbert and Jonathan T. Reynolds, *Africa in World History: From Prehistory to the Present*, (Boston: Pearson, 2012), 25-46.

<sup>24</sup> French, 103. Isaacman and Isaacman, 34-35.

<sup>25</sup> For a broad overview of language and history, see especially, Ehret.

<sup>26</sup> Joaquim Carlos Paiva de Andrada, "Relatório de uma Viagem às Terras dos Landins" (Lisboa: Imprensa Nacional, 1885), no page numbers.

within the context of European partition of Africa and of long colonial settlements along the coastal region of the Indian Ocean, pretending that the remote Gorongosa was indigenes-free by the 1880s legitimized colonial occupation of “unoccupied lands.” However, by the early 1900s, when the Portuguese colonials crisscrossed Gorongosa Mountain, Plateau, and Floodplain for effective colonization, they discovered Gorongosans’ scattered housing. It was then that the colonialists realized that Gorongosa was not indigenes-free. As a result of Portuguese interactions with Gorongosa’s ecosystems and local peoples, their 1960s’ colonial archives reported many indigenous Gorongosans living surrounded by various other indigenous groups.

My own 12-year living and researching in Gorongosa revealed that Gorongosans had different origins. Their local teachings suggested to me that the earliest settlers were from different southern African settlements and that they successively migrated into the Gorongosa ecosystem.<sup>27</sup>

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<sup>27</sup> See the collected oral traditions in Virlana Tkacz and Domingos Muala, *Tales from Gorongosa*, (USA: Carr Foundation, 2009); and interviews with Joao Alface Nkungu Chitengo, Mousinho Juliasso Famba, Francisco Seda, Celestino Sacaune Canda, Ambrosio Ngaugaque Tsamanea, Manenca Campira Jairone, Gero Trabuco, in Gorongosa, 2007, 2008, 2009, 2010.



Figure 6: Map offered by Gorongosa National Park. This map shows different origin claims by different people I asked in the Gorongosa District.

So, whichever origin claims different peoples in Gorongosa have traced, the most important aspect this brief description demonstrates is that the Gorongosa ecosystem reshaped the settlers. How? On Gorongosa Mountain, because the terrain is very uneven, each peak's carrying capacity forced Canda, Sadjungira, Tambarara, and their settler families to split yards, establishing pockets of housing in Nhandar, Nhauenje, Nhancuco, Nhabirira, Nhauranga, Nhancuma, and in other separate hills and slopes. Then, these mountain settlers climbed up and down the peaks in order to reach their relatives and maintain social interactions. On the Plateau, where most Tambarara settlers spread, the availability of leveled terrains allowed families to respond by building housing in clusters of clans. In the Gorongosa Floodplain where terrains are vulnerable to flooding, Chicare,

Nhanguo, Chitengo, and other settlers established housing selecting elevated spots. Like the rugged mountains, each island's carrying capacity in the Floodplain determined the number of families that could live closely together.

Gorongosa settlers answered to these different land configurations, humanizing the landscape with ancestral rituals (*Mbhamba* ceremonies), hunting, totems, and purposeful fires intended to manage wild environments. They also farmed and harvested trees for housing. They used eponyms, and toponyms. Through these practices, each group of newcomers created their particular "imagined landscape" in the Gorongosa ecosystem. Bearing different origins and multiple influences, what characterized the Groupings was a better exploitation of natural and cultural resources.

Grouping was one of the many strategies Floodplain, Plateau, and Mountain settlers devised to survive in the ecosystem. Based on neighborhood and family kinship, Gorongosa settlers formed small groups or bands to better exploit natural resources more cooperatively than competitively, as Darwin suggested. How did Grouping ease the exploitation of natural resources in those different micro-ecosystems they settled within Gorongosa?

Floodplain narratives portrayed dynamics of settlers and wildlife taking turns to follow their particular food chains. Pereira Charles, a former ranger at Gorongosa National Park whose grandparents and parents lived in the Floodplain before the wildlife protectionist laws, was one of the many Floodplain peoples teaching me about this old strategy of Grouping. He reminded me that living in that habitat forced bands of their ancestors to study wildlife movements, avoiding human-wildlife conflicts. Charles marveled at how the golden-brownish striped savannas of the hot season, from July to

mid-December, turned into greenish land cover from December to May-June. Tracts of evergreen forest meandered along streams, marshes, and spring basins in the dry season. In search for refreshment, prolific herds of impala, prides of lions, and other species dared to confront crocodiles in the natural streams.

Charles's memories of elephant, rhinoceros, and hippopotami focused on pachyderms grazing during the nights, early mornings, and late afternoons. Although vultures, marabou, plathythyrea, odontomachus, and even matabele ants moved at any time, for Charles elephants retreated into forest shades during the humid, boiling hours in the Floodplain. The most striking recollection was Pereira's interpretation of process. Natural shifting provided harmony that allowed for groups of human to take turns hunting in the savannas and foraging in the arid heat of the African Rift Valley Trough. "Unless it was a rainy day as it sometimes happened," Charles tranced, "most bulky grazers refreshed preferably early in the morning. Nature ruled over humans who had to wait in their kraals, figuring out when to gather food after wildlife retreated."<sup>28</sup> For Jan Vansina, although oral tradition is created in the present, such messages produced in the present have some continuity from the past. "Performances (of oral tradition) do not occur haphazardly."<sup>29</sup>

Varied memories of Gorongosans dwelling in the area between the Floodplain and Gorongosa Mountain reflected different resource use strategies, but a similar Grouping approach. Talking about personal experience in the Plateau, Albino Dos Guentes, a Catholic catechist-teacher, recalled peasants hoeing vast areas of land for

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<sup>28</sup> Interviews with Paulo Dombe, Pereira Charles, Mouzinho Juliasse Taona Famba, Silva Bacar, Ráice Moreze, Manença Jairoce Campira, Celestino Sacaúne Canda, Jando Nhanguo, Jorge F. A. Tambarara. Gorongosa, 2007 and 2008.

<sup>29</sup> Jan Vansina, *Oral Tradition as History* (Madison: The University of Wisconsin Press, 1985), 94-95.

crops. He remembered that the peasants bartered agricultural produce with meat and fish that were staple food of the Floodplain dwellers. When Dos Guentes became one of the first native teachers in colonial Gorongosa in the 1940s, he moved back and forth between remote Gorongosa and the First and Second Grade missionary schools scattered around new villages in the Plateau and Mountain. Dos Guentes resented professional segregation in the colonial Gorongosa as he and other indigenous teachers were often assigned to work in the remote areas “because the one official school in the Vila Paiva de Andrada (today’s Vila Gorongosa) was reserved for white Portuguese teachers and another school near the town was equally managed by white clergy.”<sup>30</sup>

Native teachers walked and worked far from the urban areas and they internalized the landscape. Dos Guentes felt lucky. He did not have to take turns with wildlife in the Floodplain as he only got as far as Nhambita’s First and Second Grade missionary school, which is more than 35 km away from Lake Urema, the hub of Gorongosa’s wildlife. He and his fellow African teachers walked safely to different remote schools where they taught European values to other Gorongosans. Dos Guentes interacted more with peasants running indigenous economic activities in other remote Gorongosa areas rather than the Floodplain dwellers engaged in kraals, waiting for elephants to settle in forest shades. Caught between church affairs on weekends and the teaching in primary school on weekdays, Dos Guentes did not enjoy the urbanizing life and frenzy clustering around the Vila either. In sharp contrast with Pereira’s Floodplain dynamics, Dos Guentes’s recollected how groups of women with little babies tied at their backs, often accompanied older children-babysitters, carrying hoes, machetes, axes, and snacks early in the mornings going to their farms or returning in the afternoons. He also recounted

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<sup>30</sup> Interview with Albino dos Guentes, in Matucudur, Vila Gorongosa, August 2007.

men clearing forests in the Gorongosa Plateau to expand farming plots for more food that they sold to pay house taxes.

A third striking resource exploitation story appears in Daina Santinho's political economy around Mount Gorongosa. For the 83 year-old Daina, a family cemetery close to their homestead reminded her of an old land division of a boundless rainforest. Mbuia Daina, as everyone else respectfully referred to her, was the second wife of the Nhauenje headman Verniz Alface. Mbuia Daina Santinho's family had long ago been allocated land. Their tract stretched for more than five kilometers, annexing sections downhill by the Zingazinga River. Similarly, other old families around the Mountain had been allocated lands by headmen. Local political authority assigned community headmen like Verniz Alface and chief Nyataka, the headman to whom Alface reported, the right to allocate lands to new immigrants in the Tambarara chieftaincy.

"Nhauenje residents revered Verniz Alface," Daina Santinho recollected. They called him *mfumu*, the one whose work implied dealing with local family heads, while Nyataka was called *sapanda*. Besides *mfumu* Verniz Alface, *sapanda* Nyataka had other *mfumus* in his jurisdiction, "They helped him control resource use," Santinho remarked. Sapanda Nyataka reported directly to *nyakwawa* Tambarara, their most influential traditional chief whose political decisions were channeled from him to seven *sapandas* through 53 *mfumus* and finally down to family heads of well over 40,000 inhabitants in an area reduced to 101,503 ha.

Family heads, especially newly arrived African immigrants at the foothill, were allocated their most valuable resource – the land – under these layered chains of customary authorities; land "in which the settlers were free to subdivide, setting aside

tracts of terrain for housing, farming, hunting, fishing, and a family cemetery.”<sup>31</sup>

Santinho’s perception of land distribution and control confirmed Matthew D. Turner’s claims that “the way people understand, utilize, and protect nature reflects their environmental knowledge, which is often perceived, inspired, produced, and circulated by the politics of those who have the needs and the abilities to legitimize certain practices at expense of others.”

Santinho’s Mountain political ecology provided a basis for understanding clan organizations and local social structure, the interdependence between individual families, local polities, the labor force, and ancestral shrines symbolized by the cemeteries. “‘Building’ here has a range of meanings – material, social and religious,” claimed McAllister. Indeed, once settled, new co-operations, conflicts, and competitions among various Mountain families evolved, depending on the specific demands for resources.

For Canquene Andicene, a mountain elder of Sadjungira, the extinction of Mount Gorongosa’s big game resulted from cooperative hunting – Grouping. Interfamily bands of mountain hunters were occasionally coupled with European colonists in cooperative hunting:

Men were the hunters here on Mount Gorongosa. Women never participated. There were buffalo, lichtenstein’s hartebeest, waterbucks, elephants, and other big game. Locals as well as some white people linked to Companies that extracted resources in this area also hunted big game here on the mountain, besides hunting in the game reserve. When a game was killed, the distribution of the meat started on the following day. Nearby people benefited from the meat, according to family size. Even the widows took part. I never heard of a woman hunting here.<sup>32</sup>

The four reminiscences Pereira, Dos Guentes, Santinho, and Andicene unveiled about Grouping dynamics in the Floodplain, Plateau, and Mountain were but a few

<sup>31</sup> Interview with Daina Santinho, Nhauenje-Tambarara, Gorongosa, 30 May 2009.

<sup>32</sup> Interview with Canquene Andicene, Nhauliri-Sadjungira, Gorongosa, 14 May 2009.



examples of peasantry natural resource exploitation strategies effected through Grouping. Keeping in mind this thesis central argument – that environmental changes result from natural, non-human causes and from human activities – the Grouping strategy is critical to understanding how human activities changed the Gorongosa ecosystem, reshaping the ecology through ritualizing social organization. When reading these four memories about Gorongosa, the reader should quote Vansina: “Where would social imagination find the stuff to invent from? How does one explain cultural continuities?”<sup>33</sup>

*Transitioning from Subsistence to Colonial Economy, Grouping Continued Easing Resource Exploitation in Gorongosa*

From the 1800s to 1920s, there were not many free people on Gorongosa Mountain, Plateau, and Floodplain. Gorongosans were usually captured either by neighboring indigenous emperors, such the Barue in the northwestern Mount Gorongosa, or they were enslaved by white colonists establishing in the Gorongosa ecosystem. The Gorongosans who escaped capture led their subsistence economy. They effected the exploitation of natural resources in the particular eco-regions they lived resorting to Grouping. Taken by fear and uncertainties, they ritualized their household and community activities through *Mbhamba*, an ancestral ritual, until colonial wage economy introduced migrant labor in the area.<sup>34</sup> Before the colonial economy, many *prazeiros do Vale do Zambezi* (a Portuguese system of landlord colonists) captured and exploited Gorongosans whose work sustained Gorongosa’s large estate known as *Prazo da Gorongosa*. Historian Malyn Newitt described how from about the 1500s to the 1930s the

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<sup>33</sup> Jan Vansina, 94.

<sup>34</sup> Newitt and Dewitt, 217-298; Patrick A. McAllister, “Using Ritual to Resist Domination in the Transkei,” in Andrew D. Spiegel and Patrick A. McAllister eds., *Tradition and Transition in Southern Africa* (New Brunswick, New Jersey and London: Transaction Publishers, 1991), 134-136.

Portuguese Crown leased the Zambezi River basin to Afro-Portuguese and Goans. The Gorongosa ecosystem fell under the Zambezi River basin and Grouping eased the exploitation of resources as many landless Africans came to depend on the Afro-Portuguese and Goans for land and work. Given the land, Grouping eased African works where some labored as farmers, gold miners, hunters, fishers, or carpenters, and so on. Describing how the Goan Manuel Antonio de Sousa (Gouveia), one of the last and foremost Indo-Portuguese *prazeiros da Gorongosa*, used Grouping strategy to accumulate wealth, Vasse stated:

He is one of the most remarkable figures in the history of the country, this Goa half-caste, who succeeding his uncle, took on a lease from the Portuguese Government an immense territory where he pillaged, ravished, decapitated, acquired the monopoly of commerce and of elephant hunting and enthralled in a most despotic yoke entire nationalities. At one time he aided the Portuguese against the English in their frontier wars, and received as a reward the title of captain. Made prisoner by the English and taken to Europe, he came back to reign once more; but ended by perishing miserably in an ambush in the course of an expedition against the Barwé people.<sup>35</sup>

Gouveia's ruthlessness was part of his era's brutality. Nguni, Barue, and other regional warlords equally forced their captives into resource exploitation through Grouping. Therefore, the people who settled in the Gorongosa ecosystem used Grouping to run their subsistence economy and, when the regional economy transitioned, they were among the coerced. Violence, raids, and military expeditions to Gorongosa contributed to foster more ecosystem changes at the same time that droughts, and other unpredictable natural disasters reinforced the settlers' need for Grouping and much reliance on the *Mbhamba* rituals.

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<sup>35</sup> Vasse, 90.

*Experiencing Occasional Mbhamba Performances: Two Lions Competing for a Lioness in the Chitengo Safari Camp.*

Two lions broke Chitengo's wired fence around 9:45 pm, on 25 June 2010. The feline entered through the staff's tented section, causing panic to most people in Chitengo. 25 June is Mozambique's Independence Day, and that year the country celebrated 35 years of political freedom from Portugal's colonial regime. Park staff and tourists cheerfully enjoyed pies, fries, beer, and wine seated around fireplaces on that cold night in June. South African tourists, who had fled their country's 2010 World Cup, commented about the games back home and complained about not having seen lions during the day's safari in Gorongosa National Park. Suddenly, a roaring filled the camp, stopping celebrations. Fireplaces were abandoned. The camp's lamps were switched off. Two male lions competed to possess the lioness, which nursed three cubs outside the fence, just a few meters away from the bloody fight. With everyone deeply perturbed, senior Park managers and scientists came up with solutions. They suggested that Adolfo Ruco, head ranger at the Park, and his team drive powerful cars into the area. The managers and scientists believed that the noise from their car horns, movement, and flashlights around lions would scare the fighters away. Ruco whirled three land cruisers around the scene to no avail. For long time, the beasts carried on with the fighting.

It was then that rangers indigenous to Gorongosa chose Inácio Camungueremo to perform *Mbhamba* ritual, begging Chitengo, the ancestral guardian of the safari camp area, for peace. They gathered corn flour, cooked meat, raw tobacco, matches and a coin. The managers contributed with liquor, Coca-Cola, and two pieces of black and white fabric. Camungueremo unshod. He kneeled under a random tree, and surrounded by other rangers who rhythmically clapped hands a few meters away from the lion conflict,

Camungueremo invoked Chitengo. At the same time, Camungueremo carefully poured corn flour, tobacco, and the drinks down onto the white and black fabric laid down on the roots of the tree. Camungueremo then begged Chitengo for mercy and forgiveness ‘if the lions’ fight in the camp is revenge against any persons’ breaking local ancestral code.’ Minutes after the performance of the *Mbhamba*, the roaring and fighting ceased in the camp.

*The Mbhamba Rituals – Responding to and Assuaging Violence*

*Mbhamba* was a set of ancestral religious rituals that could be interpreted as comprising one cult. The rituals represented an ideological expression of the Grouping strategy to better respond to challenges. This cult derived from humanity’s creative imagination.<sup>36</sup> It compensated for the limitations of Gorongosa settlers to explain disturbing natural and social mysteries while laying ancestral land claims against those perceived as threats to the settled land.<sup>37</sup> Using the term worship to describe this relaxed relationships between the living and the ancestors, W. David Hammond-Tooke referred to the Kenyan Kikuyu relationship with their ancestors as being one of ‘communion.’<sup>38</sup> The intimate relationship made the *Mbhamba* rituals relatively different from Christian religious practices.<sup>39</sup> *Mbhamba* was then a means through which the already settled Gorongosans transformed those natural and cultural hardships into harmonious, imaginary realms when uncertainties overtook them.<sup>40</sup>

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<sup>36</sup>Vines, 111-113; McAllister, 129-130.

<sup>37</sup>Schuetze, 40-92; French, 5-9, 49-50.

<sup>38</sup>pp. 134-147.

<sup>39</sup>Vines, 8-9.

<sup>40</sup>Vines, 117-119.

One of the differences between *Mbhamba* and other rituals was its relative informality.<sup>41</sup> The *Mbhamba* rituals still retained interpersonal, egalitarian relationships with ancestors, with whom the living shared their concerns, and the resources extracted from the Gorongosa ecosystem. Traditional community representatives, witchdoctors, healers, rainmakers, shamans, and other individuals performed the rituals to assuage personal worries. They adapted the *Mbhamba* rituals to suit their specializations, even though the cult had become increasingly central to common interests.<sup>42</sup>

Reinvented to serve political and socioeconomic interests, ancestral rituals like the *Mbhamba* survived the colonial partition of indigenous cultures in many continents.<sup>43</sup> In the late 1950s, when colonial territories in Africa became nations, some new African governments, except Mozambique, revived ancestral rituals to assist the imported models of governing. Soon after Mozambique's independence, the socialist regime politically excluded indigenous rituals. The Mozambican government decided to include *Mbhamba* only seventeen years after the independence.<sup>44</sup>

The Gorongosa *Mbhamba* rituals were not completely unique. Their performance resembled those of other ancestral rituals in southern Africa. For example, the South African Nguni's *idini* ritual killings were steps similar to those of the Gorongosa *Mbhamba* rituals, except the animal sacrifices, which by 1960 had become rare.<sup>45</sup> Hammond-Tooke interpreted *idini* as invocations of the ancestors, followed by the placing of ancestors' sacrifices on a shrine, the presence of fire, then singing and dancing

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<sup>41</sup> W. David Hammond Tooke, "Do the South-Eastern Bantu Worship Their Ancestors?" In John Argyle Eleanor Preston-Whyte (eds.) *Social System and Tradition in Southern Africa*, (Cape Town: Oxford University Press, 1978), pp. 134-148.

