An Analysis of the Suruí Forest Carbon Project in Context of Settler Colonialism

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ABSTRACT

This thesis analyzes the Suruí Forest Carbon Project in the context of settler colonialism. By exploring the three core principles of settler colonialism as outlined by settler colonial scholar Patrick Wolfe: access to land, elimination of the native, and the understanding that settler colonialism is a structure and not an event, I will demonstrate how each one of the three principles helped contribute to creating the context within which the Suruí Forest Carbon Project was situated. By taking this approach, I will be able to demonstrate the limits and possibilities of the project for the Suruí indigenous peoples. This analysis will allow me to present the challenges and contradictions associated with implementing REDD+ carbon credit projects in settler states such as Brazil and how, due to settler colonialism's structural limitations, these types of projects could be a possibility of providing some agency for indigenous peoples trying to find ways to assert their autonomy. The Suruí Forest Carbon Project was the first and still one of the only examples of an indigenous-led carbon emissions reduction project operating through the sale of carbon credits. During the first five years the project was operational, it drastically helped reduce deforestation levels within the Suruí's territory, leading many to deem the project a success. However, in 2015 and 2016, following the discovery of gold and diamonds on the Suruí's territory, the project's sight was eventually overrun by garimpeiros (small-scale gold miners), and in 2018 the project was suspended, leading some to consider it a failure. Therefore, I will present some of the challenges that arise when neoliberal conservation efforts, such as carbon credit projects, struggle to address factors outside their initial control, in this case, settler colonialism. Also, by analyzing the different components going into the project's creation, implementation, and suspension, I will present how carbon credit projects working directly with indigenous peoples can successfully halt deforestation for limited periods. But how settler colonialism makes these groups of people and their land vulnerable, which can help contribute to projects being undermined. Through my analysis, I will help demonstrate some factors that impact these types of projects' longevity and some things that would need to be implemented in the future to succeed in the long term.

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GENERAL AUDIENCE ABSTRACT

This thesis analyzes the Suruí Forest Carbon Project in the context of settler colonialism. My understanding of settler colonialism comes from settler colonial scholar Patrick Wolfe who believes that this specific type of colonialism has three core principles that help distinguish it from other colonial types and explain why anti-indigenous logics can continue. The three principles are access to land, the elimination of the native, and the understanding that settler colonialism is a structure and not an event. These three principles will serve as the core framework for my analysis. The Suruí Forest Carbon Project was the world's first indigenous-led carbon emissions reduction project operated by the indigenous peoples selling REDD+ carbon credits to buyers in order to achieve finances. The project occurred on the Suruí people's territory within the Sete de Setembro Indigenous Land, comprising a 250,000-ha site in the Amazon's "arc of deforestation" bordering the Brazilian states of Rondônia and Mato Grosso. The project was implemented on June 9, 2009, and in 2012 received its validation to sell carbon credits under the Verified Carbon Standard (VCS). Between 2009 and 2014, the project drastically helped limit the deforestation occurring within the project's site, causing many to deem it a success. However, trouble began in 2015 and 2016 following the discovery of gold and diamonds on the Suruí's territory. Shortly after this discovery, the territory began to be infiltrated by garimpeiros (small-scale gold miners), which led to increased levels of deforestation on the project's site. In 2018, the project could no longer meet the standards it needed to maintain to sell the credits and was suspended indefinitely. Therefore, based on my understanding of settler colonialism's three core principles, I will analyze the limits and possibilities of the project for the Suruí indigenous peoples to present how all three principles played a hand in creating the conditions within which the Suruí Forest Carbon Project was situated and how that impacted the indigenous peoples involved in the project ability to have agency over their forests.

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List of Abbreviations

Amazon Conservation Team (ACT)

Association of Ethnic and Environmental Defense (AEED)

Brazil's Indigenous People Articulation (APIB)

Biocarbon Fund (ISFL)

Catholic Church's Indigenous Missionary Council (CIMI)

Clean Development Mechanism (CDM)

Climate, Community & Biodiversity Alliance (CCB)

Conference of the Parties (COP)

Cuiabá-Porto Velho (BR-364)

Forest Carbon Partnership Facility (FCPF)

Forest Investment Program (FIP)

Global Environmental Fund (GEF)

Green Climate Fund (GCF)

Greenhouse Gas Emissions (GHG)

Indigenous Lands Environmental Management National Policy (ILMNP)

Indigenist Policy National Board (CNPI)

Institute for Conservation and Sustainable Development of Amazonas (IDESAM)

National Indigenous Foundation in Brazil (FUNAI)

National Institute for Colonization and Agrarian Reform (INCRA),

Northwest Brazil Integrated Development Project (POLONOROESTE)

Nongovernmental Organizations (NGO)

Management and Certification of Forests and Farms (IMALORA)

Multinational Corporations (MNC)

Payments for Environmental Services (PES)

Rondônia Natural Resources Management Project (PLANAFLORO)

Reducing Emissions from Deforestation (RED)

Reducing Emissions from Deforestation and Forest Degradation (REDD)

Reducing Emissions from Deforestation and Forest Degradation plus conservation, sustainable management of forests, and enhancement of carbon stocks (REDD+)

United Nations (UN)

United Nations Framework Convention on Climate Change (UNFCCC)

Verified Carbon Standard (VCS)

Warsaw Framework for REDD+ (WFR)

World Bank (WB)

Introduction

This thesis focuses on the Suruí Forest Carbon Project in the context of settler colonialism. By analyzing an empirical case within the Brazilian Amazon that addresses indigenous peoples who have historically faced land dispossession, are currently facing significant amounts of deforestation, and reside within a settler state, this thesis will contribute to bringing indigenous and settler colonial studies to the field of deforestation. This work will also help present how issues around settler colonial studies and deforestation help our understanding of the complications of promoting indigenous autonomy through Reducing Emissions from Deforestation and Forest Degradation plus conservation, sustainable management of forests, and enhancement of carbon stocks (REDD+) carbon credit projects, even when working directly with indigenous peoples. Understanding how these projects struggle to address factors outside their initial control, in this case, settler colonialism helps present the challenges that those creating these projects must navigate. Furthermore, it shows how the inability to account for these factors can lead to indigenous land dispossession and assimilation despite these projects being designed with the intention of promoting indigenous autonomy and forest conservation. Although this thesis will address some of the fundamental flaws of REDD+'s framework, I will also explore how, due to settler colonialism's structural limitations, how projects can provide the possibility of some agency for indigenous peoples who are trying to find ways to assert their autonomy. From these facets, my thesis will focus on the following research question: *What are the limits and possibilities of the Suruí Forest Carbon Project for indigenous peoples due to a settler colonial context?* The settler colonial aspect of my thesis is needed to understand why anti-indigenous logics can continue and the structural issues associated with settler colonialism within

Brazil and the persisting global economic system. In this thesis, I will present that when settler colonialism's structural issues are not addressed, it is unlikely that REDD+ carbon projects led by indigenous peoples will be successful in the long term at limiting deforestation efforts in the Brazilian Amazon.

My framework for analysis will come from the principles of settler colonialism outlined by settler colonial scholar Patrick Wolfe. According to Wolfe, three principles of settler colonialism help distinguish it from other colonial types. The first is that the settler's goal of establishing a new colonial society relies on the settler's ability to access land.[1] Here, he highlights that part of the trouble for settlers in this quest is that natives and indigenous people often already occupy the land the colonizers desire, resulting in settlers dispossessing the natives from their territory. Secondly, Wolfe explains how, ideologically, settlers believe they have the right to acquire the indigenous land by whatever means necessary because 'we' better know how to use it; thus, 'we' should have it.[2] Such an ideology results in their logic being one of "elimination of the native."[3] One crucial feature that Wolfe makes in his discussion of elimination is that elimination could be genocidal, but it does not have to be; more often, it refers to the destruction of the native as a *native.*[4] Lastly, Wolfe argues that because the settler's intent relies on the concept of "destroy to replace," settler colonialism should be considered a structural establishment rather than an event,[5] presenting why its impacts are resistant to change despite efforts to alter the regime or amend policies.

The first chapter will outline the increasing concerns surrounding deforestation and forest

[1] Patrick Wolfe, "Settler Colonialism and the Elimination of the Native," *Journal of genocide research* 8, no. 4 (2006): 387-388.
[2] Wolfe, "Settler Colonialism," 389.
[3] Wolfe, "Settler Colonialism," 388.
[4] Wolfe, "Settler Colonialism," 388. [italics my own]
[5] Wolfe, "Settler Colonialism," 389-390.

degradation's impact on climate change and how that led to the United Nations Framework Convention on Climate Change (UNFCCC) creating the REDD+ program. Here, I will address the differences between funding for REDD+ projects implemented at the country level through bilateral agreements and REDD+ carbon credit projects. I also work through why Brazil has been receiving increasing attention on the global stage to address its deforestation practices due to the significant portion of the Amazon rainforest within its borders. By engaging with some of the debates occurring within the REDD+ literature, particularly referencing why scholars think the help of indigenous peoples could make projects more successful, I will present how these analyses do not account for how factors outside the project, such as settler colonialism, play a role in creating the conditions within which these projects operate. Additionally, I will briefly describe the Suruí Forest Carbon Project and how analyzing the project in the context of settler colonialism provides the ability to gain new insight into the struggles of indigenous peoples who reside within settler states. I conclude this chapter with my normative methodology.

This second chapter provides an array of literature outlining Patrick Wolfe's discussion on economic motivation and access to land. I will then provide a content analysis of how scholars such as Scott (1998), Mrozowski (1999), Kopenawa (2013), and Liboiron (2021) explore Western economic justifications for accessing, commodifying, and manipulating land, nature, forests, and other resources. I will look at how Akerman (2003), Apostolopoulou et al. (2021), and Yacobi and Tzfadia (2019) conceive ideas surrounding natural capitalism, neoliberalism, and settler colonialism in the market. Lastly, I engage with McGregor et al. (2014), Bumpus (2011), and Lohmann (2011) arguments that focus on the role of carbon credits and carbon markets in relation to access. The rest of the chapter is the story of how many components involved in creating the Suruí Forest Carbon Project came to be and some of the

factors that helped contribute to the project's implementation and suspension. During this time, I will also introduce many key actors involved in and around the project, most notably Almir and Henrique Suruí of the Suruí indigenous peoples and Beto Borges of the Forest Trends Association. I conclude the chapter with an analysis of the project from the perspective of both Almir and Henrique Suruí. Through this analysis, I will show how, regardless of if the project was implemented or not economically motivated, access to land would have a foothold in the Suruí's territory which helps to demonstrate the challenges with promoting agency for indigenous peoples due to settler colonialism's structural limitations.

The third chapter will explore the second principle of settler colonialism, as outlined by Wolfe, the elimination of the native. Here, I will again explain why Wolfe believes the settler's logic is one of elimination and how this logic results in actions of land dispossession and assimilation. Again, I will provide a literature review that will serve as the basis for my content analysis that will focus on Barton's (2002) and Mahony and Endfield's (2018) understanding of why the West, since imperialism, has continuously justified Western control of the land over native control. The ways in which Curnow and Helferty (2018) and Whyte (2018) believe elimination efforts have taken place within environmental movements. Lastly, I will explore how Speed (2017) believes elimination through land dispossession is a core part of what makes Latin American countries settler states and how Poets (2021) and Guzmán (2013) understand elimination in the Brazilian context. My content analysis aims to demonstrate how elimination efforts had already been working against the Suruí even before the project, which is one of the reasons for the many complications surrounding its creation. This chapter will also further introduce key actors, such as the role of Google and the Katoomba Incubator. I will conclude this

chapter by analyzing how I see the elimination of the native as displayed by the Suruí Forest Carbon Project.

The fourth chapter will address Wolfe's final principle of settler colonialism, the understanding that settler colonialism is a structure, not an event. In this discussion, I will reference ideas presented by Coulthard (2014) that will allow me to explore the spatial and temporal aspects of the structure of settler colonialism. Additionally, I will provide a brief outline of techno-solutions presented by Huesemann and Huesemann (2011) and how they carry with them a time-based view of problems occurring, which is why they fail to address the structural issues associated with settler colonialism. In this discussion, I will analyze how, historically, injustices continue to happen to the Suruí indigenous peoples and the Rondônia state resulting in the creation of projects to amend the various wrongdoings, specifically for this analysis, the POLONOROESTE and PLANAFLORO projects. I will also address how in creating these projects, there lies the intention to acknowledge past harms and attempt to amend these wrongful acts through policies and financial support. But I will highlight how these projects operate under the assumption that because the past harms have been acknowledged and these new projects are designed with good intentions, they will erase the previous wrongdoings and not allow them to continue. However, acknowledging that because these projects failed to address the structural issues within Rondônia and Brazil, they ultimately were suspended. I will then present how the Suruí Forest Carbon Project is now the current line in attempting to remedy the injustices against the Suruí people using a new neoliberal economic project. Even so, because the project failed to address the core structural issues of settler colonialism, access to land, and the elimination of the native, the project ultimately ended up being suspended despite its initial success.

The conclusion will briefly outline the findings of my analysis of the Suruí Forest Carbon Project concerning its limits and possibilities on the Suruí indigenous peoples. I will then follow the ideas presented by Brazil's Indigenous People Articulation (APIB), Jason Hickel et al. (2022), and Anna Tsing (2005), to provide some suggestions for what I believe would be necessary for Brazil to overcome the structure of settler colonialism and what it would take for the global economic structure to reach a place where there would be less pressure to continue abstracting from the Amazon. I will also highlight that regardless of what mechanisms are put in place to address deforestation, unless perceptions surrounding the Amazon change, there cannot be successful efforts to address deforestation-related climate change.

Chapter 1: Brazil, REDD+, and the Suruí Forest Carbon Project

i. Introduction

Historically and presently, there have been complicated relationships surrounding the perception of forests. Typically, the main concerns have been who should govern them, how trees and the land upon which they reside should be used, and most recently, forests' relationship to climate change. The discussion surrounding the role of forests in relation to climate has continued to rise to the forefront of many international policy agendas. The reason for this has been the growing consensus regarding how deforestation and forest degradation practices have begun to impact the Earth's atmosphere. Deforestation occurs when land uses such as agriculture, mining, and urban development replace forests, causing trees to be cut down or burned.[6] Forest degradation is a process that causes a forest's biomass to decline and undergo composition changes to its species, resulting in a decline in soil quality.[7] Currently, the second leading cause of greenhouse gas emissions (GHG) causing damage to the atmosphere comes from land use practices, with approximately half of those emissions (5-10 GtCO2e annually) arising from deforestation and forest degradation.[8] Roughly 95% of the world's deforestation occurs within tropical rainforests,[9] making the destruction of the Amazon, which houses nearly one-third of all remaining tropical rainforests,[10] a significant environmental, economic, and

[6] "Deforestation and Forest Degradation," EU REDD Facility, accessed on October 14, 2022, https://euredd.efi.int/about/about-redd/deforestation-forest-degradation/
[7] EU REDD Facility, "Deforestation and Forest Degradation."
[8] "Forests and Climate Change," International Union for Conservation of Nature, accessed on October 14, 2022, https://www.iucn.org/resources/issues-briefs/forests-and-climate-change#:~:text=They%20act%20as%20
[9] Hannah Ritchie and Max Roser. "Forests and deforestation," *Our World in Data* (2021). https://ourworldindata.org/deforestation
[10] "Why is the Amazon Rainforest Important," World Wildlife Fund, accessed on October 14, 2022, https://www.wwf.org.uk/where-we-work/amazon#:~:text=South%20America's%20Amazon%20contains%20nearlywe%20don't%20know%20yet

social threat. As a result, international governing bodies such as the United Nations (UN) have begun to more seriously address why and how deforestation and forest degradation propel climate change.