<sup>42</sup> Schuetze, 91-95;

<sup>43</sup> Vines, 6-9.

<sup>44</sup> *Ibid.*, 6-9, 111-118.

<sup>45</sup> McAllister, 142-147.

of clan songs, and the tasting of the meat and ancestors' beer, steps similar to *Mbhamba* rituals.<sup>46</sup>

A mixture of natural and cultural elements gradually made their way into the *Mbhamba* institution. When performing planned and collective *Mbhamba* rituals, the concerned Gorongosans gathered around a shrine, usually under an ancestral tree (*Cordyla Africana*), which sometimes coincided with a patriarchal grave or a shrine linked to ancestors. Instead of the animal parts, Gorongosans would have prepared sorghum or corn flour: two agricultural products that had become more available in Gorongosa from 1920s.<sup>47</sup> As part of the rituals' preparation, Gorongosans would also have tree (*Bauhinia thonningii*) leaves, ancestors' beer made out of corn or sorghum, charring firewood for smoke, raw tobacco, and a coin.<sup>48</sup> From early 1930s and whenever Gorongosans could afford buying, their *Mbhamba* rituals integrated new elements. One black and one white fabric began replacing tree leaves. Wine replaced homemade beer. Matches replaced charring firewood. And cigarettes replaced raw tobacco.

Mediums presided over collective *Mbhamba* rituals when droughts, flooding, or any other environmental or cultural hardships hovered over the settled. Attired for the ritual and starting to clap hands, the *Mbhamba* officiant invoked the names of the ancestors according to a memorized sequence of importance. At the same time, the medium poured flour on the tree leaves. The officiant then carefully poured the drinks next to the flour heap on the tree roots. Then the officiant lit the tobacco and placed it next to other offerings on the altar. The assembly corresponded clapping hands. As the officiant presented the case for mediation to the ancestors, the assembly emphasized

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<sup>46</sup> Ibid.

<sup>47</sup> French, 98-99.

<sup>48</sup> Schuetze, 92.

emitting guttural sounds and uttering verbal reinforcements intended to move the ancestors to action.



Figure 7: Chief Chuva A. C. Nhanguo, traditional chief of Nhanguo, performing *Mbhamba* for One Africa, a private tour operator inside Gorongosa National Park. 19 April 2011. Photo by Domingos Muala.

Gorongosans also performed *Mbhamba* as a thanksgiving when they achieved the thing or intention to which they needed ancestral help. Moved by intimacy, on the day following the *Mbhamba* performance the officiant returned to the shrine to check whether the ancestors accepted the rituals. As proof of acceptance, the mediums expected the ancestors to protect the offerings over night against wildlife and to further respond with rain, health, or a lion roar according to each case. The officiant went to the shrine accompanied by select elders and community headmen who purified themselves before the ceremony. If they found the offerings and the flour heap intact, even though the

offerings were left uncovered in the forests, it indicated that the ancestors accepted the ritual. Then the officiant and the headmen shared the leftovers and the overall festivities started for all the assembled. If the ancestors refused the rituals, the performers rechecked the procedures, corrected offenses, and insisted on performing the rituals until the ancestors responded positively to the desired purpose.

Gorongosans performed the common *Mbhamba* expecting to merge the living with the dead, allowing each an opportunity to review their code of conduct. The *Mbhamba* reinforced the responsibilities on both the ancestors and the descendants. The ancestors were to renew their promise, protecting their descendants against troubles, diseases, and misfortune. The descendants renewed their covenant of maintaining the ancestral land sacred, helping needy people, inducting new elements, and abstaining from aggression toward wildlife and plants that were the totems of each clan in the communities.<sup>49</sup> However, this does not mean that Gorongosans lived an everlasting harmony. Chaos, political conflicts, diseases, and other difficulties were common. Therefore, the *Mbhamba* rituals were repeatedly thrust into the center of Gorongosan life. The ritual strengthened socioecological ties and guarded them from those they perceived as strangers and threats.<sup>50</sup>

The *Mbhamba* rituals inspired Gorongosan economic activities, and provided them with some sense of control over their destiny – to become the ancestors who then take care of those that they leave in the Gorongosa ecosystem. Most of the *Mbhamba*

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<sup>49</sup> French, 35-108.

<sup>50</sup> Ibid.; interviews with Jorge Francisco Afonso Tambarara, Vila Gorongosa, June, 2008.



procedures were related to those the Nguni followed in their *idini*, which has indicated that these ancestral rituals were common in southern Africa.<sup>51</sup>

### *Converging Patterns of Resource Use Between Natives and Colonists*

Attention to intersections between Gorongosan and European use of resources is crucial to understanding economic influences, the fallacy of indigenous resource depletion, evictions, and the enduring claims of land ownership.

### *Eponyms and Toponyms*

Gorongosans classified their wild landscapes with eponyms and toponyms. By eponym I mean the naming of places after people's names and a toponym is the naming of place after one topographical feature. Whenever a Gorongosan clan migrated to resettle another tract in order to better exploit resources, their resettlement started with a naming. They named the new settlements after the patriarch's name. Kwa-Chitengo, Kwa-Chicare, Kwa-Nhanguo, Kwa-Chirinfumbi, Kwa-Tambarara, Kwa-Canda, Kwa-Sadjungira were examples of places named after a patriarch. This form of demarcating boundaries converged with the Portuguese pattern. Gouveia, Andrada, Magalhães, Santos Mosca, Lourenço, or Kwangrezi were European eponyms in Gorongosa.

After naming the settlement, Portuguese resource exploitation followed their colonial agenda, as did the Gorongosans. Most of the times, it was the indigenous agency and its local labor force that sustained the colonists' enterprise. That mutual dependence suggested the intersections of skills underlying two different economies. Gorongosans directed their economy toward local subsistence, whereas the colonists geared their

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<sup>51</sup> McAllister, 134-147.

economy more toward the market. Until recently, some Gorongosans and colonist eponyms in the land of Gorongosa reclaimed sensitive landscape history.

Gorongosans also gave names to significant topographical features. This practice gradually replaced people's names on the land. Matucudur, Tsuassicana, Nhamissongora, Madzimachena, Mapombue, Nhandar, Chitunga, Mucodza, and Vunduzi are names Gorongosans gave to features in the physical landscape. Gorongosan settlements located along those rivers are also known by the names of the features. By reinforcing those and other Gorongosan topographical names in their colonization of Gorongosa, the colonists converged and supported native practices.

*Hunting*

Figure 8: Early in the 1900s, Africans and Europeans hunting together

From the 1850s to a near past, wildlife and hunting shook the human agency creating hatred. In Gorongosa, hunting at first crisscrossed both the African and the colonist economies.<sup>52</sup> Gorongosan snaring, trapping, fishing, spears, and arrows, among other technologies predominated until the advent of colonialism.<sup>53</sup> Upon arrival, European and Indo-European colonists were highly dependent on natives and on their land.<sup>54</sup> The colonists introduced poaching in Gorongosa when the Gorongosan economy

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<sup>52</sup> Isaacman and Isaacman, 33-37.

<sup>53</sup> Vasse, 8-9.

<sup>54</sup> Newitt and Dewitt, 287-290.

predominated. As hosts, Gorongosans introduced the colonists to local human-environmental dynamics, which included hunting.<sup>55</sup>

Coordinated hunting between Africans and colonists threatened forests and wildlife.<sup>56</sup> Thereafter, market-led economies unbalanced that mutual relationship. Some colonists advocated for development through the use of wildlife and other resources in trade.<sup>57</sup> By development I mean the need for more material accumulation of things. The colonists believed that they ought to profit from wildlife. Other colonists advocated for wildlife preservation that excluded the indigenous people.<sup>58</sup> The preservationists produced legislation that criminalized Gorongosa traditional hunting, which became poaching.<sup>59</sup>

The indigenous housing, often built in the wilderness, allowed them to hunt in the neighborhood. Therefore, they hunted by employing their Grouping strategy and ritual whereas their counterpart, the colonial developers or resource exploiters, started enslaving the indigenes to illegally poach for them.<sup>60</sup> Thus they used the indigenes as instruments to sustain colonial hunting agenda.<sup>61</sup>

### *Forest Products*

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<sup>55</sup> Vasse, 36-37, 69-79, 81-93.

<sup>56</sup> Vasse, ix, x, 16, 151.

<sup>57</sup> Armando Rosinha, “Alguns Dados Históricos Sobre o Parque Nacional de Gorongosa,” in Gorongosa National Park archives; Armando Rosinha, “O Parque Nacional da Gorongosa,” in Gorongosa National Park archives, Mozambique; Silvio Marcus de Souza Correia, “Caça e Preservação da Vida Selvagem na África Colonial,” *Revista Esboços*, 18 (Florianópolis: 2011), 164-183;

<sup>58</sup> Eduardo de Castro Amaro, “Pery de Linde e o Parque Nacional da Gorongosa,” *Ultramar*, 3 (Lisboa: 1968), 157-161; “Parques Nacionais,” in *Boletim Económico e Estatístico* 16, (Lourenço Marques: Imprensa Nacional, 1938), Cota E 26/18, Instituto Botanico de Coimbra, 13/1.

<sup>59</sup> AHM-Inspeção dos Serviços Administrativos e dos Negócios Indigenas (ISANI), Caixa 52, “Relatório da Inspeção Ordinária à Circunscrição da Gorongosa de 3 de Julho a 7 de Agosto de 1967,” 1967.

<sup>60</sup> AHM – “Autos por Transgressão ao Regulamento de Caça,” Processo 173/64. Julgado Municipal da Gorongosa, 2/64.

<sup>61</sup> Vasse, 147

Gorongosans harvested *Adina microcephala*, *Khaya nyasica*, *Phoenix reclinata*, *Borassus aethiopicum*, *Acacia albida*, *Piliostigma thonningii*, *Trichilia emetica*, *Ficus stuhlmannii*, *Lonchocarpus capassa*, *Millettia stuhlmannii*, *Azelia quanzensis*, and other native trees in the Plateau and Mountain slopes for housing, farming, fuelwood, and for canoes. In the same micro-ecosystems, the colonists started harvesting trees for housing, firewood, farming, and for temporary wooden bridges as they settled. Later the Portuguese colonialists introduced forest products into the global market through lumbering and carpentry. Gorongosans also entered the global market. As the colonists instituted house and labor taxes, some Gorongosans, especially male, abandoned cultivating the already deforested lands and joined *Serração e Florestas do Muda Lda* in Canda and *Serração do Entrepósito Comercial Lda* lumbering firms in Gorongosa. Forced labor drove Gorongosans out of their ritualized relationship with the resources. They devastated the forests to feed the firms. As a result of their varied interactions in the lumbering firms, indigenous growing needs for wooden furniture and the availability of male carpenters increased demands for more and more forest products for the firms as well as for domestic purposes.

### *Land Cultivation*

Cultivation changed the Gorongosa ecosystem dynamically. Differing in purpose, beliefs, and in techniques, Gorongosan and colonial agriculture nonetheless converged in many ways.<sup>62</sup> Until 1921, Gorongosan economy included agriculture, hunting, and fishing, depending on whether native families lived at the base of Gorongosa Mountain,

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<sup>62</sup> Harri Englund, *From War to Peace on the Mozambique-Malawi Borderland* (Edinburgh: Edinburgh University Press, 2002), 5.

on the Plateau, or in the Floodplain. Colonists whose settlement patterns matched with African families changed the economic dynamics of each of the micro-ecosystem they settled. Indigenous families already allotted lands performed a family *Mbhamba* ritual each time the family opened a new farming field. Migrant African families upon arrival asked the heads of local peoples for lands to settle and cultivate. The headman of a settlement performed the first *Mbhamba*, inducting new families into local ritual, claiming resource ownership.<sup>63</sup> Then the families continued the practice each time they opened new fields. Newly arrived colonists from Portugal followed that induction that migrant families underwent for land acquisition. Colonists then relied on local headmen to provide them with human labor. With axes and machetes, Gorongosans cleared sections of old forests and prepared the soil for sowing. Both African and European agriculture then depended on the natural rainfall and each changed the Gorongosan land.

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<sup>63</sup> Schuetze, 91-92.



Figure 9: A peasant in Cavalo, Sadjungira, Gorongosa. 12.09.2010. Photo by Domingos Muala

## CHAPTER 3, THE ERA OF WILDLIFE PREDOMINANCE, 1921-1975

*How Did the Ecosystem Change When Portuguese Agencies Predominated?*

Portuguese colonists disrupted the socioecological interactions that Gorongosans had construed in the ecosystem. The colonists stopped Gorongosans seasonal migrations in the ecosystem to hunt and gather. They separated the Gorongosans from the wilderness, shifting local perceptions of land and resource property. In so doing, the colonists generated three different ecological islands; a wilderness preserve created in 1921 in the Gorongosa Floodplain, Portuguese enclaves in the Floodplain, Plateau, and Mountain, and many scattered villages of the Gorongosans.

In order to establish their predominance, the colonists needed resources that included physical spaces, a human workforce, and infrastructure. They obtained and built these resources by fighting, disrupting, and evicting Gorongosans who had predominated in the ecosystem. In the conflict, the colonists suppressed the worldviews of the local people and conscripted the Gorongosans to labor that enhanced colonial economic agenda.<sup>1</sup> To Roderick P. Neumann, Europeans imposed their views of what African landscapes should look like. Neumann studied the Meru people in Arusha National Park and the Maasai people in Serengeti National Park, both in Tanzania, and concluded that Europeans reinvented their ideal of nature as a pristine wilderness. In Tanzania, Europeans evicted Africans from select ecosystems in order to implement the ideal. In the

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<sup>1</sup> In *Portuguese Colonialism in Africa: The End of An Era* (Paris, The Unesco Press, 1974), 111.



process, the colonists denied Africans a long history of human transformations of the landscapes, which to Europeans appeared to be uninhabited and picturesque.<sup>2</sup>

This chapter analyses the creation of Gorongosa Nature Preserve in 1921 and the upgrading of the Preserve to a National Park in 1960, a process that generated human migration from the Floodplain to the Plateau and Mountain. This mobility triggered changes in all three micro-ecosystems. Back in 1505, the Portuguese colonial agency instituted a land leasing system known as *Prazos do Zambezi*, which by the 1800s included the *Prazo da Gorongosa*. In 1892, the *Prazo da Gorongosa* ceded the Gorongosa ecosystem to the Mozambique Company, which was chartered, corporate organization. In 1942, the corporation ceded the ecosystem to Portuguese colonial state.<sup>3</sup> From 1975, Mozambique's post-colonial state took over the management of the Gorongosa ecosystem. Later, the ecosystem swung from the post-colonial state back to Western co-management. Why did Portugal legitimize Euro-American agency in the Gorongosa ecosystem, evicting Gorongosans from the Floodplain?<sup>4</sup> What did Portugal claim in the Gorongosa ecosystem? What lessons did colonial evictions teach?

### *The Creation of Gorongosa Game Hunting Reserve*

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<sup>2</sup> Roderick P. Neumann, "The Production of Nature: Colonial Recasting of the African Landscape in Serengeti National Park, in Karl S. Zimmerer and Thomas J. Bassetti (eds.), *Political Ecology: An Interpretative Approach to Geography and Environment – Development Studies* (New York: The Guilford Press 2003), 240-255.

<sup>3</sup> Jorge Luis P. Fernandes, *República [Popular] de Moçambique: Alterações Toponímicas e os Carimbos do Correio* (Portugal: Edições Húmus Lda, 2006), 103.

<sup>4</sup> Sílvio Marcus de Souza Correa, "Caça e Preservação da Vida Selvagem na África Colonial," *Revista Esboços, Florianópolis* 25 (2011): 164-183.

On 02 March 1921, João Pery de Linde created Gorongosa Game Hunting Reserve.<sup>5</sup> The preserve became the first blow to Gorongosan traditional relationships with familiar ecosystems in colonial Mozambique.<sup>6</sup> How exactly did this colonial claim to control Gorongosa resources introduce disruptions and changes in the greater ecosystem?

When the colonists created Gorongosa game preserve they evicted Gorongosans, initially from an area of 1000 km<sup>2</sup> in the Gorongosa Floodplain, which is located along the African Rift Valley Trough. This first eviction unbalanced natural and cultural food chain that the evictees had established within the ecosystem. In the following decades, as the preserve kept expanding its boundaries evicting more Gorongosans, the entire ecosystem experienced more changes, which resulted from disruptions to the food chain, resettlements, and from economic pressures by both the Gorongosans and colonists alike over the exploitation of natural resource.<sup>7</sup>

Mozambique Company (Companhia de Moçambique) was one of the three-chartered companies that Portugal leased land to in central and northern Mozambique.<sup>8</sup> Portugal granted Manica and Sofala District to the company in 1891. In 1892, the company started colonizing this District, which included the Gorongosa ecosystem.<sup>9</sup> The company ruled this territory until 1942, temporarily leasing part of the Gorongosa

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<sup>5</sup> Amélia Frazão-Moreira, 8<sup>a</sup> Congresso Ibérico de Estudos Africanos (CIEA8). Madrid 2012, “The words about a ‘sea of trees’. Colonial and post-colonial narratives about Gorongosa (Mozambique):1-9.

<sup>6</sup> AHM - “Companhia de Moçambique: Ordem n<sup>o</sup> 4178 do Governador do Território,” *Boletim da Companhia de Moçambique*, 6, (16 Março 1921). Mozambique Company published this political decision in the company’s *Boletim Oficial* (Official Bulletin) number 6, on 16 March 1921, via *Ordem de Serviço* (Labor Ordinance) number 4178.

<sup>7</sup> Todd Jeffrey French, “Like Leaves Fallen by Wind: Resilience, Remembrance, and Restoration of Landscape in Central Mozambique” (Ph.D. Dissertation, Boston University, 2009), 218-219.

<sup>8</sup> AHM – Companhia de Moçambique, “Governo do Território da Companhia de Moçambique: Organização dos Serviços de Administração Geral, Beira, 01 de Maio de 1928.” Maputo, Mozambique.

<sup>9</sup> Newitt and Dewitt, 367-369.

Floodplain to another company, the Gorongosa Company, in 1895 and to other economic firms as well.<sup>10</sup> The Gorongosa Company killed wildlife and exploited Gorongosans in the ecosystem until about 1910, when it went bankrupt.

Pery de Linde was the Mozambique Company's governor of the District of Manica and Sofala. He worked under the aegis of the Portuguese Empire for a Company financed mostly by the British, French, and Belgian colonial empires in Portugal's occupied Mozambique.<sup>11</sup> Having governed the District from 15 November 1910 to 07 May 1913, and from 21 June 1914 to 16 June 1919, and again from 28 June 1920 to 07 July 1921, Pery de Linde implemented a rule that changed ecological interactions.

De Linde undermined Gorongosan coping strategies. He destroyed a long held sense of nature as home and helped to develop a perception of the Gorongosa ecosystem as a warehouse for consumable and marketable resources.<sup>12</sup>

When Pery de Linde disrupted the interconnectedness that the Gorongosans had established with wildlife, forests, and with arable land, they reacted by exploiting even more natural resources. Gorongosans suffered with the pressures to satisfy their own economy and that of the colonizers. The results were accelerated changes in the ecosystem. Evictions and taxes fostered a frenzy competition for natural resources. In the informal business where the market valued ivory, hides, and other wildlife products, for instance, Gorongosans turned away from agricultural activities. Gorongosans connived with poachers from outside in order to earn money that boosted colonial economy. In formal markets where agricultural products held more importance, elephants, and other

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<sup>10</sup> *Ibid.*

<sup>11</sup> *Ibid.*

<sup>12</sup> Allen F. Isaacman and Barbara S Isaacman, *Dams, Displacement, and the Delusion of Development: Cahora Bassa and Its Legacies in Mozambique, 1965-2007* (Athens: Ohio University Press, 2013), 40-100.

wildlife became threats to crops. In the town of Gorongosa, in Vunduzi, and in Canda, Gorongosans sent their children to study. On Gorongosa Mountain where the indigenous economy predominated over the Portuguese, Gorongosans focused on land cultivation.