The current argument coming from Western scientists is that if the Amazon and other tropical forests continue to disappear, there will be an increase in natural disasters as trees within the forest act like carbon vacuums by absorbing and storing carbon from the atmosphere.[11] But when trees are cut down and destroyed, the carbon stored within them is released, and the carbon that would have otherwise been absorbed causes heat to become trapped in the atmosphere.[12] As more heat becomes trapped, scientists believe the chances of heat-related illnesses and deaths will increase, intensifying heat waves, droughts, flooding, and rising sea levels resulting in the transformation of ecosystems along with various other detrimental effects.[13]

While these points brought forward by scientists regarding the role of forests are true, they reflect a Western perception of the Amazon. From this argument, the image of the Amazon is that a forest is an abstract unit within the globe rather than a unique entity. Because of the high consequences that deforestation and forest degradation practices have on the atmosphere, the UN believes that creating a widespread program to help limit the damage caused by the destruction of tropical forests is necessary to help limit the world's carbon emissions. Due to the current narrative shaping the view of forests coming from a Western perspective, it is understandable why the UN believes a neoliberal approach would be a viable solution to help mitigate the problem. Of the eight countries with a portion of the Amazon within their boundaries, Brazil's

[11] Ritchie and Roser, "Forest and deforestation."
[12] "Greenhouse Gasses," The United States Environmental Protection Agency, March 19, 2020, https://www.epa.gov/report-environment/greenhouse-gases
[13] The United States Environmental Protection Agency, "Greenhouse Gasses."

holding far outweighs any others, as sixty percent of the rainforest resides within its borders.[14] Due to its large-scale possession, much international attention has been placed on Brazil to address its deforestation and forest degradation practices. One of the most significant pressures has come from the United Nations Framework Convention on Climate Change (UNFCCC) to implement a variation of their Reducing Emissions from Deforestation and Forest Degradation plus conservation, sustainable management of forests, and enhancement of carbon stocks (REDD+) program.

REDD+ is currently the UNFCCC's standard framework to incentivize developing countries with significant amounts of tropical forestry to reduce their deforestation and forest degradation practices in order to reduce their carbon emission levels.[15] As a policy framework, REDD+'s mission rests upon financially compensating developing countries with large amounts of tropical forestry upon proof that their CO2 emissions levels have reached a set baseline for reduction according to an established forest reference level or by selling carbon credits within voluntary carbon markets.[16] From its first creation until now, REDD+'s program design has evolved into two separate but connected ideas about how forest finances should be distributed to developing countries.

When the idea behind REDD+ was first adopted in 2005 at the 11th Conference of the Parties (COP 11), it initially began as Reducing Emissions from Deforestation (RED).[17] The

[14] Britannica, T. Editors of Encyclopedia "Amazon Rainforest." *Encyclopedia Britannica*, October 20, 2022, https://www.britannica.com/place/Amazon-Rainforest.
[15] Toby A. Gardner et al., "A framework for integrating biodiversity concerns into national REDD+ programmes," *Biological Conservation* 154 (2012): 61.
[16] Shijo Joseph, Martin Herold, William D. Sunderlin, and Louis V. Verchot, "REDD+ readiness: early insights on monitoring, reporting and verification systems of project developers," *Environmental Research Letters* 8, no. 3 (2013): 1-2.; Ruth D Yanai et al., "Improving uncertainty in forest carbon accounting for REDD+ mitigation efforts," *Environmental Research Letters* 15, no. 12 (2020): 2.
[17] Maria Brockhaus and Monica Di Gregorio, "National REDD+ policy networks: from cooperation to conflict," *Ecology and Society* 19, no. 4 (2014): 1.

original intent behind RED was to find an effective way of getting developing countries with significant amounts of tropical forestry to reduce their deforestation practices, thereby limiting global CO2 emissions.[18] After RED's initial adoption in 2005, scientists and policy analysts soon realized that forest degradation played an even more prominent role in contributing to carbon emissions than deforestation in some countries. Therefore, to address both concerns, the UNFCCC officially endorsed a second D to the program during the COP13 in 2007.[19] From then, the program would be called Reducing Emissions from Deforestation and Forest Degradation (REDD).

REDD's framework at the country level follows a phase-based approach with three separate implementation phases.[20] The first implementation phase is known as the 'readiness phase'; here, countries are tasked with formalizing a framework, strategy, measurements, and other policies regarding how their program will operate within their country and look to meet their intended goals.[21] In the second phase, countries begin implementing some of their intended policies outlined under their phase one readiness framework.[22] Lastly, in the third phase, countries receive results-based payments upon proof that their emissions reductions have reached the programs' established baseline reduction level.[23] Here, the program's financial layout follows

[18] Sheila Wertz-Kanounnikoff and Desmond McNeill, "Performance indicators and REDD+ implementation," *Analyzing REDD* (2012): 233.
[19] Eduard Merger, Michael Dutschke, and Louis Verchot, "Options for REDD+ voluntary certification to ensure net GHG benefits, poverty alleviation, sustainable management of forests and biodiversity conservation," *Forests* 2, no. 2 (2011): 551.
[20] "Linkages between REDD+ Readiness and the Forest Investment Program," Learning, CIF, November, 2014, 6. https://www.cif.org/sites/cif_enc/files/knowledge-documents/linkages_between_redd_readiness_and_fip_nov2014_0.pdf
[21] Sheila Wertz-Kanounnikoff and Desmond McNeill, "Global and national REDD+ architecture," *Analyzing REDD,* (2012): 14.; Shijo Joseph et al.,"REDD+ readiness: early insights on monitoring, reporting and verification systems of project developers," *Environmental Research Letters* 8, no. 3 (2013): 1.
[22] Joseph et al., "REDD+ readiness," 1.
[23] Wertz-Kanounnikoff and Angelsen, "Global and national REDD+,"13.

the idea of monetary compensation for performance or 'payment by output,' meaning that those who effectively reduce their carbon emissions are the ones who should receive funding.[24]

Under this model, funding is typically allocated in two ways. The first is that developed countries contribute funds to entities such as the Forest Carbon Partnership Facility (FCPF), Green Climate Fund (GCF), Biocarbon Fund (ISFL), Global Environmental Fund (GEF), and Forest Investment Program (FIP).[25] These organizations are overseen by the UNFCCC and managed by the World Bank (WB), giving them the authority to administer funds directly to national governments. Once these funds have been given to a country, their national government is responsible for distributing them to local-level government entities and individual REDD+ projects operating within their country to help them achieve their readiness goals.[26] The second way involves bilateral and multilateral agreements between international aid industries and developed countries' national governments, which will directly sponsor individual REDD+ projects or countries of their choosing.[27]

A few years after adopting REDD, the UNFCCC began to think there could also be benefits in attempting to conserve tropical forestry by awarding them a monetary value. This initiative would be recognized with a + to represent the creation of voluntary carbon markets where emissions reduction credits (also known as carbon credits) could be bought and sold.[28] The adoption of this + for REDD would become official in 2013 under the Warsaw Framework

[24] Margaret Skutsch et al, "Options for a national framework for benefit distribution and their relation to community-based and national REDD+ monitoring," *Forests* 5, no. 7 (2014): 1599.
[25] Asger Olesen et al. "Study on EU financing of REDD+ related activities, and results-based payments pre and post 2020: Sources, cost-effectiveness and fair allocation of incentives," (2018.; Joseph et al., "REDD+ readiness," 2.
[26] Joseph et al., "REDD+ readiness," 2.
[27] Joseph et al., "REDD+ readiness," 2.
[28] Maria Brockhaus and Arild Angelsen. "Seeing REDD+ through 4Is: a political economy framework," *Analysing REDD+: challenges and choices. Center for International Forestry Research, Bogor, Indonesia* (2012): 26.

for REDD+ (WFR).[29] Since then, the program has been officially recognized under the title Reducing Emissions from Deforestation and Forest Degradation plus conservation, sustainable management of forests, and enhancement of carbon stocks.[30] In 2015 the Paris Agreement solidified REDD+ as the standard framework for developing countries to reduce their forest-based carbon emissions, thus creating a precedent for results-based payment systems to respond to land and forest-related climate change.[31]

With the adoption of the + (carbon markets) to REDD, the program's funding model falls under the concept of 'payments for environmental services (PES).'[32] PES are policies designed to compensate individuals and communities following their efforts to undertake actions that have increased the provision of the ecosystem, in the case of REDD+, for carbon sequestration.[33] The process works by verifying the total number of saved carbon emissions for a project according to a project's baseline reduction, thereby allowing one metric ton of CO2 to be transformed into a carbon credit that can be sold within a voluntary carbon market.[34] Establishing a baseline for reduction can be done in two ways: historical or simulated.[35] The historical baseline approach takes the deforestation rate over a previous period and bases the baseline on the assumed rate of deforestation in the future.[36] The simulated baseline approach assumes the

[29] Frances Seymour and Jonah Busch, "*Why forests? Why now: The science, economics, and politics of tropical forests and climate change*," *Brookings Institution Press*, (2016): 13.
[30] Norman Marigold, and Smita Nakhooda, "The state of REDD+ finance." *Center for Global Development Working Paper* 378 (2015): 239.; Seymour and Busch, "*Why Forest? Why Now*," 13.
[31] Annalisa Savaresi,"A Glimpse into the Future of the Climate Regime: Lessons from the REDD+ Architecture," *Review of European, Comparative & International Environmental Law* 25, no. 2 (2016): 186.
[32] Alain Karsenty, Aurélie Vogel, and Frédéric Castell, "Carbon rights", REDD+ and payments for environmental services" *Environmental Science & Policy* 35 (2014): 1.
[33] Kelsey B. Jack, Carolyn Kousky, and Katharine RE Sims, "Designing payments for ecosystem services: Lessons from previous experience with incentive-based mechanisms," *Proceedings of the national Academy of Sciences* 105, no. 28 (2008): 9465.
[34] Carolyn J. Roos, "Selling carbon offsets from your clean energy project," (2009): 5.
[35] Philip M. Fearnside, Aurora M. Yanai, and C. S. M. N. Vitel, "Modeling Baselines for REDD Projects in Amazonia: Is the Carbon Real." *Gerold, G.; Jungkunst, H. F; Wantzen, KM* (2014): 22.
[36] Fearnside, Yanai, and Vitel, "Modeling Baselines for REDD," 22.

future deforestation levels that would likely occur in the project's absence.[37] Once this verification process occurs, project creators and buyers can begin to engage in carbon contracts that outline things such as the obligation that sellers must engage in to keep the credit viable and the length of the credit's validity for the purchaser.[38] Because carbon credits refer to removing carbon from the atmosphere, trees must be left standing for them to work. This is why in some cases, project creators might have to agree not to use the land or forest as part of their requirements to buyers, especially when a project's baselines are based on land use practices.[39]

Through this process of selling carbon credits, REDD+ hopes to incentivize individuals and groups within developing countries not to participate in practices such as logging or slash-and-burn by attempting to make trees more profitable left standing than cutting them down or burning them for material or land use.[40] Throughout the literature focusing on the benefits of REDD+ credit projects, some environmental scholars and activists have argued that if a project's mechanisms are appropriately implemented, it could serve as an economically competitive way of counteracting the damage caused by deforestation and forest degradation-related climate change.[41] Supporters of REDD+ consider the credits approach to the program a favorable solution for reducing deforestation-based emissions, highlighting the ability of sellers to make a profit with more predictability and longevity of funding.[42] Other scholars who favor an offsets

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[37] Fearnside, Yanai, and Vitel, "Modeling Baselines for REDD," 22.
[38] Kelly T. Wilfert, "Carefully Consider Carbon Credit Contracts," *JUSUPRA*, May 13, 2022, https://www.jdsupra.com/legalnews/carefully-consider-carbon-credit-4311468/#:~:text=Carbon%20credit%20contracts%20last%20on,practices%20and%20continuing%20the%20relationship.
[39] Matthew C. Berger, "Carbon Contracts Basics," *Gislason and Hunter Attorneys at Law*, December 5, 2022, https://www.gislason.com/carbon-contract-basics/
[40] Claudia M. Stickler, "The potential ecological costs and cobenefits of REDD: a critical review and case study from the Amazon region," *Global Change Biology* 15, no. 12 (2009): 2809.
[41] Nicholas Herbert Stern, *The economics of climate change: the Stern review*. Cambridge University press, (2007): 14.; Oscar Venter and Lian Pin Koh. "Reducing emissions from deforestation and forest degradation (REDD+): game changer or just another quick fix?," *Annals of the New York Academy of Sciences* 1249, no. 1 (2012): 137.
[42] Alonso López, Rocío Hiraldo, and Thomas Tanner. "The Global Political Economy of REDD+: Engaging Social Dimensions in the Emerging Green Economy," *United States Institute for Social Development*, accessed on October

approach acknowledge that selling carbon credit markets does offer financial rewards to developing countries, many of whom have high rates of deforestation and poor environmental records.[43] Therefore, REDD+ carbon credits projects could serve as a way to possibly help promote environmental sustainability through the market.[44]

While REDD+ has received some positive feedback from scholars, many still criticize the program's financial frameworks and the different ways projects have been implemented. As some of the current literature reviewing REDD+ has conveyed, the program has primarily served as a scheme for the privatization and marketization of forests, consequently undercutting the rights of local forest populations and indigenous peoples residing in these heavily forested areas.[45] A main criticism in these discussions is that neoliberal conservation efforts like REDD+ programs implemented at the national level and individual carbon credit projects are merely putting a price tag on nature, which places forests in the global market allowing countries and corporations to purchase their way out of pollution.[46] These critics further their concerns by stating that if the global North continues concentrating the responsibility to fix deforestation and forest degradation issues on the global South, it puts some of the world's most vulnerable populations, in many cases indigenous peoples, at risk of losing autonomy over their lands.[47] These scholars highlight that in some instances, practices such as land grabbing and indigenous

10, 2022, https://cdn.unrisd.org/assets/legacy-files/301-info-files/74C539F482DB9BD3C125792100347A59/3-1%20Lopez%20Alonso%20and%20Tanner.pdf

[43] Andrew McGregor et al., "Practical critique: Bridging the gap between critical and practice-oriented REDD+ research communities," *Asia Pacific Viewpoint* 55, no. 3 (2014): 279.

[44] Andrew McGregor et al., "Practical critique," 281.

[45] Joanna Cabello and Tamra Gilbertson. "A colonial mechanism to enclose lands: A critical review of two REDD+-focused special issues," *Ephemera: Theory & Politics in Organization* 12 (2012): 4.; Stephanie Long, Ellen Roberts, and Julia Dehm, "Climate justice inside and outside the UNFCCC: The example of REDD." *Journal of Australian Political Economy, The* 66 (2010): 5.

[46] Kathleen McAfee, "Green economy and carbon markets for conservation and development: a critical view," *International Environmental Agreements: Politics, Law and Economics* 16 (2016): 338.; Cabello and Gilbertson "A colonial mechanism," 75.

[47] Cabello and Gilbertson "A colonial mechanism," 169.

dispossession have occurred by either national governments or project managers who rely on possessing the forests to ensure that communities do not cut down trees for land uses because forests need to be left standing for a project to reach a baseline for reduction or create carbon credits.[48]

One common theme arising throughout the literature critiquing REDD+ programs in general and REDD+ projects is that if the help of indigenous peoples were more utilized, it would help with the programs and project's success.[49] But, a key component missing from these various analyses is how the conditions within which these different projects operate complicate their creation, implementation, success, and failure. Therefore, an analysis of the role of settler colonialism is needed to understand the contextual conditions, and the ability of indigenous peoples to work within these projects, which I will show is vital to understanding why REDD+ projects struggle to maintain longevity within settler states such as Brazil. To help fill these gaps in the literature, I will analyze the Suruí Forest Carbon Project in the context of settler colonialism to explore the limits and possibilities for indigenous peoples working within a settler colonial context.