New classes of people emerged from 1921, among which were the entrepreneurs, preservationists, and the indigenous. They all claimed resource access, ownership, and use.<sup>13</sup>

The entrepreneurs claimed that resources were to be extracted and transformed in order to improve living conditions.<sup>14</sup> In their views, material wealth was central to human wellbeing, development, and happiness. They argued that Gorongosa needed reliable infrastructure and related services, including roads, bridges, housing, food, transportation, and entertainment. They failed to see the aesthetical part, which natural beauty and resources provided to humans. The entrepreneurs wanted to transform the resources they could extract into material commodities that benefited humans, denying other species their natural right to live.

Defending nature, the preservationists insisted that wildlife, natural forests (represented by the Mount Gorongosa rainforest), and the recycling effect of the Gorongosa ecosystems were a priority for protection.<sup>15</sup> Pockets of less transformed Gorongosa micro-ecosystems provided an aesthetic than human-disturbed landscapes. A visual aesthetic became the justification that preservationists presented in order to exclude indigenous activities on the Floodplain and on Gorongosa Mountain.<sup>16</sup>

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<sup>13</sup> Correa, 164-183.

<sup>14</sup> *Ibid.*

<sup>15</sup> Kenneth Tinley, "Framework of the Gorongosa Ecosystem" (D.Sc. Dissertation. South Africa: University of Pretoria, 1977), 60-98.

<sup>16</sup> *Ibid.*

Evictions changed ecosystem dynamics on the Floodplain and affected Gorongosan perceptions of customary life. The evictees lost place and spiritual connections. Their adoption of birds, trees, rainwater, and wildlife as totems was indigenous knowledge, which promoted a human-wildlife balance, and created an indigenous sense of self-determination.

David M. Gordon and Shepherd Kretch III, argued that the definition of indigenous was flawed because people moved in successions, some conquering, others settling, others exchanging genes and culture with people already settled. These authors also argued that indigenous knowledge, such as the Gorongosan use of the totem, were claims born from colonial interaction and conflict.<sup>17</sup> By contrast, Fikret Berkes believed that indigenous people possessed knowledge of their own, born from their empirical experience with familiar environments. According to Berkes, this knowledge existed prior to European interaction with indigenous peoples.<sup>18</sup>

Arguing in this thesis that environmental changes result from natural, non-human causes and from the activities of humans, I focus on human-induced changes in the Gorongosa ecosystem. As I develop my arguments along the five chapters, I perceive Gorongosa historical changes through the perspective of dynamic processes. I argue that Gorongosans have construed and reinvented their customary and long-rooted beliefs based on cooperation, competition, and conflict among themselves and ultimately with Portuguese colonial state in the ecosystems. Through culture and landscape building, Gorongosans recreated their own code of life. Despite existing local perceptions, the

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<sup>17</sup> David M. Gordon and Shepard Kretch III, "Indigenous Knowledge and the Environment," in David M. Gordon and Shepherd Kretch III (eds.) *Indigenous Knowledge and the Environment in Africa and North America* (Athens: Ohio University Press, 2012), 1-24.

<sup>18</sup> Fikret Berkes, *Sacred Ecology: Traditional Ecological Knowledge and Resource Management*, (Philadelphia, PA: Taylor & Francis, 1999), chapter 1.

Portuguese conflicted with Gorongosans, coercing them to abandon their cultural autonomy and homelands in the Floodplain. Of course the colonial ethos did not recognize Gorongosans as partners. The colonists perceived Gorongosans as subjects.

The claim that Gorongosa's natural resources belonged only to Gorongosans because they were the first settlers in the ecosystem also conveyed flaws. Regional human migrations have occurred over long periods of time. Conquests, resettling, and exchanges of genes through intermarriage and culture have complicated claims of indigenes among WaDuma, Macaia, Atonga and other Gorongosans. This means that some of the people claiming indigenes in Gorongosa today may have been conquerors, re-settlers, or products of intermarriage relationships in a distant past. Similar to mobile resources such as the wind, water, and the sun, wildlife, and forests, arable lands should not be interpreted as belonging exclusively to one particular group.<sup>19</sup>

### *Colonial Reshaping of Indigenous Relations to Nature*

I did not obtain the exact number of evictees during my two times archival research in the summer of 2013 and 2014. Todd French, who studied the Gorongosa Park, argued that the Portuguese evicted 1000 Gorongosan households, corresponding to about 6,000 to 8000 people.<sup>20</sup> Because there were about three main evictions from the Floodplain before 1950, the numbers that French described applied to the third eviction, which occurred in 1948. Colonial archives indicated that nine days after the creation of

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<sup>19</sup> Arun Agrawal & Clark C. Gibson, "Enchantment and Disenchantment: The roles of Communities in Natural Resource Conservation," *World Development* 4 (1999): 629-649.

<sup>20</sup> French, 199-200.

preserve, Pery de Linde again created an indigenous reservation under Labor Ordinance number 4184 of 16 March 1921.<sup>21</sup>

This Labor Ordinance 4184 did not clarify whether Mozambique Company set aside the indigenous reservation for the affected Gorongosans. However, with wildlife and human islands created consecutively in space and time in the Floodplain, I argue that the company established the indigenous reservation to accommodate the first evictees from within the initial 1000 km<sup>2</sup> of wildlife preserve. This eviction was but one of the very first changes the company effected in the greater Gorongosa ecosystem. I was unable to discover, in the archives in Mozambique and Portugal, documents confirming whether the evictees ever resettled in the first indigenous reservation of 1921. My 2007-2012 Gorongosa learning often claimed that the affected Gorongosans indeed left the area within the 1000 km<sup>2</sup>, some of whom resettled in Mucodza, Egipto, eastern Gorongosa Mountain, Bunga, Nhadue, Nhancururu, Nhambita, Ncombezi, Vinho, Madangua, Guinha, among other areas in the greater ecosystem.<sup>22</sup>

As the evictees resettled these new plots, they cleared lands to reinvent home environments, which Kreike called “Eden.”<sup>23</sup> In their abandoned homeyards, the forces of nature such as rains, moisture, and winds together with wildlife and vegetation erased biophysical (crops, house structures) tracks that the evictees left behind. This nature recycling opened opportunities for new landscapes to emerge. Except for archeologists, it became hard to identify human signatures in the former homeyards within the game

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<sup>21</sup> AHM - “Companhia de Moçambique: Ordem n° 4184 do Governador do Território,” *Boletim da Companhia de Moçambique*, 6 (16 Março 1921).

<sup>22</sup> Joann McGregor, “Living with the River: Landscape & Memory in the Zambezi Valley Northwest Zimbabwe,” in William Beinart & Joann McGregor (eds.), *Social History & African Environments* (Oxford: James Currey, 2003), 87-105.

<sup>23</sup> Emmanuel Kreike, *Re-Creating Eden: Land Use, Environment, and Society in Southern Angola and Northern Namibia* (Portsmouth, NH: Heinemann, 2004), 1-2.

preserve; changes occurred. Only memories of evictions live longer in the oral tradition of the Gorongosans, now mixed up with everyday struggles to cope with life. Theorizing memory, Jan Vansina argued that remembering was creating.<sup>24</sup> The creation part complicated tracing the truth between the claims of the Gorongosans and those written in documents produced under colonial interests, which were often times biased against the Gorongosans in terms of land occupation and labor. In the various areas that the evictees resettled, their housing, farming, hunting, and fishing disrupted existing interactions between various living organisms. Mozambique Company then opened roads, built bridges, and accommodations for hunters.

In 1935, the preserve expanded its boundaries once more to integrate new wildlife habitats. I argue that this expansion kicked another group of Gorongosans out of their arable lands, cemeteries, and symbolic power, since there were no unoccupied lands, especially in the fertile soils of the Floodplain in the Rift Valley.<sup>25</sup> Concomitantly, greedy Portuguese colonists publicized Gorongosa Game Hunting Reserve in other colonial markets, making the preserve economically viable for colonists from outside to the detriment of Gorongosans.<sup>26</sup> As a result, South African, Zimbabwean, Malawian, and Euro-American wildlife hunters responded positively.<sup>27</sup>

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<sup>24</sup> Jan Vansina, *Oral Tradition as History*, (Madison: The University of Wisconsin Press, 1985), 43.

<sup>25</sup> Neumann, *Imposing Wilderness*, 30-78.

<sup>26</sup> French, 213.

<sup>27</sup> Rodrigues Junior, *Moçambique: Terra de Portugal*, (Lisboa: Agência-Geral do Ultramar, 1965); C. S. Spence, *Mozambique: África Oriental Portuguesa*, (Lisboa: Editora Gráfica Portuguesa, 1965).





Figure 10: 1930 South African and Rhodesian sport hunters in Gorongosa Game Hunting Reserve. Photo courtesy by Andrew Misdorp.

In an era that killing wildlife for sport still defined the power of elites, moneyed clients hunted in Gorongosa's preserve.<sup>28</sup> Their British-ruled territories had already begun to preserve fauna, exchanging the shooting of wildlife with guns to shooting with cameras.<sup>29</sup> The British and French financed Mozambique Company opened Gorongosa preserve commercially for foreign game hunters while colonizing the Gorongosans with agricultural activities that included working in plantations of cotton in and around

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<sup>28</sup> Amélia Frazão-Moreira, "8<sup>o</sup> Congresso Ibérico de Estudos Africanos (CIEA8). Madrid 2012." P. 1-9.

<sup>29</sup> For photography in Gorongosa, see João Augusto Silva, *Gorongosa: Shooting Big Game with Camera*, (Lisbon: Livraria Bertrand, Lda, 1964).

Gorongosa and in sugar plantation in Buzi, Marromeu, and Luabo, within Chinde District.<sup>30</sup>

*Excluding, Marginalizing, and Repelling Competitors*

The divisions between entrepreneurs, preservationists, and Gorongosans that followed Pery de Linde's legislation allowed the colonists to repel Gorongosan competitors in wildlife use. A reduction in the numbers of wildlife hunters, the presence of water even during droughts, high humidity, and a fewer occurrence of tsetse flies in the Floodplain allowed fauna to multiply in the Gorongosa game preserve.<sup>31</sup>

Confined to land cultivation, some of the resettled Gorongosans came to live along Mucodza, Nhancururu, Vunduzi, Pungue, Mussicadzi, Mucombedzi, and other streams in the Gorongosa Plateau and Mountain micro-ecosystems. They deforested the slopes and upstream woodlands with axes and machetes, opening forests for crops and housing. Each rainy season, from December to early March, washed detritus from the denuded soils uplands, building up obstructions in the riverbeds downstream.<sup>32</sup>

Soil erosions gradually decreased the amount of water running from the highlands downward to the Floodplain. The combination of human and nature activities upstream changed edaphic properties along the drainages. Soil configurations also changed. The advent of gold mining in the twenty-first century increased soil erosions and siltation since the 1920s, despite recent sand mining along some of the sections of the watershed.

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<sup>30</sup> Interview with Antonio Carlos Nogueira, August Lisbon, 2014, revealed that there were cotton and sugar plantations in Gorongosa, Buzi, Marromeu, Chemba, Luabo and that many Gorongosans produced cotton at family level. Others worked in the plantations.

<sup>31</sup> Correa, 164-183.

<sup>32</sup> J. M. Mafalacuser and M. R. Marques, O Potencial dos Recursos Agrários do Distrito de Gorongosa e Possibilidades de Desenvolvimento, República de Moçambique, Direcção Provincial de Agricultura e Desenvolvimento Rural de Sofala, Programa de Desenvolvimento Rural, Sifala, Maio 2000.

Changes in the Gorongosa ecosystem affected local politics early on. The expressions of indigenous activities through local institutions and rituals became dynamic; new political actors resurfaced in the socioecological interactions. For example, when the affected Gorongosans shifted focus from hunting to agricultural practices, rainfall became more important. From 1920s, swidden agriculture leveraged Gorongosans to abandon the Floodplain and to produce more food (maize, peanut, beans) in order to obtain surplus, which they sold to Dários Dos Santos Mosca and to other colonial entrepreneurs in Gorongosa. In this way, Gorongosans farmed, sold the produce to colonial entrepreneurs, and most of the money they earned they used to pay taxes that Mozambique Company imposed.<sup>33</sup>

But how did the evictions, which the company effected, shift Gorongosa politics? Ecologically, old and newly settled zones changed. Politically, wherever the evictees resettled, the company co-opted traditional headmen for colonial political auxiliaries.<sup>34</sup> Then, the headmen pressured their subjects, the Gorongosans, to produce more and more and to comply with colonial requirements, which accelerated forest clearance, soils erosion, and reduced moisture in the ecosystem.<sup>35</sup> The headmen's attitude became ambivalent as they simultaneously worked to please their colonial masters and the people they represented. This double-dealing work destroyed the headmen's moral legitimacy in face of the peoples they represented, leading to a political dilemma.<sup>36</sup>

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<sup>33</sup> Interview with António Alberto Sequeira Mendes, Coimbra, July-August 2014, revealed how Gorongosa Gorongosans produced maize (corn) and sold it to Dario Faria dos Santos Mosca, a businessman who began as a mechanic and ended up revitalizing commerce in the Gorongosa town.

<sup>34</sup> "In Celestino Gonçalves possession" – Relatório d'uma Viagem pelos Territorios da Companhia de Moçambique por Abeillard Gomes da Silva. Celestino Gonçalves. Lisbon. Portugal.

<sup>35</sup> AHM – Autos Administrativos. Administração da Circunscrição da Gorongosa. 1952. Cota: A/11.Maputo. Mozambique.

<sup>36</sup> AHM – Autos Administrativos. Administração da Circunscrição da Gorongosa. 1965. Cota: A/8. Maputo. Mozambique.

Consequently, Gorongosan rainmakers took advantage of the headmen's political dilemma from the 1920s. With an end to hunting and fishing economies, rains became more decisive to emerging agricultural economy. The importance of the rainfall put rainmakers, especially the Samatenje family who live on the eastern Gorongosa Mountain, at the center of land cultivation in the ecosystem.<sup>37</sup> Trapped in the dilemma between the ambivalent headmen and the rainmaking mediums, Gorongosa peasants became increasingly dependent on the rain providers. More Gorongosans focused on the rain mediums and on Gorongosa Mountain for more rains because they believed that Samatenje and other rainmakers possessed the power to influence rainfall whenever needed. This belief made Samatenje's spiritual power predominate in the ecosystem. The performance of the *Mbhamba* rituals for rains by Samatenje evolved, dominating the role of Gorongosa headmen.<sup>38</sup>

Pressures from changing politics, accelerated deforestation, soil erosions, siltation, and the damming of Zambezi River upstream in the 1960s-70s all resulted in reduced surface waters in the Gorongosa ecosystem. These human-environmental pressures precipitated the enshrinement of natural and cultural topographies of which Gorongosa Mountain and Samatenje became the symbols of rainmaking in Gorongosa.<sup>39</sup>

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<sup>37</sup> According to Manença Campira Jairone, "Samatenje was the most important man because his actions provided food. Every Gorongosan needs food. Without rain there is no food. Samatenje has the power to make rains fall. After rains, people sow maize (corn) and vegetable. Without rain there is no food. People die."

<sup>38</sup> Interviews with Jorge Francisco Afonso Tambarara, chief of Tambarara, Marcelino Manuel Sadjungira, chief of Sadjungira, Eugenio Almeida Canda, chief of Canda. Gorongosa. June, July, September, 2008.

<sup>39</sup> Interview with Jorge Francisco Afonso Tambarara. Mapombue, Gorongosa, 2007-2008. According to Tambarara, the first Samatenje followed traditional rituals and when he performed the rain *Mbhamba*, as people returned home they would get soaked in heavy rain. Rain fell almost always. But the other samatenjes (titles earned after the first Samatenje) who followed the first Samatenje have become less devout to ancestral rituals. As consequence, the *Mbhamba* that modern samatenjes perform rarely satisfy the spirits who hold the rain. Although he is the ultimate authority in his area, Tambarara has Chizira as his kingdom's rain medium. When people ask Tambarara for rain, he gathers sorghum and visits Chizira to ask

*Gorongosa Ecosystem Under Portuguese Colonial Government, 1943-75*

In 1943, the Portuguese colonial government replaced Mozambique Company in the management of the Greater Gorongosa Ecosystem, including the Game Hunting Reserve. How did the colonial government accelerate changes in the Gorongosa ecosystem? In 1948, the government expanded the Reserve's boundaries to Mudoda (west of the preserve), to integrate gnus, lion, sable antelope, elephant, and other wildlife habitats that the company did not contemplate. The 1948 expansion once again dispossessed other Gorongosans. Acting more paternalistically than the commercial Mozambique Company, the government coordinated the 1948 evictions with its co-opted local auxiliaries. How?

In the summer of 1948, the colonial government convinced Tambarara, one of the Gorongosa headmen, to cede a portion of his territory to accommodate Nhanguo, the headman dispossessed from the Floodplain late in 1948.<sup>40</sup> Tambarara complied. Respected when compared to previous evictions by the Mozambique Company, Nhanguo moved with his people out of the Floodplain. He resettled in Tambarara, spreading his people across EN1, the Mozambique's main north-south road. The EN1 bisects the Tambarara territory.

The 1948 settlers readjusted to their new homeland. A few years later, however, this relocation set a stage for Tambarara and Nhanguo to dispute people and land ownership. In 1967, Tambarara unilaterally reverted his tract back. This included

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him to perform Tambarara's rain *Mbhamba*. When Chizira's *Mbhamba* does not satisfy the ancestors, chief Tambarara moves on to Samatenje.

<sup>40</sup> Interview with Jorge Francisco Afonso Tambarara. Tambarara-Gorongosa. June, July, 2008, 2009, 2010; Interview with Jando Camacho Nhanguo. Nhanguo-Gorongosa. June, July 2008, 2009, 2010.

Nhanguo people who settled the tract during the 1948 relocation, stirring long lasting claims.<sup>41</sup>

As re-settlers, Nhanguo people occupied and hoed lands along stream banks of Puazi, Guango, Vunduzi, Mussicadzi, Mombezi, and Matacamachaua for about four to five years before fallowing. The settlers also readjusted their *Mbhamba* rituals to suit cultivation purposes and related social norms, while slash-and-burn agriculture changed the ecosystem.

What made Nhanguo resettlement particular was its location adjacent to the EN1 highway. Traffic in the EN1 introduced Nhanguo settlers into an alternative economic activity: charcoal. With no clear date when they began to produce charcoal, at the turn of twentieth-century, Nhanguo people had become the best charcoal providers. The charcoal producers increased production while decreasing prices when compared to other charcoal vendors along the EN1. This price reduction attracted many consumers and retailers. For example, from 2002 to 2012, all the charcoal I used for fuel I bought in Nhanguo community. While beneficial to the three actors involved in the Nhanguo charcoal business, the amount of forest resources the settlers cut to answer charcoal demands exerted pressure on vegetation cover in the Nhanguo area.

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<sup>41</sup> Interview with Bento, Sapanda of Nhanguo, July 2014.



Figure 11: Nhanguo charcoal business. Photo by Domingos Muala.

Unlike other Gorongosans resettled on the Mountains, Nhanguo re-settlers grew mango and other fruit trees around their homesteads. They produced two distinct landscapes. In the farming and charcoal spots, the land became more open and smoky. By contrast, in the areas they built homes, the land became covered with mango and papaya trees, generating a new forest. As their daily movements became frequent in both home and farming environments, their mobility in the land increased soil erosions. In the windy months from August until the early rains in November or December, expanses of grasses plus the wastes of chopped trees became fuel for fires that set portions of the Nhanguo territory ablaze, endangering reed thatched huts, livestock, and wildlife.

Apparently essential for the management of miombo woodland, wildfires in grassy portions of the Nhanguo area became problematic, at least from human perspective. Fire increased the exposure of denuded soils to erosion, reduced fertility,

increased aridity in soils, and dried up rivers like the Mussicadzi, Matabachaua, and Mucombedzi. This landscape of fire, when associated with strong summer winds, became pervasive, spreading fires to far away areas. What cumulative effects of soil erosion in the uplands Nhanguo have since the 1948 been sedimenting downstream into the Floodplain? With fewer planned evictions, how much did the Mozambique Company and the Portuguese colonial state expect Floodplain ponds, lakes, and marshes to remain unchanged? Resettled in the arid Plateau and mountainous sections of the greater ecosystem and seizing on slash-and-burn cultivation to survive, to what extent did the effects of the farming agency accelerate changes in the greater Gorongosa ecosystem?

#### *Outlaws, Connivance, and Silence*

Gorongosans retaliated against the evictions by poaching, tree felling, trespassing, and arson as they needed housing, land, furniture, and charcoal, activities that became crucial to their subsistence. The colonists devised responses for these indigenous pressures. Ever since the 1950s, poaching and fires marked the attitude of the evictees, especially when wildlife outside the preserve became scarce as a result of population increases and of droughts between 1950-54, 1960-64, and 1970-74.

A growing conscience about resource dispossessions evolved as the preserve's law enforcement arrested the evictees and other Gorongosans, who remained within the preserve. Until 1975, the colonial state constrained the captives. The poaching conflict signaled a shifting of power relations in the Gorongosa ecosystem. Each time the rangers captured peasants poaching, they presented the captives to the Gorongosa town judicial



system, which issued correctional procedures and determined fines.<sup>42</sup> Once back in their communities, the poachers became aware of the criminalization of their traditional practices and the demise of ancestral institutions that included totemic beliefs in wildlife use and control. This reversal of former poachers into resource-owners and the former owners into poachers illustrates how power shifting allows some groups of people to legitimize certain attitudes while criminalizing others.<sup>43</sup>

Tomás Jeremias, one of the local men, observed on 30 October 2008 in Gorongosa National Park that judicial constraints repeatedly reminded him and other peasants of shifting relationship about traditional lands and habits. Captured and imprisoned sometimes for months on end, the poachers acquired a new conscientiousness, which included acquiescing to the colonial and neocolonial authorities. Where ancestral power emphasized spiritual beliefs, fostered co-existence with wildlife via totemic tokens, allowed fauna to integrate local education through human-wildlife conflict, and controlled outlaws by sending diseases to Gorongosans who broke local code, colonial power criminalized and punished such cultural practices.

The Portuguese colonial state placed much value on agricultural work and criminalized traditional hunting. Where Gorongosa education valued friendly competition, cooperation, and used farming plots for both human consumption and to bait wildlife, which they then hunted, colonial markets emphasized deforestation, agricultural

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<sup>42</sup> Luis Fernandes, Lobao Tello, Celestino Goncalves, Gorongosa National Park officials, often times took to Gorongosa town, different cases of involving indigenous people and tourists who violated Gorongosa National Park laws. As a political institution, Gorongosa National Park imposed a set of behavior that indigenous resident and visitors were required to comply with.

<sup>43</sup> For an extended discussion of this paradox, see Karl Jacoby, *Crimes Against Nature: Squatters, Poachers, Thieves, and the Hidden History of American Conservation*, (Berkeley: The University of California Press, 2001).

expansion, and other devastating practices. Legal promotion of farming produce turned wildlife presence in the crops into pests.

Until 1975, colonists prohibited, for example, the killing of elephants, even if the animal ate crops. Killing an elephant and taking the ivory to the market and distributing the meat among fellow Gorongosans became risky. Co-opted Gorongosans betrayed each other, denouncing the elephant hunters to the Portuguese authorities. And the colonists belittled and distrusted Gorongosans, unless they were crucial to their colonial agenda. In the event of an elephant eating crops, the affected Gorongosans were to report it to colonial authority, instead of killing the animal right away as they used to do. The colonists then sent their team into the troubled community to kill the elephant. The killers took the ivory and distributed the meat. The devastated crops, however, belonged to Gorongosans. This colonial behavior fostered hatred against elephants and other wildlife that became unwelcome and put locals against the preservanists working in the Preserve. Gradually the traditional importance that the elephant held in the Gorongosa economy shifted.<sup>44</sup>

Forbidding the killing of elephants erased ancestral feasts (*pwando*) that the Gorongosans used to have. Although some hunters were injured or even died in the battues (hunting in bands), ritual killings of the elephant provided the Gorongosans with highly socializing occasions before colonial predominance.<sup>45</sup> Gorongosans believed that an elephant was a sacred animal. To them, the elephant represented authority and leadership. For example, after authorizing the hunting, local headmen used to receive

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<sup>44</sup> Christopher Ehret, *An African Classical Age: Eastern and Southern Africa in World History, 1000 B.C to A.D. 400* (University Press of Virginia, Charlottesville, 1998), 67-130.

<sup>45</sup> In interview with Canquene Andicene in June of 2008, in Sadjungira, indicated that many people from different settlements gathered to prepare the hunting of elephant in Gorongosa.

elephant meat and ivory from the hunters. For the headmen, the hunters reserved especial meat, which they cut from the part of the elephant that touched the ground when the animal fell.<sup>46</sup>

Paulo Dombe, a 92-year old local elder, recalled that, “When elephants ate crops they invoked hunting memories. However, when lions preyed on Gorongosans, they revealed conflicts with ancestral code, which was believed to inspire human-wildlife behavior.”<sup>47</sup> Tomás Vinho, a ranger at Gorongosa National Park, observed that, “dominant Gorongosa tenets codified the killing of a person by a lion as an ancestral revenge.” Gorongosans intertwined lions and humans in an integrated socioecological dynamics that regulated attitudes. “Lion attacks meant that the victim broke the ecosystem code, which the ancestors established,” Vinho continued.<sup>48</sup> Those who gathered fuelwood, for example, carried what they could. Returning to their kraals, they should lay the bundles carefully down, avoiding tossing. Tossing the bundles indicated an overload and the tossing produced noise. The noise invited lions and other dangerous animals that could attack the perpetrator. The intentions behind this code were obvious: to control the amount of firewood collected each time and to keep the carriers healthier. These perceptions, however, were accommodated in memory because the colonial state pressured Gorongosans to forget their cosmology in order to commodify natural resources and human labor. In response, Gorongosans used guns for protections and hunting, walked at any time, and exploited more ecosystem resources that enhanced colonial economy.

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<sup>46</sup> Interview with Celestino Sacaúne Canda, Gorongosa Town, July 2009.

<sup>47</sup> Conversation with Paulo Dombe, Gorongosa town. 19 May 2008.

<sup>48</sup> Interview with Tomás Vinho. Chitengo-Gorongosa National Park. July 2014.

Other parts of the Gorongosan code prohibited immersing or washing blackened clay pots and other domestic utensils directly in the running streams. Ancestors expected descendants to fetch water and to wash the dirt far from the running streams. “To any descendant disobeying this covenant, the ancestors retaliated by sending lions, or leopards, or other dangerous wildlife to attack the perpetrator,” Celestino Sacaúne Canda, a 79 year-old man from the Canda chieftaincy, explained. Having sex in the open was another major offense to ancestral lands. Sex in the open profaned the land. Ancestors allowed sex in *Mbhamba* blessed houses, since no descendant built a house without asking ancestral blessing. Many Gorongosans thought that lions attacked offenders who did not observe the code of the land. The attacks served to send an educational message to others.<sup>49</sup> I argue that powerful Gorongosa headmen and mediums reinvented these rules whenever they felt necessary to assuage hardship and conflicts among Gorongosans and between the people and wildlife. This code helped Gorongosa politicians to control and maintain social order in an environment then dominated by human-wildlife conflicts. Privileged by their bridging role between the living, the dead, and the environments, traditional politicians disguised their land-based code under ancestral ethos in order to make their subjects believe in the authority of the dead. Therefore, elephants, lions, droughts, floods, wars, and diseases were believed to be signals of offenses against ancestral lands. Entitled to perform the *Mbhamba* rituals, which were the highest cultural expression of Gorongosans, the traditional politicians were essential in the assuaging of land offenses.

Portugal introduced Catholicism in Gorongosa in order to convert the locals to Western religious perceptions. Together with Catholicism was the notion of one formal

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<sup>49</sup> Interview with Joao Alface Nkungu Chitengo, Gorongosa National Park. Gorongosa, 2008-2009.

and vertical God who lived far in the Heaven, and not in the bush of Gorongosa like the spirits of the ancestors did.<sup>50</sup> Catholicism combated the worshipping of ancestral spirits, which, according to Gorongosan worldviews, lived in forests, on Gorongosa Mountain, in rivers and streams, and of course in homeyards ready to assist their descendants.<sup>51</sup>

Claiming ancestral omnipresence, Jorge F. A. Tambarara reminded me that:

“The Spirits are like the wind...”  
 They are with you  
 wherever you go.  
 Can you see the wind?  
 Can you hold it in your hand?  
 Your spirits walk with you.  
 You are part of their family.”<sup>52</sup>

The Portuguese introduced in the Gorongosa ecosystem catechism, baptism, confirmation rites, and other Christian ceremonies that did not bind the people to the environments they inhabited. By contrast, indigenous mediums expected the users of the ancestral code to deeply care for their inherited lands and wildlife. Lacking fixed graves and established cemeteries, for example, Gorongosan mediums had conceived the whole land as a cemetery, which demanded deep reverence. Gorongosa traditional politicians insisted that the descendants respected each ancestral tract, totem like *adansonia digitata*, *borassus aethiopicum*, *piliostigma thonningii*, *cordyla africana*, or helmet shrike, zebra, bushpig, and other totems because each reminded them of the presence of their ancestors.<sup>53</sup> Catholicism removed Gorongosans from their environmental history.

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<sup>50</sup> Viriana Tkacz and Domingos Muala, *Tales from Gorongosa* (USA: Carr Foundation, 2009), 15.

<sup>51</sup> To Celestino Tsacaune Canda, “Gorongosans believed that their ancestors lived on Gorongosa Mountain, in streams, and forests.”

<sup>52</sup> Interview with Jorge Francisco Afonso Tambarara, chief of Tambarara, Gorongosa Town 03 September 2009.

<sup>53</sup> Interview with Raice Morezi, Nhauenje, Gorongosa Mountain, June 2009.

Catholicism desacralized the land, the elders, and natural resources. Elders resented the marginalization of their worldviews.

Some young people aspired to join colonial economic agenda in order to earn cash that they used to pay colonial taxes. They sought employment in timber firms, shop businesses, canteens, and other colonial enterprises that sprang around Gorongosa National Park.<sup>54</sup> Slash and burn agriculture together with these development initiatives devastated Gorongosa forests. And Gorongosans learned to shop more and more as they sought to respond to colonial pressures. Some Gorongosans worked for colonial entrepreneurs and poached wildlife for their commercial masters.<sup>55</sup> Others became clients of the various canteens or small-scale shops, and distinct entrepreneurial businesses expanding in Gorongosa from 1950s to 1975.<sup>56</sup> Some bought fish and cheap bushmeat from Pungue, Goronga, Samacueza, Mueredzi, and Derunde, among other settlements based on fishing and hunting, and retailed their produce in towns of Gorongosa, Muanza, Cheringoma, Nhamatanda, and Dondo. The farming, fishing, poaching, buying, and retailing activities fed a cycle of unfolding micro-economies sustained by the resources of the changing Gorongosa ecosystem.

As already state above, charcoal producers cleared forests to make money. As colonial administrators pressed each household to pay hut tax, active Gorongosans had to exploit whatever resources at their hand that best suited the market in order to obtain money. Economic pressures changed Gorongosan habits. What was a relatively

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<sup>54</sup> Manuscripts in possession of Gorongosa District Administration” (hereafter GDA) – Primeira Reunião do conselho Distrital da Gorongosa. Distrito da Gorongosa. Província de Sofala. República Popular de Moçambique. 23 de Junho de 1976.

<sup>55</sup> GDA manuscripts detailed court cases involving Gorongosans and non-Gorongosans who were caught hunting inside Gorongosa National Park.

<sup>56</sup> Cabrita, 60-115.

egalitarian thinking among Gorongosans faded. Money allowed Gorongosans to comply with taxpaying and the buying and consuming economies.

*Gorongosa Reserve Upgrading to Gorongosa National Park*

On 23 July 1960, the Portuguese colonial state upgraded Gorongosa Game Hunting Reserve to Gorongosa National Park, ending decades of game hunting in the preserve and introducing changes to the way that different stakeholders came to perceive their role toward Gorongosa wildlife.

Massive hunting with guns, which the colonists and their clients did in the early decades of the preserve, gradually gave way to hunting with eyes and cameras by the 1940s. Casting the American example of conservation onto Africa, the British in South Africa, Rhodesia, Malawi, and Tanzania had already moved ahead toward preservation.<sup>57</sup> With the Gorongosa preserve as a flagship in Mozambique, the aging Portuguese empire followed the global preservation trends. These trends were led by American conservation model, exemplified by the evictions in the creation of Yellowstone and Yosemite National Parks. In the first half of the twentieth-century, Portugal and many European countries replicated the American conservation model in territories under European control.<sup>58</sup> Therefore, even with the legal use of guns fading in Gorongosa Park, the encounter between city dwellers and Gorongosa wildlife continued to produce and command emotions, generating money. Tourists, top politicians, and distinct Western personalities from Portugal, British colonies, Europe, and America took the opportunity

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<sup>57</sup> Junior, 127-130.

<sup>58</sup> Roderick P. Neumann, *Imposing Wilderness*, 50-121. Amélia Frazão-Moreira, “8<sup>a</sup> Congresso Ibérico de Estudos Africanos (CIEA8). Madrid 2012,” 1-9.

to visit the famed Gorongosa National Park.<sup>59</sup> The visitors increased Portugal's concerns about preserving the park's wildlife habitats.<sup>60</sup> Why did colonists decide to preserve what they killed?

Back in 1934, Jacinto Pereira Martinho, a veterinarian doctor in Mozambique, published *A Caça* in which he argued that the civilized men destroyed wildlife in Africa. Although Martinho realized that Rinderpest devastated southern African wildlife until early in the 1900s, it was the civilized men who deliberately slaughtered African wildlife.<sup>61</sup> More interesting in *A Caça* is the fact that Martinho unveiled colonial contradictions that consisted of mourning the extermination of Mozambican wildlife while promoting further hunting.<sup>62</sup>

Colonial contradictions in Mozambique's preservation history were not limited to grieving wildlife while hunting it anyway. The need to protect Gorongosa's wildlife evolved bound by the need to commodify and sell nature and human services for profit. This game against nature and humans was obvious politically. At a micro-level, the interests of the preservationists and those of some entrepreneurs in Gorongosa contradicted. The preservationists battled to protect fauna and flora. And they tended to dislike Gorongosans.

In 1948, for example, 387 Mateve and Manhica people were recruited in what was then Villa Pery (now Chimoio) to work in Gorongosa preserve instead of Gorongosans. The 387 non-Gorongosans deforested a tract of land for an airstrip in the

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<sup>59</sup> Junior, 130-150.

<sup>60</sup> Interviews with A. D. da Cunha, Luís Fernandes, António Carlos Nogueira, José Carlos Cunha, António A. Sequeira Mendes, on 28 July and on 06 August 2014.

<sup>61</sup> Jacinto Pereira Martinho, *A Caça*, (Lourenço Marques: Imprensa Nacional de Moçambique, 1934); Kreike, 36-41.

<sup>62</sup> Jacinto Pereira Martinho, *A Caça*, (1934), 4-5.



Chitengo Camp, the preserve's main headquarters.<sup>63</sup> Portugal was trying to impress its English visitors by building airstrips, roads, bridges, and other infrastructure. Thus cleanliness and the spread of cement technology marked civilization, especially from the 1960s, while sacrificing trees and changing landscapes in the Gorongosa ecosystem.<sup>64</sup> Elders Mouzinho Taona J. Famba, Francisco Seda, and Silva Bacar spoke of Henriques Coimbra as an example. According to the elders, Coimbra was the first tour guide working for the colonial government in Gorongosa preserve from 1930 through the 1950s. Coimbra was very unkind to indigenous people in the Park to such an extent that when he had an accident on one of his legs during his work in the preserve, his local foes celebrated.<sup>65</sup>

The entrepreneurs made their wealth by selling meat and ivory, which involved Gorongosans in poaching, and by selling the resources the preservationists protected. The colonial government backed both the preservationists and entrepreneurs at the macro-level. They were both used as essential colonizing instruments in Gorongosa. The progress of the two executive agencies in Gorongosa relied on synergies at political level and on exploitation of cheaper indigenous workforce.<sup>66</sup>

Inside the wilderness entrepreneurs built tourist campsites such as the Lion House, Chitengo, Cangantole, and Bela-Vista and developed other tour facilities within and around Gorongosa National Park.

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<sup>63</sup> Bob Shacochois's interview with colonel Pinto Soares, Portugal, 2009.

<sup>64</sup> Englund, 60-88.

<sup>65</sup> Interviews with Mouzinho T. J. Famba, Francisco Seda, and Silva Bacar. Gotongosa town. 2007-2008.

<sup>66</sup> GDA – Autorização de Exportação de Troféus ou Despojos Animais Bravios. Colonial documents. Gorongosa Administration Manuscript. Created by article 33º-2 of Portaria 117/78.



Figure 12: 1930s Mozambique Company's nature friendly building. Photo courtesy Andrew Misdorp.

Portugal related to Gorongosans with a paternalistic mindset, using them as tools for the manual hard work, including opening roads and assisting in the building when the park developers wanted.<sup>67</sup> Using this excluding strategy, Portugal denied Gorongosans the ability to become tourists, by offering them the lowest salary, the occasional free and cheap tourist experience in the park, and by having them content themselves with low quality gifts.<sup>68</sup> This impoverishing practice developed low self-esteem and resistance in Gorongosans, resulting in passivity, and a subservient mentality.<sup>69</sup> By denying Gorongosans the ability to become active owners, buyers, and consumers of park's

<sup>67</sup> Interview with Silva Bacar and Regina Mabai. Tsuassicana-Gorongosa Town. August, 2008.

<sup>68</sup> Amélia Frazão-Moreira, "8<sup>a</sup> Congresso Ibérico de Estudos Africanos (CIEA8). Madrid 2012," p. 1-9.

<sup>69</sup> Interview with Francisco Seda. Matucudur-Gorongosa Town. August 2008.

ecotourism, Portugal made the park more important to outsiders than to Gorongosans.<sup>70</sup> Envyng the parade of tourists moving through their homesteads, some Gorongosans retaliated by poaching, shaping colonial responses through law enforcement.<sup>71</sup> Other Gorongosans perceived the park as a source of wages, which in dire time helped them survive crises such as the cyclical droughts that hit Gorongosa.