The Suruí Forest Carbon Project was the first and still one of the only examples of an indigenous-led carbon emissions reduction project financed through the sale of carbon credits.[50] The project occurred on the Suruí people's territory within the Sete de Setembro Indigenous Land, comprising a 250,000-ha site in the Amazon's "arc of deforestation" bordering the

[48] Susan Chomba et al., "Roots of inequity: How the implementation of REDD+ reinforces past injustices," *Land use policy* 50 (2016): 211.; Moses Mosonsieyiri Kansanga and Isaac Luginaah, "Agrarian livelihoods under siege: Carbon forestry, tenure constraints and the rise of capitalist forest enclosures in Ghana," *World Development* 113 (2019): 135.
[49] Heike Schroeder and Nidia C. González. "Bridging knowledge divides: the case of indigenous ontologies of territoriality and REDD+." *Forest Policy and Economics* 100 (2019): 204.; Anne E. Larson, "Forest tenure reform in the age of climate change: Lessons for REDD+," *Global Environmental Change* 21, no. 2 (2011): 199.
[50] Steve Zwick, "The Story of the Suruí Forest Carbon Project," *Forest Trends*, March 25, 2019 https://www.forest-trends.org/blog/the-story-of-the-surui-forest-carbon-project/

Brazilian states of Rondônia and Mato Grosso.[51] However, most of the Suruí people live in the portion of the territory located within Rondônia.[52] The project was implemented on June 9th, 2009, with its intended crediting period ending on June 9th, 2038.[53] In 2012 it received the validation to sell credits under the Verified Carbon Standard (VCS).[54] An authorized VCS credit represents "one metric ton of carbon dioxide reduced or removed from the atmosphere."[55] The project became the first VCS project to receive a Gold certification from the Climate, Community, and Biodiversity Alliance (CCB).[56] It achieved this status after it was able to successfully reduce the territory's levels of deforestation through the production and sale of carbon credits between 2009 and 2014.[57] While the project was operational, it generated nearly 299,895 credits, drastically helping to reduce deforestation within the project's area[58] and thereby leading supporters to deem it a success.

Despite the project's ability to limit deforestation during its first five years, trouble began to occur in 2015 and 2016 following the discovery of gold and diamonds on the Suruí's territory.[59] Shortly after this discovery, the territory began to be infiltrated by garimpeiros (small-

[51] "Baker & McKenzie Legal Analysis-Surui REDD Project," *Washington: Katoomba Group*, accessed on February 25, 2023 https://www.forest-trends.org/wp-content/uploads/2010/12/baker_mckenzie.pdf; Claudia Suzanne Marie Nathalie Vitel et al, Land-use change modeling in a Brazilian indigenous reserve: Construction of a reference scenario for the Suruí REDD Project." *Human Ecology* 41, no. 6 (2013): 807.
[52]"Suruí Forest Carbon Project." *Institute for Conservation and Sustainable Development of Amazonas - IDESAM*, October 13, 2011, 27.
https://s3.amazonaws.com/CCBA/Projects/Surui_Forest_Carbon_project/PCFS_PDD_English_2011-10-17.pdf
[53] IDESAM, "Suruí Forest Carbon Project," 6.
[54] "Brazil: The Suruí REDD project has been suspended indefinitely," REDD_Monitor, September 18, 2018 https://redd-monitor.org/2018/09/20/brazil-the-surui-redd-project-has-been-suspended-indefinitely/
[55] "The world's leading greenhouse gas crediting program," Verified Carbon Standard, accessed on March 25, 2023, https://verra.org/programs/verified-carbon-standard/#:~:text=Once%20certified%2C%20these%20projects%20are,their%20climate%20change%20mitigation%20activities.
[56] Zwick, "The Suruí Forest Carbon Project."
[57] REDD_Monitor, "The Suruí REDD project."
[58] Zwick, "The Suruí Forest Carbon Project."
[59] Max Nathanson, "World's first indigenous carbon offset project suspended due to illegal mining," *Mongabay*, September 18, 2018, https://news.mongabay.com/2018/09/worlds-first-indigenous-redd-program-ended-due-to-illegal-mining/

scale gold miners), which led to increased levels of deforestation on the project's site.[60] The illegal mining, in addition to illegal logging that had already been taking place, caused CO2 levels to rise 452,554 tonnes, above the projects' established baseline scenario.[61] As a result, the project was ultimately suspended indefinitely in 2018,[62] resulting in some critics considering it a failure, despite its early success. While there has been a relatively large consensus among critics that the primary reason for the project's eventual suspension was due to the infiltration of miners on the project's site, there has been growing discussion regarding how various other factors contributed to complicating the project's long-term success. [63] For instance, some believe that the lack of law enforcement to protect the Suruí territory, inner conflict amongst tribal members regarding the project's design threatening their way of life, and some tribal members collaborating with the miners and loggers to take down the project all had a contributing role in why the project was eventually suspended.[64] Therefore, analyzing these components through a settler colonial lens will help present how indigenous-led carbon credit projects taking place in Brazil, a settler state situated within the larger persisting global economic structure, exacerbates the likelihood of these outside components being adequately addressed and overcome.

There is some debate surrounding whether the Suruí Forest Carbon Project officially counts as a REDD+ project or another variant of a similar carbon credit project.[65] This uncertainty is because the Suruí's project was created outside the UN's legal framework, which requires coordination of the project to be done at the national level, not with an individual

[60] Nathanson, "carbon offset project suspended."
[61] REDD_Monior, "The Suruí REDD project."
[62] REDD_Monior, "The Suruí REDD project."
[63] Nathanson, "carbon offset project suspended."; Chris Lang, "The Suruí Forest Carbon Project faces illegal logging, gold and diamond mining. Almir Suruí is looking for alternatives to carbon," *REDD_Monior*, October 3, 2017 https://redd-monitor.org/2017/10/03/the-surui-forest-carbon-project-faces-illegal-logging-gold-and-diamond-mining-almir-surui-is-looking-for-alternatives-to-carbon/; Zwick, "The Suruí Forest Carbon Project."
[64] Nathanson, "carbon offset project suspended."; Lang, "Suruí Forest Carbon Project."
[65] Nathanson, "carbon offset project suspended."

group.[66] However, this complication provides a new opportunity for analysis by exploring how working directly with indigenous groups in creating carbon credits could provide more significant avenues for promoting indigenous autonomy and how at the same time, settler colonialism makes these groups vulnerable. In this case, the Suruí people, through the Metareilá Association (the organization created to defend the Suruí's rights), in agreement with the Institute for Conservation and Sustainable Development of Amazonas (IDESAM), were the ones facilitating the sale of the project's carbon credits, not the Brazilian government.[67]

The creation and implementation of the Suruí Forest Carbon Project involved introducing new actors, governmental agencies, non-governmental organizations (NGOs), multinational corporations (MNCs), technologies, and ways of working with forest and land resources. The project was first discussed in 2007, implemented in 2009, and was suspended in 2018, which means that the political, social, and economic conditions around Brazil will be relevant to my analysis. The project's initial success shows the ability of market-based solutions to work for brief periods of time, while also promoting indigenous agency. But the project's suspension displays how the inability to account for how factors associated with settler colonialism help to undermine the likelihood of these types of projects being successful long term. Specifically noting how it is never certain if the state upholds indigenous land rights, I will help present why there were numerous complications and contradictions surrounding the Suruí Forest Carbon Project. Thus, while there are already many existing studies on REDD+ and the cost and benefits of carbon credit projects, this thesis provides the opportunity to explore the role of settler colonialism in helping to create the pressures that cause these types of projects to be undermined.

[66] Nathanson, "carbon offset project suspended."
[67] Beatriz Garcia et al., "REDD+ and forest protection on indigenous lands in the Amazon," *Review of European, Comparative & International Environmental Law* 30, no. 2 (2021): 211.