The co-opted Gorongosans worked as assistants of the preservationists and entrepreneurs in the production of the wealth shipped to and invested in Portugal while the people who produced in the Gorongosa ecosystem remained comparatively poor.<sup>72</sup> In Gorongosa, a new socio-geography emerged. African and Portuguese agricultural colonies sprang up around the Mountain. Colonial villages abounded in the Plateau. And the tourist industry predominated in the Floodplain.<sup>73</sup>

One of the external resource pressures connected to the Gorongosa ecosystem was the frolicking of hunters in colonial hunting concessions. Another pressure was of visitors to Gorongosa National Park. Tourist exploitation of Gorongosa encouraged the Portuguese government to support the transformation of the ecosystem. Portugal had envisioned tourism as a potential boon to the Portuguese economy.<sup>74</sup> And because tourism in Gorongosa invited many South Africans, Rhodesians, and Malawians who lived under a civilizing and progressive British Empire, promoting tourism seemed an

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<sup>70</sup> *Ibid.*

<sup>71</sup> According to the interview with Luis Fernandes, António Alberto Sequeira Mendes, Celestino Gonçalves, and José Canelas, in the 1960s and 1970s, patrols at Gorongosa National Park were intensified because colonialists and Gorongosans poached wildlife. While most of the colonialist-poachers lived in Dondo, Beira, chimoio and other places outside Gorongosa, Gorongosans were at a constant check because they lived in and around the Park and therefore were more active poaching on their own or on behalf of their colonial patrons.

<sup>72</sup> Alan K. Smith, "António Salazar and the Reversal of Portuguese Colonial Policy," *The Journal of African History* 15 (January, 1974): 653-667.

<sup>73</sup> Correa, 164-183.

<sup>74</sup> Spence, 55-120. Harri Englund, *From War to Peace on the Mozambique-Malawi Borderland* (Edinburgh: Edinburgh University Press, 2002), 35-90.

opportunity for Portugal to change its heavily criticized model of colonizing Mozambicans.

Gorongosa National Park needed tourist infrastructure built in cement. Chitengo safari camp was completed in 1960s. The camp was equipped with a restaurant, 38 rooms, swimming pools, one workshop, and a gift shop. Although Villa Paiva de Andrada (today's Gorongosa town) had served as the government's headquarters since 1906, Chitengo's proximity to the wildlife drew tourists away from Andrada.<sup>75</sup> In Andrada and in Chitengo colonial developers spread more cement than anywhere in the Floodplain, Plateau, and Mountain within Gorongosa. Comparatively though, it was Chitengo that impressed most tourists.

I argue that when accounting for human-induced changes in Gorongosa, the proliferation of technologies that used cement, steel, tar, asphalt, and iron in the building of conventional infrastructure deserve much attention. These convenient materials accelerated changes in the land configuration. Building roads, bridges, houses, power lines, and the irrigation systems replaced forest tracts, thus changing the ecosystem. The cement and iron technologies accelerated economic exploitation of Gorongosa's resources. Colonists shipped resources out of the ecosystem easily. Attractive housing, roads, bridges, farming, and transportation encouraged more and more resource exploitation. And roads and bridges, particularly a 1970s' bridge over Pungue River, drained more ivory, hides, fur, logging, timber, cotton, tobacco, people, and countless resources in and out of the Gorongosa ecosystem than in the previous decades.

When in July of 1960 Portugal upgraded Gorongosa Game Hunting Reserve to Gorongosa National Park, the ecosystem had changed a great deal. Wildlife and humans

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<sup>75</sup> Junior, 56-160.

had changed the Floodplain. Silva Bacar, Regina Mabai, Mouzinho Taona Juliasse Famba, Francisco Seda, and other Gorongosa elders who were the working tools for the preserve until it became a national park recalled that at times in the late 1940s and in the 1960s vegetation in the preserve became scarce for wildlife grazing. Buffalo starved. Some collapsed.<sup>76</sup>

Outside the preserve, Portuguese *Fomento Agrícola* agricultural programs and peasants cleared forests to satisfy their own growing needs. Cement engineering further boosted infrastructure and human settlements.

Internally, the preserve expanded its boundaries, repelling indigenous from the Floodplain. Development projects in the periphery of the preserve blocked animal migratory routes, confining wildlife within the park's boundaries. As a result, late in the 1960s and early in the 1970s, within 5370 square kilometers the park was home to about 14000 buffalo, 7000 wildebeest, 3500 hippopotami, 3500 zebra, 2500 elephants, and nearly 500 lions, just to name but a few wildlife species reported.<sup>77</sup>

### *Shifting from Colonialism to Global Market*

The end of the World War II inspired new political dynamics at a global scale. Until the 1970s, evolving interactions in the Gorongosa ecosystem reflected these global trends. The global market claimed imperial opportunities to exploit natural resources worldwide, including the ones in the Gorongosa ecosystem. Portuguese settlers and

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<sup>76</sup> Interview with Mouzinho Taona Juliasse Famba, Gorongosa, August-September, 2008.

<sup>77</sup> Tinley, 181. Richard Beilfuss *et al*, "Monitoring post-war recovery of wildlife at Gorongosa National Park, Mozambique" (Gorongosa National Park, 2007): 1-22; Michael John G. Yeats, "The Restoration of Gorongosa National Park: A Project to Conserve Wildlife Whilst Assisting Impoverished Communities" (Cape Town: The Graduate School of Business, 2010): 28; John Hatton *et al*. "Biodiversity and War: A case Study of Mozambique" (Washington, DC: Biodiversity Support Program, 2001): 44.

settlers still believed that they would never leave Mozambique but would always be part of it, their settlements, roads and tourist facilities further reshaped the Gorongosa ecosystem.

Transformation projects, including the cement technology, energized economic and social changes in the greater Gorongosa ecosystem, leading to more socioecological interactions in late 1960s and early 1970s.<sup>78</sup> Outside the Floodplain, eight agricultural colonies sprang in Nhabirira, at the foothill of Gorongosa Mountain, and four others surged in the Plateau. Scattered settler villages and towns emerged in Nhamissongora, Gorongosa town, Mucodza, Massara, Zongorgue, and Nhadue in the Plateau.

The colonists installed one factory for processing maize (corn) in the town of Gorongosa. They also installed about 31 small grinding mills in different villages. These small industries pressured the ecosystem for resources on the one hand. On the other hand, the industries reduced the time Gorongosan women spent pounding corn for flour. Six timber firms destroyed forests. Gorongosa Catholic Mission-school (Missão Cristo-Rei da Gorongosa) established six other mission schools, including Púngue, Chicare, Sacudzo, and João Chapeva, and health posts increased in numbers in many villages.<sup>79</sup>

From the Floodplain, Gorongosa National Park continued to gravitate more Portuguese, South Africans, Rhodesians, Malawians and Euro-Americans to Gorongosa, reshaping the ecosystem. All these colonial entrepreneurships changed the Gorongosa ecosystem. Why did Portugal revitalize Gorongosa, supporting multiple economic and

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<sup>78</sup> Interview with Luís Fernandes, António Carlos Nogueira, José Carlos, Portugal, 26-27 July and 05-06 August 2014.

<sup>79</sup> AHM - Inspeção dos Serviços Administrativos e dos Negócios Indígenas (ISANI) “Relatório da Inspeção ordinária às sub-divisões administrativas do distrito de Manica e Sofala: Circunscrições do Mossurize e Gorongosa e Conselho de Manica e Chimoio,” por Júlio Augusto Leite Pinheiro, Inspector Administrador, 27 Dezembro de 1955. Caixa 39, Maputo, Mozambique.

social improvements only after the World War II when they had been in the region since 1505?<sup>80</sup>

C. F. Spence, a Portuguese writer, argued that international politics pressured Portugal to improve colonial performance in Mozambique. By the mid-1960s, African countries had gained political independence, sending a warning message to Portugal.<sup>81</sup> Despite liberation wars in Mozambique and in Angola, from the 1960s through the 1970s, Portugal invested more in these colonies, resulting in accelerated ecosystem changes.<sup>82</sup> Spence reported that Portugal practiced multiracialism, the policy of no segregation based on the race, in the southern African colonies of Mozambique and Angola. Multiracialism implied that Africans and the Portuguese had rights to equal opportunities, all enjoyed Portuguese citizenry, and those African colonies were extensions of the Portuguese nation. Why would multiracialism be politically correct when other African colonies were becoming independent nations?

Although too late, Portugal still believed that reinventing political relations, including multiracialism, would convince the international opinion into legitimizing Portuguese extension in Mozambique, thus allowing Portugal to further exploit ecosystems, such as expanding the park's boundaries.<sup>83</sup> Extending its presence in Mozambique, Portugal pressured for more ecosystem changes within its flagship nature preserve, Gorongosa National Park. By the 1970s, Gorongosa Park had become an attraction for distinguished personalities including presidents, singers, and American

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<sup>80</sup> Junior, 35-70.

<sup>81</sup> C. F. Spence, 63-97.

<sup>82</sup> Robin Hallett, *Africa Since 1875: A Modern History*, (USA, Ann Arbor: The university of Michigan Press, 1974).

<sup>83</sup> "Portuguese Foreign Policy: Extracts from statements made by the Portuguese Minister for Foreign Affairs, Dr. Franco Nogueira" (Ministry of Foreign Affairs, 1965-1967), 51-53.

astronauts, who had been to the Moon and now wished to walk among Gorongosa elephants and lions.<sup>84</sup>

Multiracialism weakened racial divisions, which had been sharper in the first half of the twentieth-century. Loosening racial categories affected the way people dealt with land and other natural resources because the sense of promotion increased African motivation to work more and to cooperate with the colonial regime. Slowing racism provided Gorongosans with a sense that the Portuguese upgraded them. Gorongosans thought that they were being untangled from colonial leashes, integrating the evolving economy in the ecosystem. From the 1960s through 1970s, for example, the one official school in the Gorongosa town opened doors for children of co-opted Gorongosans, “assimilated,” to join white minorities in classes. This antidote had improved self-esteem of the “assimilated,” then encouraged to defend the Portuguese.

Unlike the cement technology that energized immediate extraction and draining of natural resources out of Gorongosa, schools prepared a relief for the ecosystem. From 1960s, primary schools in Gorongosa taught children how to mix agriculture with teaching, nursing, health, registering, and easing their transport and communication, instead of the traditional hoeing. Until mid-1970s, primary schools empowered some local people to move their attentions from the extractive industry to services, an indication that the Portuguese multiracialism induced incremental shifts in the life of

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<sup>84</sup> Gorongosa National Park Archives, Vasco Galante and Fernando Gil’s Blog, “Astronautas do Programa Apollo no Parque Nacional da Gorongosa, em Moçambique (1971),” *Moçambique para todos* (18/02/2013).



Mozambicans.<sup>85</sup> Portuguese primary schools and the one big Mission School north of the town of Gorongosa, therefore, brought a form of modernization.

Making schools and other colonizing institutions accessible to a handful of Mozambicans, however, did not restrain the dynamics of human history that began at the end of the World War II, when the global market and the United Nations became involved in Mozambican politics. Nationalists, the UN, and other external forces continued to pressure the Portuguese to end colonialism in Mozambique.<sup>86</sup> In 1962, for example, Julius Nherere, then president of Tanzania, supported some Mozambicans who formed Mozambique Liberation Front (Frelimo), a nationalist movement intended to fight for the independence of Mozambique. The UN and some of its member countries encouraged this decolonizing initiative, despite the fact that Portugal was part of the UN Member Countries.<sup>87</sup>

From 25 September 1964 to 1974, Frelimo, then a rebel movement, fought against the Portuguese.<sup>88</sup> According to Malyn Newitt, it was on 25 September 1964 that Frelimo launched its military campaign by attacking the Portuguese base at Chai in northern Mozambique, at the same time issuing a proclamation and a call to arms. The movement entered Gorongosa in 1973.<sup>89</sup> Following the footsteps of Gorongosans, Gouveia, and Makombe, Frelimo based itself on Gorongosa Mountain from which they attacked the Portuguese until 1974. Frelimo's attacks caused unrest in Gorongosa, forcing peasants to

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<sup>85</sup> Eduardo de Sousa Ferreira, *Portuguese Colonialism in Africa: The End of an Era*, (Paris: The Unesco Press, 1974), 105.

<sup>86</sup> *Ibid.*, 1-10.

<sup>87</sup> *Ibid.*

<sup>88</sup> Newitt and Dewitt, 87-160.

<sup>89</sup> Bob Shacochis's interview with the liberation war-veterans in Maputo-Mozambique, 2009.

reduce hoeing and resulting in famine between 1973 and 1975.<sup>90</sup> From 1920s to early 1970s, the Portuguese evicted Gorongosans from the floodplain. In return, Gorongosans, led by Frelimo, evicted the Portuguese in 1975. With independence, the new Frelimo elites adopted European model of government it fought against, adjusting the model to fit realities in Mozambique. For João Cabrita, “Frelimo’s call for the destruction of foreign ‘economic domination’ in reality meant a realignment of the country’s traditional links with the Western economic system. The goal was to rapidly complement the political and ideological unity already established with the socialist world, with economic unity.<sup>91</sup> This meant maintaining some of the foundational structures that Portugal established, including Gorongosa National Park.<sup>92</sup> Maintaining colonial economic structure operational, however, required core skills, which rested in the hands of the evicted Portuguese. As colonial auxiliaries, almost no Mozambican bourgeoisie had had the blessing to enter the core of colonial politico-economic planning. Lacking the technical skills to run the economy and hard-pressed financially, the Frelimo government sought foreign experts who could help manage the Park.<sup>93</sup> The IUCN and other global organizations carried on managing the Park in partnership with the Frelimo

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<sup>90</sup> “In possession of the Gorongosa District Administration” – Exmo Senhor Administrador da Circunscrição da Gorongosa: Vila Paiva de Andrada. R. B. Rancho (Moç.), L.D.A, Propriedades em Lamego e na Serra da Gorongosa, Beira, 30 Julho 1974. Gorongosa District Administration Manuscripts; “In possession of the Gorongosa District Administration” – Mui Excelentíssimo Senhor Governador do Distrito da Beira. Francisco Nunes Teixeira. Paço Episcopal. Diocese da Beira. Mozambique. Gorongosa District Administration Manuscripts; Bob Shachochis’s interview with liberation war-veterans in Maputo-Mozambique, 2009, also observed that in 1974 Frelimo freedom fighters operated in Gorongosa.

<sup>91</sup> “In possession of Gorongosa District Administration” – Sessão Extraordinária da Assembleia Provincial Sobre o P. P. I. Discurso de Abertura. Província de Sofala. República Popular de Moçambique. Gorongosa District Manuscripts; Cabrita, 48-100;

<sup>92</sup> ADG [Administração do Distrito de Gorongosa] “Circular-Informação” República Popular de Moçambique, Ministério do Interior. 23 April 1976.

<sup>93</sup> Eduardo de Sousa Ferreira, 13-80.

government.<sup>94</sup> The Gorongosa ecosystem has thus reflected more traces of actors, decisions, laws, and trends emanated from the outside.

Summing up, from individual enterprises that subsisted until late in the 1880s and up to 1975, different human agencies consecutively altered the physical configurations of the greater Gorongosa ecosystem as they farmed, hunted, opened new roads, housing, and businesses. However, a decade before 1974, colonial insensitivity to Mozambican concerns and priorities generated Frelimo, which in 1975, became the next agent determining actions that changed the Gorongosa ecosystem. Under Frelimo's politico-economic limitations, its elites, besides maintaining colonial model of dealing with people and natural resources, they opted for Marxism-Leninism. This new power structure in the countryside drove Gorongosans into living in communal villages, villagization. Villagization made Gorongosans hoe in communal farms and buy in cooperative shops, hindering Gorongosan traditional habits and the habits they learned from colonial interactions.

Villagization coerced Gorongosans to attend communal meetings (*banjas*) under layered new socialist leadership. The new government established this leadership all over rural Gorongosa, and undermined the established headmen. Villagization altered the interactions of indigenous vegetation and fauna. This was an attempt to create a "New Man," through Marxism-Leninism, by providing the people with ideas and food. But villagization tightened social control, belittling local ways of living.<sup>95</sup> In the colonial era, Gorongosans were working tools for Portugal's economic agenda, running activities that

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<sup>94</sup> Joseph Hanlon, *Mozambique: Who Calls the Shots* (London: James Currey, 1991), 5-50; Bob Shacochis's interviews with Baldeu Chande, a Mozambican environmentalist, summer 2009. Maputo-Mozambique.

<sup>95</sup> Newitt and Dewitt, 77-133.

modified the ecosystem. However, when Gorongosans returned to their homesteads, they led their customary land use patterns. By contrast, soon after the independence, villagization reduced Gorongosans to political puppets, increasing frustrations, resentment, and hatred, especially as the headmen's power disappeared from the political arena and resettlement altered land use customs.<sup>96</sup>

Complicating Gorongosans even more was the fact that Mozambique's socialist elites grabbed colonial housing, infrastructure, and other stuff that the Portuguese left in Mozambique and they moved into these colonial enclaves which were separate from indigenous settlements.<sup>97</sup> When the party elites returned to larger towns and cities, they led capitalist lifestyle, which was supported by the rural peasantry.<sup>98</sup>

Eager for the independence but technically limited on how to run the country successfully, the Frelimo government frustrated other Mozambicans who did not grasp enough material and political gains.<sup>99</sup> Looking for an alternative, some Mozambicans, including but not limited to Gorongosans, joined a widespread national discontent, which aggravated splits among Frelimo members from the independence onward.<sup>100</sup> With the appearance of Renamo, a rebel movement, to compete with Frelimo's political inconsistencies, havoc followed.

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<sup>96</sup> GDA, Circular-Infomação, Ministério do Interior. República Popular de Moçambique. 23 April 1976, no page numbers.

<sup>97</sup> William Finnegan, *A Complicated War: The Harrowing of Mozambique*, (Berkeley: University of California Press, 1992).

<sup>98</sup> Vines, 37-90. Hanlon, 10-67.

<sup>99</sup> Vines, 116.

<sup>100</sup> Cabrita, 55-73.

## CHAPTER 4, THE ERA OF FLORA PREDOMINANCE, 1975-1992

*When Marxism-Leninism Predominated How Did the Ecosystem Change?*

Algae, angiosperms, bryophytes (monocotyledons and dicotyledons), fungi, gymnosperms, lichens, and pteridophytes, vegetation indigenous to Gorongosa, expanded over the Gorongosa ecosystem during Mozambique's civil war, which was linked to anti-Marxism-Leninism reactions.<sup>1</sup> Trees, gramineae, and flowers colonized Gorongosa mostly when the war displaced humans from the lands. Some peasants within Gorongosa confined themselves to mountains, Gorongosa town, and Gorongosa National Park. Their housing, paths and roads, charcoal production, and their slash-and-burn agriculture for maize [*Zea mays*], sorghum [*Sorghum bicolor*], cotton [*Gossypium hirsutum*], beans, cassava [*Manihot esculente*], potato [*Ipomea batatus*], peanut [*Arachis hypogaea*], vegetables, pineapple, and orange trees dwindled in the ecosystem. Displacements turned lands previously inhospitable to plants into areas receptive to vegetation regeneration.<sup>2</sup> Decreasing food crops slowed competition with indigenous vegetation over space, soil and water.<sup>3</sup>

Civilians and soldiers in Gorongosa became foragers and they survived by eating, bartering, and selling bushmeat from the park. As Chacupiua, aged 67, told me, “the war forced the peasants into a foraging life, which shook Gorongosa's social hierarchy because as people fled the bullets they did not pay attention to the elites which regulated

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<sup>1</sup> Marina Ottaway, “The Theory and Practice of Marxism-Leninism in Mozambique and Ethiopia,” in David E. Albright (ed.), *Communism in Africa*, (Bloomington & London: Indiana University Press, 1980). João M. Cabrita, *Mozambique the Tortuous Road to Democracy* (London: Palgrave-McMillan, 2001), 21-43.

<sup>2</sup> Edward O. Wilson, *A Window on Eternity: A Biologist's Walk Through Gorongosa National Park*, (New York: Simon & Schuster, 2014), 123. Joseph Hanlon, *Mozambique: Who Calls the Shots*, (London: James Currey, 1991), 20.

<sup>3</sup> Wilson, *Window*, 136.

the social, religious (*Mbhamba*), and the magic (Mountain) life.”<sup>4</sup> Even Gorongosa’s strong totemic beliefs (Tembo, Moio common totems) aimed at keeping human-wildlife equilibria in the ecosystem faded, as Chacupiua and other peasants began eating zebra, hippopotami, elephant, buffalo, and other bulky-grazers from the Park, reducing the quantity of wildlife whose pasture gave the Floodplain vegetation no chance to thrive.<sup>5</sup>

As agricultural activities reduced on Gorongosa Mountain, forest of *Aphloia theiformis*, *hypericum revolutum*, *kiggelaria Africana*, *macaranga capensis*, *myrsine Africana*, *nuxia congesta*, *philippia hexandra*, *pittosporum viridiflorum*, *podocarpus milanjianus*, *rapanea melanophloeas*, and *widdringtonia nodiflora* took over the fallowed spaces. The grassland on the top of Gorongosa Mountain, where Afonso Curandeiro and a few other Gorongosans remained during the civil war, included the following gramineae *andropogon flabellifer*, *danthonia davyi*, *eragrotis volkensis*, *festuca costata*, *ischaemum arcuatum*, *koeleria capensis*, *panicum ecklonii*, *panicum lukwangulense*, and *panicum inequilatrum*.

Gorongosa miombo woodland spread over empty spaces left on the Gorongosa Plateau included *Ambrygonocarpus andogensis*, *brachystegia boehmii*, *brachystegia speciformis*, *burkea Africana*, *diplorrhynchus condylocarpon*, *julbernardia globiflora*, *oxytenanthera abyssinica*, *periscopsis angolensis*, *pterocarpus angolensis*, *pterocarpus rotundifolia*, *pterocarpus brennani*. Spreading over the surface and retaining soils erosion

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<sup>4</sup> Interview with Chacupiua, Gorongosa town, July 8, 2013.

<sup>5</sup> Wilson, *Window*, 7.

on the Plateau were the following gramineae andropogon gayanus, heteropogon melanocarpus, hyparrhenia cymbaria, hyparrhenia filipendula, and hyperthelia dissolute.<sup>6</sup>

Gorongosa Floodplain vegetation included acacia galpanii, a. xanthophloea, a. nigrescens, a. robusta, a. sieberiana, a. welwitschii, albizzia herveyei, albizzia versicolor, balanites maubhamii, cladostemon kirkii, coffea racemosa, combretum fragrans, c. imberbe, craibia zimmermannii, erythrina livinstoniana, euphorbia halipedicola, e. lividiflora, ficus spp. guibourtia conjugata, gyrocarpus americana, hunteria zeylanica, hymenocardia ulmoides, hymenodictyon parvifolium, inhambanella henriquesii, lonchocarpus capassa, millettia stuhlmannii, newtonia hildebrandtii, piliostigma thoningi, pteleopsis myrtifolia, pterocarpus antunessi, sclerocarya caffra, strychnos decussate, s. mitis, trichilia emetic, and vepris reflexa. Heteropogon contortus, hyparrhenia rufa, panicum maximum, pennisetum purpureum and urochloa mossambicensis are on the list of Floodplain gramineae.<sup>7</sup>

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<sup>6</sup> J. M. Mafalacuser and M. R. Marques, "O Potencial dos Recursos Agrários do Distrito de Gorongosa e Possibilidades de Desenvolvimento," República de Moçambique, Direcção Provincial de Agricultura e Desenvolvimento Rural de Sofala, Programa de Desenvolvimento Rural, Sifala, Maio 2000. P. 21-23.

<sup>7</sup> Marc Stalmans and Richard Beilfuss, "Landscape of the Gorongosa National Park" (Gorongosa National Park, Mozambique. June 2008).



Figure 13: Aerial view of Gorongosa vegetation in 2011. Picture by Luis Patrício Oliveira.

In the context of the Cold War era, the Frelimo socialist government appropriated land, wildlife, and other resources across the country. Land reform, in part sparked the 1977-1992 civil war.<sup>8</sup> Nationwide, about a million Mozambicans died directly in the war. Thousands of others died from problems related to the war. The war displaced other thousands of people who sought refuge within Mozambique and in neighboring countries. Why did Mozambicans fight each other?

Divisions among Mozambicans, and each group's efforts to control infrastructure was one of the local reasons that drove the country into the civil war, and affected the way Gorongosa land was used until the war ended.<sup>9</sup> Building on precolonial divides, for instance, the Portuguese reshaped the divided Mozambique. As history shows, early on the Portuguese further separated native Mozambicans to better colonize. In the process,

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<sup>8</sup> Carolyn Nordstrom, *A Different Kind of War Story*, (1997), 34-50; Hanlon, 68-76.

<sup>9</sup> Nordstrom, 48.



Portugal had co-opted traditional headmen from within native settlements who acted as colonial ambassadors in their own communities. Then, Portugal created native housekeepers and a regular workforce that built and maintained Portuguese precincts. Using schools, health centers, the market economy, and Portuguese wage labor as instruments of colonization, Portugal managed to create classes of *assimilados* (assimilated).<sup>10</sup> And by transferring the capital of the colony late in the 1880s to southern Mozambique, the Portuguese favored southerners at expense of other regions, paving the way for future political divisions in Mozambique. Then, the colonists called the southern region *Terra da boa gente* (the land of good people).<sup>11</sup>

The region is still favored by the postcolonial state, creating resentments in the non-southerners. Because the political power in the colonial era was focused in the south, southerners still believed in *Terra de boa gente* distinction. For example, from its inception in 1962, through the civil war era to its aftermath Frelimo drew its most influential leadership from the south.<sup>12</sup> These power imbalances that the Portuguese fanned during the colonial era continued.<sup>13</sup>

The colonial infrastructure was also one of the central causes of the civil war. Late in the 1940s through the 1970s, Portugal established social and material infrastructure.<sup>14</sup> At independence in 1975, twelve million Mozambicans inherited cities, ports, railways, factories, roads, telecommunications, tourist sites, and others infrastructure. Important trade routes evolved in a predominantly east west orientation

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<sup>10</sup> Harri Englund, *From War to Peace on the Mozambique-Malawi Borderland* (Edinburgh: Edinburgh University Press, 2002), 5.

<sup>11</sup> Allen Isaacman and Barbara Isaacman, *Dams, Displacement, and the Delusion of Development*, (Athens: Ohio University Press, 2013), 76-99.

<sup>12</sup> Alex Vines, *Renamo: Terrorism in Mozambique* (Bloomington: Indiana University Press, 1991), 100-112.

<sup>13</sup> Englund, 13-67.

<sup>14</sup> *Ibid.*, 5.

connecting Mozambique to the economies of the ex-British colonies of Malawi, Zambia, Rhodesia, and South Africa. Mozambique's poor internal development also fell under Frelimo's socialist government at independence.<sup>15</sup> The government's inability to unite Mozambicans after the independence generated complaints from other nationalists countrywide.

Despite the socialist leanings of Frelimo, Mozambicans were nursed under capitalism in the colonial time. Therefore, controlling the state's inheritance became important to multiple interest groups. Soon after independence, the interest groups drove the new nation into the civil war. Ethnic, ally-based marginalization within Frelimo alienated some of its members who found themselves in the periphery of the power.

According to Alex Vines:

Frelimo was born of a coalition of three exile groups, MANU, UDENAMO and UNAMI. They coalesced together in June 1962 through the encouragement of Eduardo Mondlane, who had the advantage of not belonging to any of them. This union was fragile. Already by August 1962, Frelimo experienced its first schism with the expulsion of Matthew Mmole and Lourence Millinga (both former MANU officers) which arose from their disquiet over not being elected to Frelimo's Central Committee. (...) In December 1962, Frelimo's first publicity secretary, Leo Milas, was beaten up by about twenty Frelimo members in Dar es Salaam. In January 1963, Frelimo's Secretary General, David Mungwambe, his deputy Paulo Gumane, the organizing secretary, João Mungwambe, and Fanuel Mahluza were expelled from the Central Committee because of their alleged involvement in the beating. (...) Milas was expelled in August 1964 from Frelimo. (...) By late 1967 and early 1968, the further tensions generated by the unexplained death of Frelimo's Secretary of Defense, Filipe Magaia, in October of 1966 and the encouragement into unrest by Fr. Mateus Gwenjere, exploded into violence.<sup>16</sup>

Intolerance to different opinions and marginalization Vines described above became characteristic. And as it happened with the Portuguese who excluded native

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<sup>15</sup> Malyn Newitt and Marilyn Dewitt, *History of Mozambique* (Bloomington: Indiana University Press, 1995), 50-56.

<sup>16</sup> Vines, 11-12; Newitt and Dewitt, 523-525.

Africans from the evolving economy, resulting in the nationalist awakening, marginalization made Frelimo's euphoric era short lived. Disillusioned Mozambicans entered into the civil war as Vines observed:

The first violent disturbance against the new government after independence occurred in late 1975 with a flare-up of unrest in the north of Mozambique among the Macua and Makonde ethnic groups. Frelimo alleged that this had been stimulated by the Frente de Cabo Delgado (FCD), partly out of discontent over the continued imprisonment of the former Frelimo Vice-President, Lazaro Nkavandame, who originated from Cabo Delgado. Not much is known about the FCD, but Frelimo reports at the time refer to thirty-five members being arrested by the authorities in February 1976 in Nangada, and, a few weeks later, to the detention of a Frelimo political commissar in Montepuez, for involvement with the group.<sup>17</sup>

Frelimo's main foe surged later. Many opposition groups had emerged soon after independence in 1975 as Vines claimed. According to Vines, south Rhodesian Security Forces (CIO) under Ken Flower, in coordination with Portuguese Intelligence (DGS), created the Renamo (*Resistência Nacional Moçambicana*/Mozambique National Resistance) rebel force between 1976 and early 1977. He observed that Renamo's mandate was to act against Frelimo within Mozambique. According to Vines, Flower created Renamo after Frelimo launched successful offensive against the Portuguese in Tete Province in 1973.<sup>18</sup>

One version of the literature about the Mozambican civil war, including Vines, argues that Frelimo's policies caused national discontent and internal divisions soon after

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<sup>17</sup> Newitt and Dewitt, 14-15.

<sup>18</sup> Vines, 15; For a general discussion, see also, Carrie L. Manning, *The Politics of Peace in Mozambique: Post-Conflict Democratization, 1992-2000*, (Westport, Connecticut: Praeger, 2002).

independence. This literature argues as well for the predominant role of white South Rhodesians and apartheid South Africans in the conflict.<sup>19</sup>

A second version of the civil war literature argues against the Cold War paradigm. This literature recognized the influence of foreign patronage to Renamo against Frelimo. However, the literature emphasized Mozambican internal divisions as the cause of the civil war. The literature further argued that Frelimo's policies generated the divisions and oppositions.<sup>20</sup>

Joseph Hanlon focused on the Mozambican economy. Hanlon argued that a socialist Frelimo inherited a weak economy from Portugal. And that Frelimo made the economy stronger by selecting the donors who could invest in Mozambique. In Hanlon's view, Frelimo's rejections of IMF, World Bank, and other donor economic programs infuriated the capitalist block in the Cold War era. As a consequence, the capitalists undermined Frelimo's successes by patronizing Renamo. Hanlon observed that devastation, famine, and lack of enough assistance impoverished Mozambique, pressuring Frelimo to accept the programs it previously rejected.<sup>21</sup>

Carolyn Nordstrom stressed the connection between white Rhodesians and the apartheid regime of South Africa. Both feared a socialist and black-majority Frelimo government. Frelimo infuriated the Rhodesians and South Africans by assisting, supplying, and allowing the establishment, in Mozambique, of military bases of African independence movements from Rhodesia and South Africa. Vines argued that Renamo's creation was a retaliation for Frelimo's attacks of Portuguese economic interests in Tete.

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<sup>19</sup> Vines, 15-16; Manning, 38; William Finnegan, *A Complicated War: The Harrowing of Mozambique*, (Berkeley: The University of California Press, 1992), xi.

<sup>20</sup> Cabrita, 127; David Alexander Robinson, "A Curse on the Land: A History of the Mozambican Civil War" (PhD Dissertation. University of Western Australia, 2006), 19.

<sup>21</sup> Hanlon, 1-81.

By contrast, Nordstrom claimed that white Rhodesians created and supported Renamo in retaliation against Frelimo's assistance to Rhodesian freedom fighters. She observed further that South African Defense Forces continued to assist Renamo's destabilization when in 1980 Rhodesia became independent.<sup>22</sup>

Most of the literature I mentioned converged around the argument that Renamo's initial role was to destabilize Mozambique's economy in order to curb Frelimo's ability to govern the country. The economic argument is crucial to an understanding of how the Gorongosa ecosystem changed in the face of violent local and global political disputes. The economic argument explains why cement technology, such as bridges, roads, tourist camps, and colonial enclaves, in the Gorongosa ecosystem were destroyed under Cold War political disputes over Mozambique's future.

In that sense, the literature stressed Renamo's destruction of infrastructure such as communication (roads, bridges, and railways), commercial sites (shops, markets, and factories), social structures (hospitals, schools), and tourist attractions like Gorongosa National Park as strategic. Some scholars mentioned that Frelimo and its allies, especially Zimbabweans, also bombed similar infrastructure, including Gorongosa's Pungue bridge, believing that they were equally important to Renamo. This policy applied to physical structure as well as forests, and mountains. Renamo and Frelimo both destroyed social, economic, and agroecological life. Assessing Renamo's war economy, Vines observed that:

Another aspect of Renamo's economy has been its involvement in the ivory trade. It has been alleged that Orlando Cristina and Evo Fernandes, in conjunction with South African military officers, were deeply involved in this illicit trade. This trade is not surprising since the Gorongosa national park, Renamo's base, was once famed for its rich wildlife. It is

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<sup>22</sup> Nordstrom, 39.

now thought that Renamo has been integrated into the international ivory smuggling network. The seriousness of this trade is suggested by the fact that Renamo bases recaptured by the FAM in 1988 yielded 19,700 elephant tusks, worth some \$13 million. Ivory smuggling appears to be an important source of finance or barter for obtaining firearms.<sup>23</sup>

Omitting Frelimo's relation to wildlife and forest products, Vines's account of the ivory trade explains part of the havoc that Renamo's war economy inflicted on Gorongosa National Park. How much Gorongosa ivory and elephant tusks may have entered the global market from 1980s to 1992?

According to Cecily G. Brewer, a proxy-war "is a conflict in which one party fights its adversary via another party rather than engaging that party in direct conflict."<sup>24</sup> Did Renamo and Frelimo fight a proxy-war? The literature indicated that Rhodesian and South African capitalists used Renamo while the USSR, China, Cuba, and other socialists backed Frelimo. Both blocks struggled to impose their dominance on the newly independent Mozambique. The common assumption was that some disenfranchised Portuguese, white Rhodesians, and South Africans funded and trained Renamo to attack Frelimo within Mozambique. Frelimo favored the USSR, China, and Cuba from which it obtained military support during the 1964-1974 liberation war.<sup>25</sup>

The literature on the war argued convincingly that it was the proxy-war that destroyed Mozambican ecosystems. From military bases in Mozambique, ZANU was fighting white dominance in south Rhodesia and white Rhodesians therefore bombed ZANU in Mozambique. The apartheid regime endeavored to expand its regional influence into Mozambique. But Frelimo backed the ANC, which also confronted the

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<sup>23</sup> Vines, 89.

<sup>24</sup> Cecily G. Brewer, "Peril by Proxy: Negotiating Conflicts in East Africa," *International Negotiations* 16 (2011), 137-167.

<sup>25</sup> Englund, 6-15.

apartheid system from Mozambique. Angry about the loss of their properties left to Frelimo, Portuguese colonists also supported the Rhodesians and South Africans destabilization of Mozambique through Renamo.

Besides external patronage, internal conflicts, and political divisions, to what extent did natural resources influence Renamo's and Frelimo's civil war?<sup>26</sup>

A growing literature argued that resource exploitation fueled small wars in southern Africa. Focused on thirteen case studies about civil wars and natural resources in Latin America, Africa, and Asia, Michael L. Ross argued that intra-state civil wars were triggered by claims over mineral and other natural resources.<sup>27</sup> Benedikt Korf agrees, arguing that opportunities to exploit resources determined civil wars.<sup>28</sup>

The literature convincingly argued that internal and external forces all fueled the Mozambican civil war.

#### *How Did the Civil War Affect the Gorongosa Ecosystem?*

Kenneth Tinley and Paul Dutton reported about 14000 buffalo in Gorongosa National Park in the 1970s. By contrast, Richard Beilfuss et al counted around 50 buffalo late in 2007, fifteen years after Mozambique's 1977 - 1992 civil war had ended and after thirteen years of ecosystem restoration.<sup>29</sup> Are there different versions of stories humans tell about this drastic wildlife reduction? How much damage did the civil war cause to the

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<sup>26</sup> Mark C. Chona and Jeffrey I. Herbst, "Southern Africa," in Anthony Lake (ed.), *After The Wars: Reconstruction in Afghanistan, Indochina, Central America, Southern Africa, and the Horn of Africa* (New Brunswick, USA: Transaction Publishers, 1990), 141-166.

<sup>27</sup> Michael L. Ross, "How do Natural Resources Influence Civil War? Evidence from Thirteen Cases," *International Organization* 58 (2004): 35-67.

<sup>28</sup> Benedikt Korf, "Resources, Violence and the Telluric Geographies of Small Wars," *Progress in Human Geography* 36 (2011): 733-756

<sup>29</sup> Richard D. Beilfuss *et al*, "Monitoring post-war recovery at Gorongosa National Park, Mozambique," *Gorongosa National Park, Chitengo, Mozambique* (November, 2007): 1-22.

Gorongosa ecology? Besides wildlife, thousands of humans died. Countless others were displaced. And with Gorongosa as one of the central battlefields, the ecosystem, its human and wildlife actors suffered considerable trauma. How can violence change and traumatize an ecosystem?

The 1977-1992 civil did not start ecosystem changes in Gorongosa. The Gorongosa ecosystem already changed under droughts, floods, and global warming among other natural forces. However, violence in the ecosystem accelerated the changes. Large human induced changes in the ecosystem occurred from the 1940s to the 1970s when Portugal extended cement building, resulting in long lasting transfigurations of landscapes. Cement building generated deep social transformations. Roads, bridges, housing, and agriculture replaced vegetation covers within the ecosystem. The multiplication of human populations, about 5,000 in 1944 to about 97,221 in 2005, in Gorongosa reduced wildlife because people killed animals for food and trade.<sup>30</sup>

However, from the 1980s through the 1990s, the civil war went from Gorongosa Mountain down to the Gorongosa Plateau and to the Gorongosa Floodplain because Renamo's important military bases were located on the Mountains and near the massif. Most displaced humans moved downhill, a pattern contrary to ascending migrations that followed the 1920s, 1930s, and 1940s evictions. Together with the 1981-1984 droughts, the war reduced the area of land cultivation, destroyed cement technology, allowed vegetation to recolonize farms, increased famine, and drove people to live off bushmeat.