Therefore, this thesis will contribute to the overall discourse on REDD+ by providing insights into the limits and possibilities of working specifically with indigenous peoples in a settler colonial context and factors that must be considered when attempting to implement these types of projects within the Brazilian Amazon.

Figure 1: Map of the Arc of Deforestation located between Rondônia and Mato Grosso
Source: Stephen Aldrich et al., "Contentious Land Change in the Amazon's Arc of Deforestation," *Annals of the Association of American Geographers*, 2012, p.104.

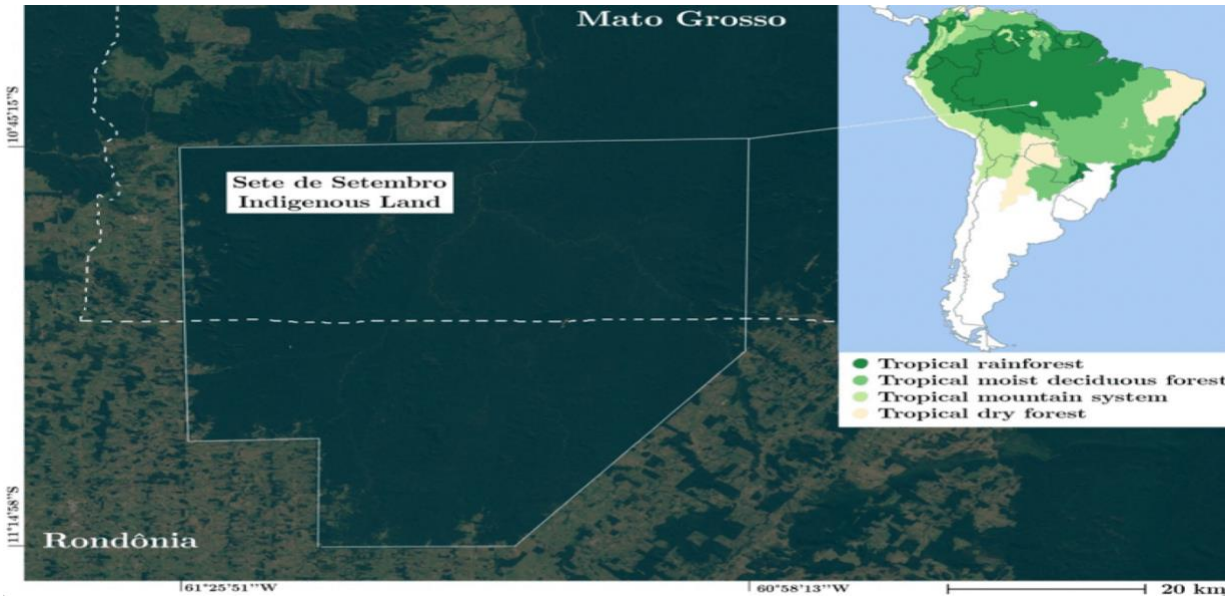

Figure 2: Location of the Sete de Setembro Indigenous Lands

Source: Tatiana Nazarova, Pascal Martin, and Gregory Giuliani. "Monitoring vegetation change in the presence of high cloud cover with Sentinel-2 in a lowland tropical forest region in Brazil," *Remote Sensing*, 2020, p. 4.

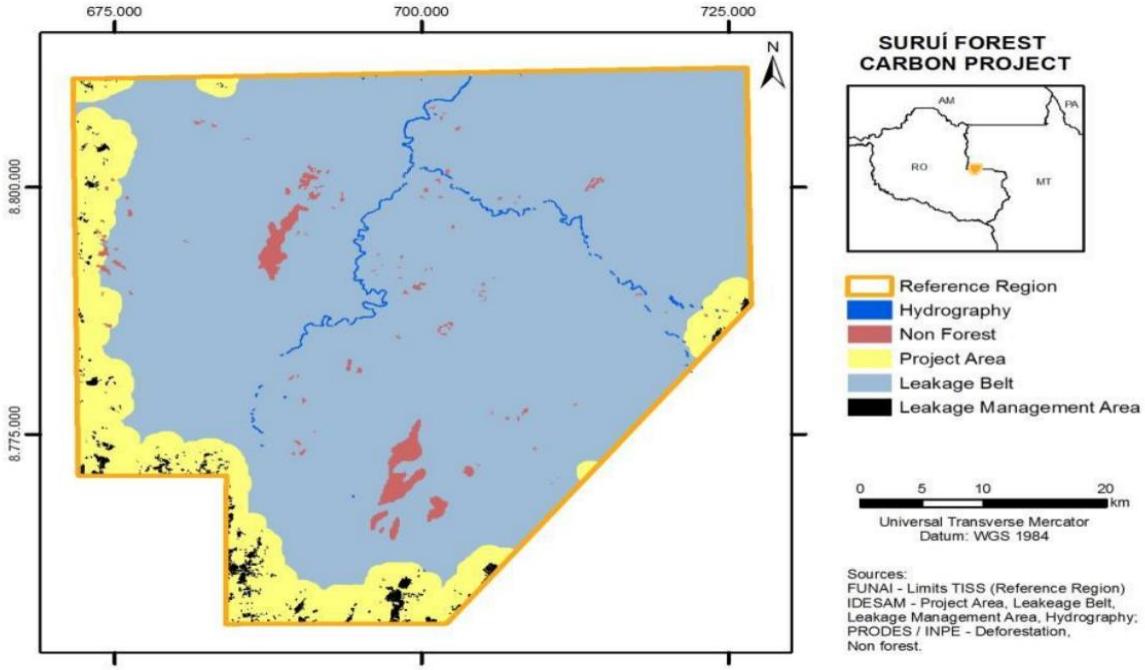

Figure 3: A Map of the Suruí Forest Carbon Project
Source: "Suruí Forest Carbon Project," *Institute for Conservation and Sustainable Development of Amazonas – IDESAM*, 2011, p.7.

ii. Methodology

This thesis proposes a methodology centered around settler colonial theory and forms a core framework around the three principles of settler colonialism outlined by Patrick Wolfe (2006): access to land, elimination of the native, and the understanding that settler colonialism is a structure and not an event. The framework for this project is mainly qualitative and done primarily through close readings of the various works mentioned in the literature reviews within Chapters Two, Three, and Four. I then apply the normative conclusions from each section and integrate them into my analysis of the Suruí Forest Carbon Project. Additionally, part of the

content for my analysis will come from an interview I conducted with Beto Borges of the Forest Trends Association, who was one of the leading actors in helping create the Suruí Forest Carbon Project. His first-hand insight into the project is invaluable in helping explain the complications and complexities that went into creating the project from a legal and methodological standpoint, helping to provide insights into the struggles of working within a settler colonial framework. In the concluding chapter, I will address the core components that I believe are necessary for allowing Brazil to overcome the structure of settler colonialism and how redefining how the current global economic system understands progress could help address the issue of climate change. This thesis aims to offer a convincing argument highlighting how settler colonialism complicated the conditions in and surrounding the Suruí Forest Carbon Project. Therefore, the research question that will be explored throughout this thesis is the following:

What are the limits and possibilities of the Suruí Forest Carbon Project for indigenous peoples due to a settler colonial context?

Chapter 2: Access to Land and Economic Motivation

i. Introduction

This chapter will explore the evolution of economic justification for access to land and the commodification of nature. This trend will be seen throughout the literature and will be critical in understanding how settler colonialism's first core principle, access to land, was a significant concern of the Suruí Forest Carbon Project in three ways: access through design, access through purchase, and access through dispossession. To help address this issue, I will briefly summarize how Patrick Wolfe saw the relationship between access to land and economic motivation, a literature review outlining the history of economic justifications for accessing and commodifying land, nature, and other resources, as well as how new forms of access are being obtained through the use of carbon markets. From here, I will provide some background information to present how the Suruí's territory has been a location that settlers have desired to possess for many years. Knowing this will help explain some of the complications going into the creation, unfolding, and suspension of the Suruí Forest Carbon Project.

ii. Wolfe's Understanding Regarding Access to Land and Economic Motivation

In discussing the settlers' need to access land, Wolfe presents how settlers' economic intentions have often fueled their desire to acquire new territories. To explain this, Wolfe provides examples highlighting how various groups of settlers have continually justified taking native lands because it has helped them meet their economic ambitions. For instance, Wolfe explains how in the U.S., when settlers came into contact with indigenous peoples, they believed they possessed a monopoly regarding land transactions, wherein "The American right to buy

always superseded the Indian right not to sell."[68] He continues this analysis by explaining how in a frenzy to acquire native land, settlers became "economic immigrants," displacing natives from their lands and then dividing it and other stocks into private ownership.[69] He furthers this economic history by analyzing how settler colonialism was foundational to modernity, as settlers seized land for its resources and then used indigenous and Black labor to help fuel the demand of the international market.[70] This brief outline of Wolfe's discussion regarding the relationship between access to land and economic motivation shows how settlers' desire to access land has a repetitive history of resulting in indigenous dispossession.

iii. Economic Expansion, Access to Land, and Justifications for Commodifying Nature

Before exploring the complexities associated with access to land involved in creating the Suruí Forest Carbon Project, it is first necessary to show how Western justifications for accessing land and altering how forests and other resources are used are not a new occurrence, but a continuation of a reality rooted in colonialism. James Scott (1998) addresses how early modern European states such as Germany, France, England, and later the U.S. would come to view forests through a fiscal lens and later impose this view upon the Third World through their colonial expansions. When breaking down this extractive history, Scott addresses how changes were made to the German encyclopedia, referring to an entry regarding forests and how the listing provided an almost exclusive understanding of forests regarding taxes, revenues, and profits.[71] He explains how during this period, the German model for forests would abandon any

[68] Wolfe, "Settler Colonialism," 391.
[69] Wolfe, "Settler Colonialism," 392.
[70] Wolfe, "Settler Colonialism," 394.
[71] James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*, Yale University: Press, (1998): 13.

form of a naturalist or anthropological view and shift to a utilitarian state, allowing the government to manage their forests on a fixed bottom line driven by profit.[72] This new understanding surrounding forests in Germany would result in the industry operating as a cameral science, meaning that the state could strengthen its central authority in managing the economy so that it could enhance its economic productivity.[73] As a result, German foresters were quickly tasked with producing standardizing techniques based on geometry, allowing them to increase commercial timber production.[74] Once the Germans realized that this technique worked on their trees, although for a short-lived time, they believed they had economic justification for experimenting with the same process in their colonies and quickly began expanding their reach into new areas to see if they could replicate their success.[75] The idea of creating standardizing procedures designed to bring order to disorderly nature and then attempting to replicate these procedures elsewhere displays how historically the West has operated under the impression that they can alter forests to meet their needs and should do so whenever and wherever they see fit.

While Scott's work helps lay the foundation for how economic desire motivates the West to manipulate nature and why they feel they possess the right to expand their reach elsewhere, there needs to be an understanding of how land and its resources are commodified and how this commodification leads to the possibility of access through purchase instead of seizure. Stephen Mrozowski (1999) provides this analysis by outlining the roles of abstraction, abstract space, dualism, and structuralism in allowing things such as land and resources to become commodified.[76] In his discussion, Mrozowski attempts to connect how the rise of capitalism gave

[72] Scott, "*Seeing Like a State*,"13-14.
[73] Scott, "*Seeing Like a State*," 15.
[74] Scott, "*Seeing Like a State*," 15.
[75] Scott, *Seeing Like a State*, 42.
[76] Stephen A. Mrozowski, "Colonization and the commodification of nature," *International journal of historical archaeology* 3 (1999): 154-156.

rise to the abstraction of land[77] and how the process transformed the land into an abstract space that could be measured and then turned into a commodity for exchange.[78] Mrozowski believes one must understand dualism in the colonial context to understand how this occurrence happened. He states dualism is "the fundamental belief that nature and society are separate realities."[79] Because of this distinction, colonizers believed they had a cultural rationale for viewing land and nature as abstract entities.[80] Once this distinction occurred, structuralism began to take hold. Structuralism is the ability to categorize a thing, whatever it may be, as separate from humanity.[81] Following this, the colonizers believed they possessed a moral justification for the domination, commodification, and exchange of the thing in question.[82] Therefore, once land and nature are distinguished as separate from humanity and able to be sorted, they are able to be split up, commodified, bought, and sold.

Following the thoughts of Scott and Mrozowski, Davi Kopenawa's (2013) work is critical in presenting how the Western world believes altering and commodifying land and forests is what enables them to possess value. Throughout his book, Kopenawa presents the differences between indigenous and Western perspectives towards forests, allowing him to explain how the West's view is shaped by their desire to obtain something from the land and trees. To demonstrate this, Kopenawa describes his interactions with 'white people' and how they 'award' value to land only after manipulating it. He explains,

> We use our words this way to say that the ancient white people once drew their land to cut it up. First, they covered it in crisscrossing lines, forming sections in the center of which round spots are painted. This is how the shamans see it. These drawings of lines and dots, like jaguar skin paintings, appear to make it more beautiful. Yet afterward, they are glued in a book, and those who want to plant their food on these parcels must then

[77] Mrozowski, "Colonization and commodification," 154.
[78] Mrozowski, "Colonization and commodification," 155.
[79] Mrozowski, "Colonization and commodification," 156.
[80] Mrozowski, "Colonization and commodification," 156.
[81] Mrozowski, "Colonization and commodification," 156.
[82] Mrozowski, "Colonization and commodification," 156.

> give back their value. The white people claim these land drawings have a **price,** and this is why they trade them for money.[83]

With this quote, Kopenawa explains that the Western way of working and relating with land and forests is only from a profitable perspective. The land must be cut up, assigned an owner, and then labor must be put back into it to be considered beneficial. The land itself does not hold value if it is not used to further an owner's economic needs. From this quote, he also discusses how the ability to put a price on land is a critical component in the land holding value. A price means that the land and its resources can be traded for money, making them available for access through purchase. While there are many more examples to be drawn from his discussions, this quote provides an excellent example of the context for what Kopenawa discusses extensively throughout the work, which is that white people's exploitation of the land and forest for capital gains directly juxtaposes his indigenous understanding of the benefits that the forest can provide.

Max Liboiron's (2021) work helps connect Mrozowski's understanding of how nature becomes commodified and Kopenawa's interpretation of how the West believes access and value are achieved through purchase. Liboiron's position is slightly different from the other two author's arguments as she focuses on the issue of pollution. Still, her insights on land relations are critical to understanding why those purchasing land believe they have economic justification for doing what they desire. In her discussion, she believes pollution is not a side effect of colonialism; it is the enactment of ongoing colonial relations with the Land.[84] For Liboiron, a distinction needs to be made when discussing land with a lowercase *l* and Land with an uppercase *L*. Liboiron discusses this essential difference to help outline the differences between indigenous and Western relationships to Nature, which will later set up her discussion of why

[83] Davi Kopenawa and Bruce Albert, *The Falling Sky: Words of a Yanomami Shaman*. Harvard University Press, (2023): 255.
[84] Max Liboiron, "Pollution is colonialism." In *Pollution Is Colonialism*, Duke University Press, (2021): 6.

settlers believe they have the right to access Land and do with it whatever they please. For Liboiron,

> Small-*l* land is usually synonymous with Nature in that both only focus on some aspects of relations, such as soil, air, water, animals, and plants, but not on human people, events, memories, spirits, or obligations. Nature describes colonial relations with capital-*L* Land. Whether Nature is understood as wild and heartless or the victim of industrial assault, or the raw stuff of scientific inquiry, one of Nature's defining characteristics is that it is separate from humans, even if there is a closeness or affinity between them.[85]