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<sup>30</sup> "Perfil do Distrito de Gorongosa, Província de Sofala." República de Moçambique, Ministério de Administração Estatal. P. 2. AHM-ISANI, Relatório da Inspeção Ordinária às Circunscrições de Buzi, Chemba, Cheringoma, Chimoio, Gorongosa, Manica, Marromeu, Mossurize, Sena, Sofala. Caixa nr. 39. 1943-1944. Abel de Sousa Moutinho, inspector Administrativo, 357.



Some displaced people took refuge inside the park, thus regaining ancestral lands.<sup>31</sup> Other refugees opted for the mountain and relied on cultivation, despite Renamo's incursions. Others clustered in and around Gorongosa town and received food donations. This war dynamic threatened wildlife and reduced living conditions to misery in Gorongosa. But it allowed vegetation to recolonize abandoned plots in the ecosystem.

Why did Gorongosa become the hub of the civil war?

The first was Frelimo's failure to divert the rural Gorongosans from their wish to remain linked to customary lands, ritualized practices, and indigenous norms. The socialism that Frelimo introduced soon after the independence forced people into planned village settlements. Unfortunately, many left the communal villages. By contrast, the Portuguese had let natives enjoying their rural settlements, interfering occasionally for conscripted labor and during Frelimo's war for independence.

Socialism required that Gorongosans abandon their rural lands, ancestral graves and other sacred places, independent huts, home-yards (*madembes*), and family farms. Pressured, native people had to accept living in communal villages, share gardens, shops, and attend the populist meetings, as I described in Chapter 3. Additionally, socialism introduced new leaderships in the communal villages, undermining the traditional polity and other symbolic values long established in the Gorongosa ecosystem. The resettlement policy failed to build on preexisting dynamics. Traditional polity and their institutions had been enshrined in the life of the *madembes*.<sup>32</sup> Forcing natives to leave behind their ritualized practices, including the *Mbhamba* cult embedded in rural life, erased

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<sup>31</sup> Cabrita, 30-80.

<sup>32</sup> One *madembe* is an abandoned former homestead. Gorongosa *madembes* are easily recognizable by a forest growth mostly composed of mango trees, cashew trees, orange trees, papaya trees.

Gorongosan identity. Mucoza, Nhamadzi, Tsiquir, Nhamussongora and ten other planned villages concentrated Gorongosans, set aside hectares and hectares of land for settlement and collective farming. Feeling vulnerable and resentful, most rural folks soon abandoned the villagization and returned to their traditional home-yards.<sup>33</sup>

Of course, colonialism evicted peasants from Gorongosa's most arable lands, the Floodplain, in order to create Gorongosa Game preserve, which at that time served colonial interests. To Pereira Manuel Sadjungira, Canquene Andicene, Afonso Curandeiro, Gero Trabuco and to most Gorongosa peasants, "liberating Mozambique from colonialism meant an opportunity for Gorongosa people to do what the colonialists prohibited," such as returning to live in their homelands in the Floodplain where they would once again farm and hunt freely.<sup>34</sup> This return to freedom, as the peasants expected when they allied with Frelimo's freedom fighters, did not happen. Instead, the Park's boundaries remained fully patrolled. The peasants continued living and farming in the arid lands of the Plateau and the mountainous sections of Gorongosa. Their failure to regain access to the floodplains bred resentment.<sup>35</sup>

The second reason why Gorongosa became the hub of the civil war was the postcolonial state's failures to integrate Gorongosa peasants into new economies based on the ecosystem services. Historically, the southern Tsonga, Nguni, and Vatua, for example, repeatedly exploited the Gorongosa peasants. The southerners used to raid, loot, and capture Gorongosans for enslavement. Each time the raiders invaded Gorongosa, the peasants took refuge in the rainforest on Gorongosa Mountain. Historical sources showed

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<sup>33</sup> Cabrita, 77-87.

<sup>34</sup> Interviews with Canquene Andicene, Gero Trabuco, Afonso Curandeiro, and Pereira Manuel at Pereira's house, in Sadjungira, eastern Gorongosa Mountain. September, 2010.

<sup>35</sup> Cabrita, 100-120.

that from the 1850s, Gorongosans allied with the Indo-Portuguese estate owner Manuel António de Sousa (known among the natives as Gouveia).

Gouveia rivaled the Vatua for power. He adopted Gorongosa Mountain for his home. Gorongosa Mountain therefore served as the refuge for Gorongosans and Gouveia when the Vatua attacked. Each time I contemplated one of the ruins on the mountain I asked why did the massif become Gouveia's stronghold. In response, I learned stories about Gouveia's alliance with Gorongosa peasants and their collective transformation of mountain landscape by building several brick forts, exploring mountain resources, and by introducing acacias [*sp*] and mango trees at the foothill north of Gorongosa Mountain.<sup>36</sup> In fact, Gorongosa oral tradition demonstrated how naturalized the Goan emperor had become. And reports of him being ruthless to his opponents, internal and external, were never erased.

In conclusion, Gorongosa's alliances have continued, following similar patterns. First, they allied to Gouveia to resist against the Vatuas. Then, they allied to Makombes to resist against Portuguese invasions.<sup>37</sup> Further, they formed economic alliance with developers-poachers to resist against wildlife preservationists in Gorongosa National Park. And then they allied with Frelimo to resist the Portuguese colonization. But when they realized that Frelimo did not fulfilled its promises, Gorongosans shifted. In 1979 they allied to Renamo in order to resist the Frelimo government. Frustrated with Renamo, in 2004 and in 2009, peasant Gorongosans allied to *Partido Para Desenvolvimento e Democracia* (PDD) to resist Frelimo and Renamo through elections. In 2013 and in 2014,

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<sup>36</sup> Jorge Luis P. Fernandes, *República [Popular] de Moçambique: Alterações Toponímicas e os Carimbos do Correio*, (Portugal: Edições Húmus Lda, 2006), 89-99.

<sup>37</sup> AHM – Direcção dos Serviços dos Negócios Indígenas (DSNI). Inventário dos Relatórios das Inspecções Ordinárias, 1936-1974. Caixa 40. Circunscrições de Mossurize, Manica e Gorongosa. Esboço Histórico. Júlio dos Santos Peixe, Administrador da Circunscrição da Gorongosa, 1955; Englund, 66-78.

some Gorongosa peasants shifted from PDD. They allied to *Movimento Democrático de Moçambique* (MDM) to resist Frelimo, Renamo, and PDD altogether.

## CHAPTER 5, THE ERA OF RESTORATION, 1993-2014

*How Did the Ecosystem Change When the Global Market Predominated?*

The different ways that different peoples interacted with the Gorongosa ecosystem before the civil war (1977-1992) inspired the content they restored from 1993 to 2014. To begin with, what is Restoration? Restoration, according to Kumar, implied rebuilding physical “infrastructure and facilities, basic social services, and essential government functions” after a devastating war.<sup>1</sup> In terms of park conservation, restoration included the expansion of the summit rain forest on Mount Gorongosa, the planting of millions of tree seedlings, and the rebuilding the tourist center to make the park financially self-sustaining.”<sup>2</sup>

*Nationwide Restorations in the Aftermath of the Civil War: Overview*

The Mozambican civil war ended in 1992. Reconstruction followed nationwide. How is reconstruction defined? Besides being broadly interchangeable, definitions about reconstruction, restoration, rehabilitation, and rebuilding are problematic because there is no consensus in terms of what they really convey. A growing literature has defined reconstruction as the restoration of physical and institutional structures to pre-destruction state. Sometimes rehabilitation referred to rebuilding households whereas reconstruction meant restoring physical and social infrastructure. Krishna Kumar believed that the causes of civil wars were mostly political, when governments were unable to perform

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<sup>1</sup> Krishna Kumar, “Nature and focus of international assistance for rebuilding war-torn societies,” in Krishna Kumar, (ed.) *Rebuilding Societies after Civil War: Critical Roles for International Assistance*, (Boulder, London: Lynne Rienner Publishers, 1997), chapter 1.

<sup>2</sup> Edward O. Wilson, *A Window on Eternity: A Biologist’s Walk through Gorongosa National Park* (New York: Simon & Schuster, 2014), chapter 1.

their essential functions, generating insurgences. Therefore, instead of aiming at achieving the pre-destruction conditions, Kumar understood that reconstructions needed to move in multiple directions.<sup>3</sup>

The causes of the Mozambique's civil war were indeed political because there were several internal conflicts between different factions, including but not limited to traditional, rural groups and the city-based nationalists. After the first democratic election in 1994, the new Mozambican government still faced opposition from different groups who possessed different socioecological and political agenda. According to Matthew D. Turner, the ways peoples understand, utilize, and protect nature reflects their environmental knowledge. This knowledge is often inspired, produced, and circulated by the politics of those who have the needs and the abilities to legitimize certain environmental practices at expense of others. To Turner, although privileged, those who produced environmental knowledge suffered external and internal influences. They produced knowledge inspired by both the needs of the people who wanted to apply it and by the knowledge already in circulation in the societies that the knowledge-producers integrated.<sup>4</sup> With Gorongosa under restoration, what environmental knowledge was promoted and what was marginalized?

*“What” Has Been Restored in the Gorongosa Ecosystem?*

Between 1993 and 1998, different peoples returned to recolonize the Gorongosa ecosystem. Government appraised demining projects were the first to enter in the

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<sup>3</sup> Kumar, 2.

<sup>4</sup> Matthew D. Turner, “Introduction of Environmental Knowledge: Scientists, Complex Nature, and the Question of Agency,” in Maria J. Goldman *et al* (eds.) *Knowing Nature: Conservation at the Intersection of Political Ecology and Science Studies*, (Chicago & London: The university of Chicago Press, 2011), 25-29.

Gorongosa ecosystem. They cleared landmines. Then, different development projects entered. They restored bombed roads, bridges, schools, health clinics, and other governing institutions. Directly, the government restored the main road (EN1) that transects the Gorongosa District in the early 2000s. The government also repaired Gorongosa's internal roads leading to places like Cheringoma, Cudzo, and to Nhambita, including important bridges, such as the Pungue Bridge. The Catholics restored Gorongosa's *Missão Cristo Rei*, a mission located about two kilometers north of Gorongosa town.

On the other hand, Lolinha Casado, Fainita Vijarona and other Gorongosa peasants picked up hoes and went back to plowing the land. Together with other peasants, these women stopped forest expansion by cutting trees for housing, hoeing, and by burning to open up vegetation covers, restoring the ecology of their farms and home environments.

Countrywide, the global market agencies revived capitalism, which, from 1994, replaced socialism in the manner Mozambicans formally had to deal with lands and natural resources use.<sup>5</sup> As with the previous agencies (indigenous, colonial state, and postcolonial state), the success of the global market after Mozambique's civil war depended on exploiting resources, including Gorongosa's National Park, local labor, and physical infrastructure in the District.<sup>6</sup> Land mines, war-stricken infrastructure, and a

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<sup>5</sup> Amélia Frazão-Moreira observed that, "At the end of the civil war, the Mozambique government together with the support of international organisations (such as the IUCN) began work on the park's rehabilitation in 1995."

<sup>6</sup> Krishna Kumar, "The Nature and Focus of International Assistance for Rebuilding War-Torn Societies," in Krishna Kumar (ed.), *Rebuilding Societies After Civil War: Critical Role of International Assistance*, (Boulder, London: Lynne Rienner Publisher, 1997), page 25 Kumar argued that, "After prolonged wars, the economies of the conflict-ridden societies are invariably seriously weakened. Their institutional and physical infrastructure are damaged and in desperate need of repair."

traumatized workforce were conditions inhospitable for an economic agenda.<sup>7</sup> In order to reintegrate the Mozambican workforce, the global policies had to prioritize rehabilitations of the damaged structures without which direct resource exploitation would be impossible.<sup>8</sup>

“Rehabilitating war-torn societies, then, involves redefining and reorienting relationships between political authority and the citizenry, revisiting relationships between different ethnic and social groups, creating a civil society in its broadest sense, promoting psychosocial healing and reconciliation, and reforming economic policies and institutions that foster entrepreneurship and individual initiative.” Krishna Kumar.

More interesting in my study of the different human segments in Gorongosa and their interactions with local environments was that the remnant colonial infrastructure in the ecosystem exposed different landscape histories. For the government and its global support structure, restoring Gorongosa’s governing structures legitimized their authority and expanded their businesses opportunities. To indigenous Gorongosans, stories of resistance and submission enriched narratives. For example, Celestino Sacaune Canda, born in 1936 in the Canda chieftaincy, Francisco Seda, about eighty years old, and Mouzinho T. J. Famba, in his late seventies, the restoration of colonial enclaves, such as the town and the Park, “invoked colonial memories. The structures reminded us about

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<sup>7</sup> *Ibid.*, page 25 Kumar argued that, “The overall economic climate of transition societies is hardly favorable to investment or domestic savings. Business elites tend to invest overseas rather than within the country and are often responsible for capital flights. Overseas investors are naturally reluctant to invest in an uncertain environment. Under these conditions, the flow of substantial international aid is essential for economic rehabilitation.”

<sup>8</sup> Antonio M. D. Nucifora and Luiz A. Pereira da Silva, “Rapid Growth and Economic Transformation in Mozambique, 1993-2009,” in Punam Chuhan-Pole and Manka Angwafo (eds.), *Yes Africa Can: Success Stories from a Dynamic Continent*, (Washington, D.C.: World Bank Publications, 2011), 76.



who used them.”<sup>9</sup> To the old men, the structures were symbols of power and the elders consider them out of place.

Another segment was of Gorongosa’s traditional headmen (*nyakwawas*). Denied political activities in 1976, the democratic government allowed the headmen to reintegrate into Mozambique’s political arena in 1994. Revived, the headmen battled to reconquering their political influence in communities that had been governed by other political actors (*secretários*) for nearly 17 years.

Gorongosa shamans returned to use traditional medicine as traumatized civilians sought healing. Gorongosa rainmakers restored the importance of the Mbhamba rituals on farming.

For Nhenua Baptista, 46 years old, and for Vasco Antonio Joao, a carpenter and painter in his twenties, rebuilding colonial infrastructure in Gorongosa meant “job opportunities” and cash. Early in 2000s, Baptista assisted southern African building firms in the rebuilding of the EN1 while Vasco Antonio had had a job fixing windows and doors at Gorongosa health center.<sup>10</sup> These and other different restorations by different human groups put the Gorongosa ecosystem and the human transforming each other from 1993 to 2014.

In a nutshell, different Gorongosan age groups made sense of different historical dynamics as the various activities continued to change the land and its natural resources. I think that it is important to clarify that the fact that colonial infrastructure was reused by Mozambicans does not stop the questioning about alternative infrastructure in the

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<sup>9</sup> Interview with Celestino Sacaune Canda, Francisco Seda, and Mouzinho Taona Juliasse Famba at Celestino’s house. Mapombue. Gorongosa. June-July 2009.

<sup>10</sup> Interview with Nhenua Baptista. Vila Gorongosa. June 2007. Interview with Vasco Antonio Joao. Vila Gorongosa. September 2012.

postcolonial era. Can the independent Mozambicans build complementary (alternative) towns and cities, reflecting their current culture in which the local and Western coexist?



Figure 14: Picture showing rural peasants focused on their day-to-day dynamics in the Gorongosa ecosystem. Nhancuco-Canda, Gorongosa. 20.6.2012. Photo by Domingos Muala

Additionally, some rural Gorongosans maintained negative perceptions about Gorongosa's colonial legacy including the town, villages, and Gorongosa National Park. These places represented the centers of the external imposition of power. Therefore, rural folks continued to shy away from such centers of external authority as much as they could. Except when campaigning in the rural areas, the new occupants of the colonial villages and towns in Gorongosa also considered themselves superiors.<sup>11</sup>

<sup>11</sup> Victor Igreja, "The Politics of Peace, Justice and Healing in Post-War Mozambique: 'Practice of Rupture' by *Magamba* spirits and Healers in Gorongosa," in Chandra Lekha Sriram and Suren Pillay (eds.), *Peace versus Justice: The Dilemma of Transitional Justice in Africa*, (USA: James Currey, 2010): 277-300.

Environmentally, the restoration of the section of the EN1 that transects Gorongosa represented a pressure to vegetation in Gorongosa and in neighboring districts, as logging companies and charcoal producers cleared forests and used the highway to freight the products out of Gorongosa. Since 2004, power lines reestablished electricity in the Gorongosa town. From 2005, electricity improved the life of town-dwellers. Electricity allowed food conservation, improved public services, boosted commerce, and connected town residents to national television at the same time humans cleared long sections of vegetation where they planted power lines. Since 2005, cellphones became increasingly popular in Gorongosa. In order to buy cellphones, however, some Gorongosans poached wildlife. As in the colonial times, most of improvements from 1993 had been limited to Gorongosa town and villages, except the EN1. Although occupied by Frelimo elites, the rehabilitated infrastructure in the colonial town of Gorongosa shaped new perceptions in peoples like Nhenua Baptista and Vasco Antonio while awakening colonial memories of segregationist dynamics in the old Gorongosans.

#### *Restoring Gorongosa National Park*

The most energizing reconstruction in the Gorongosa ecosystem has been the restoration of Gorongosa National Park. Gorongosa National Park, which still faced massive poaching, tree felling, land cultivation, and arson until early in the 2000s. During the civil war and a few years after the ceasefire in 1992, anthropomorphic threats changed the “picturesque” game park into a mere precolonial native village.<sup>12</sup> A growing

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<sup>12</sup> Dan Brockington, *Fortress Conservation: The Preservation of the Nkomazi Game Reserve, Tanzania*, (James Currey: The International African Institute, 2002), 81.

literature reported the massive poaching that occurred in the years following the 1992 ceasefire.<sup>13</sup>

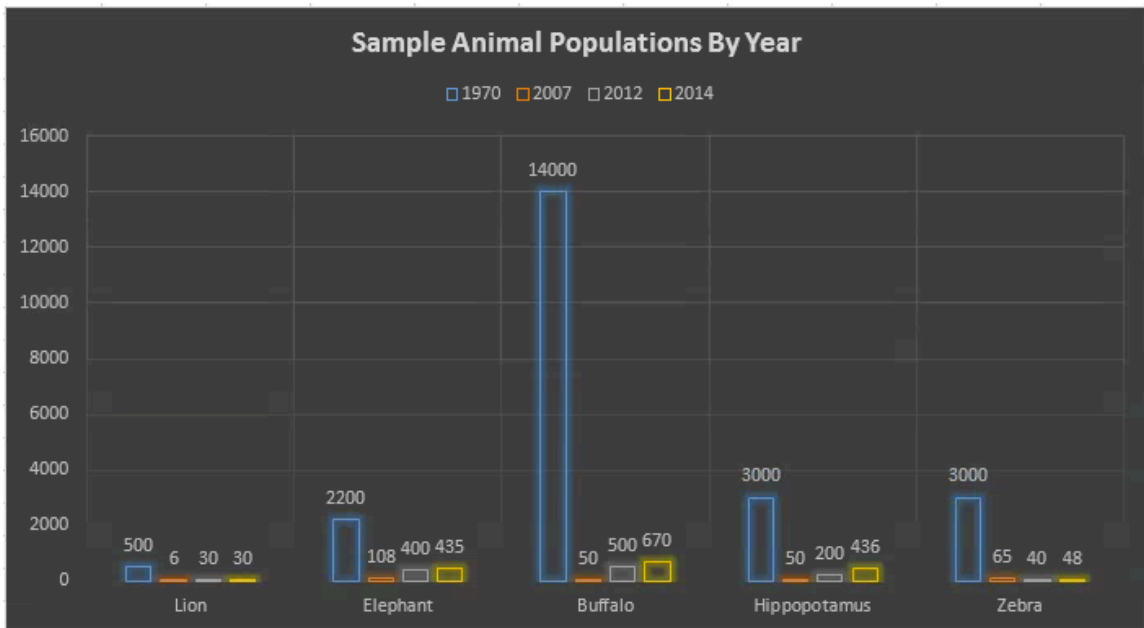


Figure 15: Wildlife fluctuation based on data from 1970s, 2007, and 2014 reports showed significant increase in wildlife populations in the Gorongosa National Park compared with 2007 surveys.<sup>14</sup>

Nonetheless, Gorongosa National Park survived as a symbol of Mozambican “pristine wilderness.”<sup>15</sup>

Postwar liberalization environment drove Frelimo to provide land concessions to the African Development Bank, the European Union, and the International Union for the Conservation of Nature that patronized initial attempts to restore Gorongosa National Park in collaboration with the Mozambique government. However, the most active restoration agent has been the US-based Greg C. Carr Foundation, a non-profit philanthropic and environmentalist organization.

<sup>13</sup> Wilson, *Window*, chapter 3.

<sup>14</sup> Richard D. Beilfuss *et al*, “Monitoring post-war recovery at Gorongosa National Park, Mozambique,” *Gorongosa National Park, Chitengo, Mozambique*. (November, 2007): 1-22.

<sup>15</sup> Bob Shacochis’s interview of Baldeu Chande, Maputo-Mozambique, July 2010.

Invited by the Mozambique government in 2002 to invest in the country, Greg C. Carr pledged \$40 million of his money in the restoration of the war-stricken Gorongosa National Park.<sup>16</sup> In a not-for-profit joint venture involving Greg C. Carr, the Mozambican government, and other organizations, the Greg. C. Carr Foundation created the Gorongosa Restoration Project, a public-private partnership committed to co-manage the restoration of the park, endeavoring to return the preserve to its former glory as one of the East African tourist destination status.

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<sup>16</sup> Amélia Frazão-Moreira assessed that “The formal discourse of the ‘Gorongosa Restoration Project’ departs ideologically from the Park of colonial days. Greg Carr said, for instance: ‘This is modernity meeting traditional culture’ and ‘You’ve got to bridge the two cultures. You’ve got to create a situation where both sides win.’”





Chitengo safari camp. The Project built new tourists facilities, and established communications via Internet and cellphones. For the first time, Gorongosa Restoration Project electrified the Chitengo camp, connecting it to Mozambique's power system, replacing the generators. A section of forest had to be cleared out, giving way to the power lines poles.

The Restoration Project rebuilt and expanded the park's internal network of roads and bridges. These activities included clearing vegetation and the reestablishment of cement infrastructure. The Project studied the ecological needs of the park, hired more than 400 employees, among them 130 rangers. Most of the park's workforce came from local communities. Some of the workers were former poachers, artisanal gold miners, and peasants. Pereira Charles told me about his reintegration in the park as follows:

“Warden Baldeu Chande invited me again in 1995. It was my friend Mário Macane who brought the news to me. I had spent six months home working on slash and burn agriculture, after my military service with Frelimo. Macane's name had already been on the list together with other few rangers of the prewar time, but no one of them remembered where the old roads were. These roads have stories: abandoned for about 13 years, there were no traces. Bush had grown thick, making it difficult to tell where the roads once were. When we began, there were no machines to open the roads. Chande hired part-time workers in Vinho community and in Vila Gorongosa. They went us into the Park to do the work. I was the leader. I showed each group where the old road passed. They began opening each road after I started cutting the first tree.” Pereira Charles, 2007.

Like Pereira Charles, the integration of many local people in the wage economy reduced the pressure they put on the ecosystems' natural resources because they earned cash. Over the same period, the Project introduced about 200 buffalo, 180 wildebeest, six adult male elephants, five hippopotami, 35 eland, and 15 zebra among other wildlife. These introductions also changed the ecosystem as the numbers of the grazers in the park

gradually increased ecological dynamics, altering the wetland vegetation that had taken over the preserve when wildlife dwindled. The Project launched a comprehensive biodiversity study and has been counting wildlife populations, building inventories of both the megafauna and smaller species. On the other hand, the scientists used chemicals to tranquilize and collar megafauna, killed some wildlife and plants for specimens and museum exhibits.

The Project planted about 3,000,000 indigenous trees, reforesting Gorongosa Mountain where most streams and rivers that sustain the Park originate. As the trees grow, they add up layers of dead leaves whose sponge effect retain rainwater, releasing it drop by drop into the streams in dry season.

Gorongosa Restoration Project extended improvements to its employees and local communities. The Project improved working conditions, built a number of facilities including new housing, and medical facilities to cover the employees and their families. This upgrading kept most employees away from pressuring natural resources, turning them from resource exploiters into environmentalists. In some communities around the park, the Project built and contributed to the building of schools, health centers, and water pumps. As tourists started visiting the Gorongosa Park, the Project distributed 20 percent of annual revenues to each community that helped protect resources within the preserve over one year period. A Community Education Center (CEC) built inside the park started aggregating peoples from around the park in support of environmental education programs for the surrounding communities. The completion of the CEC in 2010 allowed the Project to run environmental education sessions at the CEC as well as in the communities.



*Integrating Gorongosa Mountain in Gorongosa Park*

“Man’s intelligence however has won its victories chiefly because it was a cooperative one, and it would not have been such had there been no strong fellow-felling. It is the attachment of mother for child, of man for woman, and of man for man, that have bound us into the little groups that won, and that are finally binding us into the universal group, and it is this basic feeling of love that will continue to make the living world go around, if go it does. It is this for which we most readily put forth sacrifice.” Herman J. Muller, 07 July 1948.

Beginning in the late 1960s, colonial ecological assessments in the Gorongosa ecosystem argued for the protection of a tropical rainforest on Gorongosa Mountain. Fighting against developers and peasants, the preservationists urged governments to include Mount Gorongosa, about 1863 meters high, in Gorongosa National Park so that the rainforest might be protected against destructive human activities.

Only 50 years later, Gorongosa Restoration Project achieved the goal that the ecologists of the 1960s and 1970s sought. On 20 July 2010, the government of Mozambique approved the integration of an area above 700 meters of Mount Gorongosa in Gorongosa National Park.<sup>17</sup> Is it possible that by 2010 deforestation and land degradation on Mount Gorongosa had worsened? As in Guinea, West Africa, Melissa Leach and Robin Mearns claimed that most land degradation narratives from the 1980s and 1990s and became political rhetoric in the developing countries were wisdom derived from the West.<sup>18</sup>

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<sup>17</sup> Conselho de Ministros, Decreto nº 78/2010, “Altera os limites do Parque Nacional da Gorongosa,” *Boletim da República*, 13º Suplemento, Série I, 52 (31 Dezembro 2010): 1-3. This decree, which Mozambican Council of Ministers approved on 20 July 2010, changed the limits of Gorongosa National Park.

<sup>18</sup> Melissa Leach & Robin Mearns, “Environmental Change & Policy: Challenging Received Wisdom in Africa,” in Melissa Leach & Robin Mearns (eds.), *The Lie of the Land: Challenging Received Wisdom on the African Environment*, (Oxford: James Currey, 1996), 1-33.



Figure 17: Indigenous subsistence activities on Gorongosa Mountain. Photo courtesy Vasco Galante.

With the integration of the area above 700 m into the park, both institutions faced the challenge of implementing this environmental law. Since 2011, the process has been complicated by the fact that more than 2,000 people already lived on Gorongosa Mountain. How to proceed implementing the law? Where should the Project resettle hundreds of Mountain residents? Do Mountain residents consciously empathize with conservation goals? Have they agreed to move down Gorongosa Mountain?

Concerned about Serengeti National Park in Tanzania, Roderick P. Neumann argued that the idea of nature as a “pristine wilderness” was a reinvention of Europeans who cast their Western relationship with nature onto occupied African territories. Neumann added that such ideas of Serengeti as an “empty wilderness” was possible by denying the long history of human transformation of the landscapes claimed to be pristine and by evicting people.<sup>19</sup> Like Serengeti, Gorongosa Mountain was not pristine. This thesis argues that the mountain has for decades been a place of residence.

Further, Renamo leader, Afonso Dhlakama, resettled near Mount Gorongosa on 17 October 2012. His presence generated the 2013-2014 civil and military unrest in Gorongosa and across Mozambique.<sup>20</sup> This fact further complicated the Gorongosa restoration efforts because the Renamo and Frelimo militaries occasioned ambushes, shootings, burnings, displacement, and the killings of people, wildlife, and flora. This unrest disrupted the reconciliation work. As a result, the government and Gorongosa Restoration Project had to delay the implementation of the environmental protectionist law on the Mountain.<sup>21</sup>

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<sup>19</sup> Roderick P. Neumann, “The Production of Nature: Colonial Recasting of the African Landscape in Serengeti National Park,” in Karl S. Zimmerer and Thomas J. Bassett (eds.), *Political Ecology: An Integrative Approach to Geography and Environment-Development Studies* (New York: The Guilford Press, 2003), 240-255.

<sup>20</sup> Joseph Hanlon, “Renamo: 2 road attacks in new places,” in *Mozambique News report & clippings* 233 (4 November 2013): 1-6. According to Hanlon, on 3 November [2013] “Renamo has attacked main roads in two places.” One of the places was “near the Pungue River bridge, north [*the bridge in south*] of Gorongosa town, Sofala.” On Tuesday, 29 October [2013] there was another attack on a main road in Nampula-Rapale. José Chirinza, “Fim da tensão político militar em Muxúnguè: Dhlakama diz que já foi contactado por Guebuza,” *MediaFAX* no. 5276 (11 April 2013): 1-4. In this article, Chirinza reported that Mozambique and Frelimo’s President Guebuza asked the President of Renamo, Afonso Dhlakama, to stop his soldiers from military confrontation with Frelimo led soldiers and that Frelimo and Renamo should resume negotiations.

<sup>21</sup> Tim Forsyth & Andrew Walker, *Forest Guardians, Forest Destroyer: The Politics of Environmental Knowledge in Northern Thailand*, (2008), 49-50.



Figure 18: Map of Gorongosa Mountain, showing Canda, Tambarara, and Sadjunjira, the three main communities sharing the mountain.

### *How Can Conservation Biology Help Protect the Gorongosa National Park?*

On 27 March 2014, the Gorongosa Restoration Project moved a step forward in its mission to convert individual resource users into environmentalists. The Project built and inaugurated the Edward O. Wilson Biodiversity Laboratory, a training facility named after the American biologist. The Wilson Laboratory's mission includes training that fosters science and conservation education. Expatriate experts have used the Wilson Laboratory, collecting specimens and passing down skills to young Mozambicans selected from the neighboring human settlements.

A few Gorongosa boys and girls learned research skills and put them into practice right inside the Gorongosa Park, instead of going from their settlements into the park to poach. Through the Wilson Laboratory, the park resumed its pioneer mission of changing

human attitudes toward natural resources and ultimately turning boys and girls from land cultivation, poaching, tree felling, and arson, into future environmentalists.

With successes measured against Western standards and worldviews in current conjuncture, young Mozambicans need to understand, utilize, conserve, and change the Gorongosa ecosystem in ways that reflect a mix of environmental knowledge. To restore and promote this interaction with the ecosystem, the boys and girls training is inspired, produced, and circulated by the politics of those who have the needs and the abilities to legitimize certain environmental practices at expense of others.<sup>22</sup>

Having signed in June of 2008 a 20-year commitment to co-manage the restoration of Gorongosa National Park, the Gorongosa Restoration Project directly restored and alleviated the poverty of more than 400 workers whose salaries support their families who otherwise would have simply gazed at the park from outside its boundaries. Indirectly, the Project aided many Mozambicans who have had non-permanent waged contracts. One of the big challenges though entailed dealing with more than 200,000 people living within the greater Gorongosa ecosystem.<sup>23</sup> Eastern African environmental narratives tell of similar population-boom problems happening, for example, in Kibale in Uganda. Reporting on Kibale's socioecological constraints, Thomas T. Struhsaker argued that effective conservation strategies were urgent in Africa because of a rapid human population growth and the associated rush to lead a westernized lifestyle only attainable through massive exploitation of natural resources.<sup>24</sup>

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<sup>22</sup> Turner, 25-29.

<sup>23</sup> Arun Agrawal and Clark C. Gibson, "Enchantment and Disenchantment: The Role of Community in Natural Resource Conservation," *World Development* 4 (1999): 629-649.

<sup>24</sup> Thomas T. Struhsaker, "Strategies for Conserving Forest National Parks in Africa with a Case Study from Uganda," in John Terborgh et al. (eds.), *Making Parks Work: Strategies for Preserving Tropical Nature* (Washington: Island Press, 2002), 97-111.

From the 2000s, daily traffic on the EN1 put Gorongosans on the map of the global markets and modernity. Additionally, the electrification of Gorongosa town in 2005, along with the acquisition of commodities such as Chinese motorbikes, cars, cellphones, television sets, computers and other gadgets, and the need for improved housing of most of the 200,000 people were paid by the resources within the greater Gorongosa ecosystem. Because other restoration in the greater Gorongosa ecosystem focused much attention on rebuilding physical structures, most of the 200,000 residents resorted to small-scale farming. However, communications, trading roads, shops, and public services that the international donor community favored, under Frelimo's government, connected rural folks to the global market, exciting more resource exploitation. For most inhabitants of the Gorongosa ecosystem, slash and burn and intensive agriculture, poaching, fishing, gold mining, and charcoal production among other activities responded to the needs for sustenance as well as for income.

With human boom, the restoration of Gorongosa National Park would gain more allies by capitalizing on the more than 200,000 peoples in and around the park rather than by neglecting them.<sup>25</sup> From Maasai Amboseli experience in Kenya, David Western argued that rural folks expressed open hostilities to wildlife and game sanctuaries especially when their claims were not respected because of the rigid conception of nature

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<sup>25</sup> Francine Madden and Brian McQuinn, "Conservation's blind spot: The case for Conflict Transformation in Wildlife conservation," *Biological Conservation* 178 (August, 2014): 97-106. Madden and McQuinn argued that "The ultimate level of social carrying capacity for many species will depend on the extent to which conservation can reconcile (unaddressed or poorly addressed) social conflicts, thereby increasing social receptivity to conservation goals."



in the preserves. The holders of these mechanistic perceptions have resorted to protectionist laws instead of seeking alliances with the affected rural peoples.<sup>26</sup>

This Chapter 5 analyzed “what” the government and its international donors restored in the Gorongosa ecosystem since 1993. This thesis focused particularly on changes in the Gorongosa ecosystem as a result of human uses of the land and natural resources. I argued that the current levels of restoration and the sustainability of the Gorongosa ecosystem will improve if the most powerful stakeholders (especially the government and Gregory C. Carr Foundation), committed to restoring the ecosystem, promote and encourage local peoples’ needs to conserve natural resources by drawing on both the indigenous and conventional knowledge. This encouragement entails studying together with the local peoples, who today threaten the sustainability of the park, in order to discover talents of each active member of each particular community. Realistic and individualized talents could then be promoted as an alternative way for each concerned member to make a living without relying exclusively on hoeing and on outlaws. I believe that an active integration of individualized local peoples into conservation activities and an increased sharing of leadership responsibilities at all structural levels of the ecosystem and biodiversity management will help the locals to re-identify with their asset – the Gorongosa Park.

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<sup>26</sup> David Western, “Ecosystem Conservation and Rural Development: The Case of Amboseli,” in David Western *et al* (eds.), *Natural Connections: Perspectives in the Community-Based Conservation* (Washington: Island Press, 1994), 15-52.

## CHAPTER 6, CONCLUSION

Sketched between 1920s and 2014, the main assumption in this thesis is that environmental changes in the Gorongosa ecosystem result from natural, non-human causes and from the activities of humans. Throughout history, natural processes (geologic, climatic, and biotic forces) changed the ecosystem.<sup>1</sup> However, because geologic and climatic forces act unrestrained by human management, I focused more on the human agency, which can learn from past experiences. “Humans come first, of course,” recognized Edward O. Wilson when weighing the changes different peoples induced in Gorongosa during the 1977-1992 civil war. “But shouldn’t the rest of life and the quality of human life dependent on the rest of life be entered into the equation? Put another way, do we wish future generations to think we were insane or perhaps criminally stupid?”<sup>2</sup>

With human activities in mind, the thesis discussed how different people have different ways of reclaiming and using Gorongosa’s natural resources located outside and inside Gorongosa National Park. Environmentalists who earn a living by coveting and protecting natural resources claim that local peoples are a threat to natural resources in the Park. On the other hand, local people who also covet and poach wildlife for food and trade, encroach to farm, settle, pasture, manage ecosystems with fires, and cut trees from the Park, claim that it is through these practices that they can survive.

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<sup>1</sup> About changes in the Gorongosa ecosystem, Kenneth Tinley, “Framework of the Gorongosa Ecosystem” (D.Sc. Dissertation. South Africa: University of Pretoria, 1977), i, observed that, “To maintain a diversity of ecosystem in Gorongosa, the fundamental management action is to reinforce or reinstate the natural local base level sills which cause ponding of floodwaters responsible for the mosaic of grasslands and slack marshes of high primary productivity and ungulate carrying capacity.”

<sup>2</sup> Edward O. Wilson, *A Window on Eternity: A Biologist’s Walk Through Gorongosa National Park* ((New York: Simon & Schuster, 2014).



If the ways local people (Gorongosans) living in and around Gorongosa National Park use natural resources in their vicinity threatens the park's sustainability, and if the ways Park advocates use natural resources in the Gorongosa National Park is sustainable, how can the two groups coexist cooperatively?

The thesis demonstrates that the creation of the Gorongosa Game Reserve in the 1920s entailed compulsory eviction and the exclusion of the local peoples. From the 1920s to 1975, disenfranchisement and marginalization marked the interactions between the Park and the local people. Because of this troubled relationship and the enduring violence, insisting on compulsory conservation laws will not build a healthy coexistence in Gorongosa, "Gorongosa's people are clearly unsettled by these developments," argued Carolien Jacobs.<sup>3</sup>

By contrast, environmentalists should foster more empathy and a gradual but mutually agreeable integration of both the local peoples' and the preservanists' concerns and priorities as an antidote to improving the current level of resource conservation and sustainability in the Gorongosa ecosystem. And this is what made the Gorongosa Restoration Project unique in its conceptual model: the integration of a Community Relations Department, which had the mandate to correct the historical mistakes of exclusion and marginalization by promoting the inclusion of concerned local peoples and incentivizing human development in the Park's buffer zone. Can the Community Relations Department at Gorongosa National Park reverse century-long exclusionary policies by the Park?

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<sup>3</sup> Carolien Jacobs, "Navigating Through a Landscape of Powers or Getting Lost on Mount Gorongosa," *Journal of Legal Pluralism* no. 61 (2010): 81-107.

Reaching out to the buffer zone peoples and luring them with benefits, such as, schools, health centers, water pumps, tourist revenues, and environmental education is one of the long-term strategies. Helping the local peoples discover alternative ways of making a daily living without relying solely on the extraction of contested resources is another strategy. A third and not least important strategy entails a continuous understanding of the Gorongosan worldviews, spirituality, and socioecological interactions so important to inform the decision-making process.

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