The understanding that Liboiron presents regarding *Land* and *land's* relationship to Nature helps explain why settlers think that resources should be offered to help meet colonial ends.[86] For Liboiron, under a colonial management system, when Nature is turned into a Resource, it can be turned into Property. Here, Liboiron references Tuck and McKenzie, who explain how recasting land as Property allows settlers to think of land as a means to achieve their financial goals, for they now possess the 'right' to do with it as they desire.[87] This understanding is essential because it helps explain why settlers believe purchasing power provides them avenues to acquire land and continue to enhance themselves in whatever ways they deem necessary.

iv. Natural Capitalism, Neoliberalism Conservation, and Settler Colonialism

Because neoliberal conservation efforts such as REDD+ are the dominant model for promoting forest conservation in the modern-day, it is important to address what factors gave rise to this view and why it successfully gained attraction. To help do this, I will first work through the thoughts of Maria Akerman (2003), who helps contextualize how the rise of environmental economics came to be and what circumstances led to the creation of natural

[85] Liboiron, "Pollution is colonialism," 48.
[86] Liboiron, "Pollution is colonialism," 62.
[87] Liboiron, "Pollution is colonialism," 68.

capital as a means for sustainable development.[88] According to Akerman, the 1960s and 70s were a time of various environmental awakenings that allowed for new possibilities of thinking about nature and capital that would be the entryway for ideas of sustainable development that came to define the 1980s and 90s.[89] She explains how in the early 1980s, economists were challenged to find new ways to use natural resources to overcome the idea that economic and environmental agenda goals could not work together.[90] Natural capital was the most influential of these ideas, created in 1988 by economist David Pearce.[91] For Pearce, natural capital referred to the idea that the environment and its various resources could be considered a set of natural assets or stocks positioned to serve larger economic purposes.[92] Natural capital became a success following its introduction, and Akerman credits this success because of the way,

> The metaphor suggested that nature is a source of welfare and economic growth, which 'naturally' generates richness if wisely used. With an analogue between an asset and nature, the metaphor evoked, for example, a comparison between the conservation of nature and investment saving. In addition, the metaphor of natural capital gave a possibility to conceptualize complex mechanisms of nature-human relationship in terms of something manageable, productive machinery or financial assets. This, in turn, promised that a solution to environmental problems is achievable.[93]

The metaphor of natural capital presents how capitalism as a system was reaching its limits. However, nature presented a possibility of a new market while attempting to address environmental issues. An important point to highlight is that because nature would be considered a stock for promoting economic wealth and environmental sustainability, it would help foster the idea that nature could be incorporated into the market in order to protect it.

[88] Maria Akerman "What does' natural capital do? The role of metaphor in economic understanding of the environment." *Environmental Values* 12, no. 4 (2003): 432.
[89] Akerman, "What does' natural capital do," 432.
[90] Akerman, "What does' natural capital do," 433.
[91] Akerman, "What does' natural capital do," 432.
[92] Akerman, "What does' natural capital do," 434.
[93] Akerman, "What does' natural capital do," 436.

While Akerman's work helps explain why market-based solutions for environmental sustainability came to be, Elia Apostolopoulou et al.'s (2021) analysis of neoliberal conservation efforts over the last fifteen years helps present how these types of projects have given rise to new forms of access.[94] According to Apostolopoulou et al., there is a growing consensus among scholars that neoliberal conservation efforts "have been increasingly creating new spaces and territories for capitalist governance and accumulation through processes of demarcation, enclosure, privatization, marketization, securitization and land grabbing for green, and un-green purposes."[95] For Apostolopoulou et al., these practices are particularly problematic because they have created new markets for profit where global North and South power dynamics are furthered as "entrepreneurial environmental subjects" (usually in the North) now possess the ability to "govern" the conduct of individuals and institutions and how they can use nature.[96] As they move through their literature analysis, these scholars address the various narratives around neoliberal conservation and how these discussions continue to enhance the idea that nature needs ownership to be protected. According to Apostolopoulou et al., the idea that has gained the most traction from global North investors is that "in order to 'save' nature, it is necessary to bring conservation to the market and attract private investment to it."[97] This understanding is particularly important because it helps explain why the West continues to promote market-based solutions for environmental sustainability and how neoliberalism continues to provide new forms of access for consumers.

[94] Elia Apostolopoulou et al., "Reviewing 15 years of research on neoliberal conservation: Towards a decolonial, interdisciplinary, intersectional and community-engaged research agenda," *Geoforum* 124 (2021): 337.
[95] Apostolopoulou et al., "Reviewing 15 years," 237.
[96] Apostolopoulou et al., "Reviewing 15 years," 244, 246.
[97] Apostolopoulou et al., "Reviewing 15 years," 237.

In building these connections between neoliberalism and the privatization of nature, it is essential to see how this process can even be done to explicitly promote settler colonial goals by integrating land into the free market. Haim Yacobi and Erez Tzfadia (2019) provide this critical component in analyzing Israel's urban planning and land regime in the 1990s. In their breakdown of policies, the two explain how neoliberal ideas became integrated into the country's governing policies and how ethnonational hierarchies were implemented by accumulating and allocating spatial rights.[98] The two argue that through these policies and other selective privatization and planning efforts, Israel maintained and enhanced its settler colonial logic over the Palestinians, who were integrated into the state as citizens but never fully recognized.[99] In this discussion, Yacobi and Tzfadia introduce the term neo-settler colonialism to understand how neoliberalism can hide its settler colonial tendencies through efforts such as privatization, decentralization, deregulation, and the free market.[100] From here, Yacobi and Tzfadia highlight how efforts were made by the Israeli government to privatize National Lands, which allowed them to be used for free market developments that were still founded in "nationalist-territorial values."[101] In this discussion, the two specifically draw attention to Israel's National Outline Plans 31 and 35 to present how even when planning rights to further frontier settlements were shifted towards entrepreneurs who were supposed to cooperate with local authorities, amendments were still made to the bill enabling the denial of spatial rights to Palestinian local authorities.[102] Small and poor municipalities that were governed by Arab authorities were unable to operate local planning committees or create independent plans, resulting in them ultimately

[98] Haim Yacobi and Erez Tzfadia. "Neo-settler colonialism and the re-formation of territory: Privatization and nationalization in Israel," *Mediterranean Politics* 24, no. 1 (2019): 2.
[99] Yacobi and Tazfadia, "Neo-settler colonialism," 1, 3.
[100] Yacobi and Tazfadia, "Neo-settler colonialism," 2.
[101] Yacobi and Tazfadia, "Neo-settler colonialism," 10.
[102] Yacobi and Tazfadia, "Neo-settler colonialism," 11-13.

being governed by regional authorities which allowed for the furthering of "ethno-national logic of territorial control" and the continuance of settler colonialism in the country.[103] While this analysis of settler colonialism and neoliberalism is not specific to Brazil, it is important to note how efforts to integrate settler colonialism into the free market have been possible.

v. The Complications Surrounding Carbon Markets Concerning Access

One of the most significant ways the commodification of nature and neoliberal conservation movements have led to new forms of access is through the rise of carbon markets. In their work, Andrew McGregor et al. (2014) explore the differing perspectives on REDD+ in critical and practical research to help explain why the two sides have trouble communicating. Throughout this piece, McGregor et al. explain that some scholars see market-based approaches as a way to help empower local communities in negotiating and profiting from conservation agreements while also allowing them to shift away from unsustainable practices such as logging.[104] On the other hand, those who argue against the use of PES note that they, in many cases, have had adverse effects, such as leading to a lack of usage for these groups and putting the seller at risk of losing autonomy over their land.[105] The scholars highlight that those who take these negative stances on carbon markets typically ground their argument by stating that market-based logics in forest conservation have favored big businesses and governments in the global North, not local populations.[106] One of the most crucial points that this piece draws attention to is scholar's views on the 'spatial fix' of carbon markets and how some consider offsets as an unfair

[103] Yacobi and Tazfadia, "Neo-settler colonialism," 14.
[104] Andrew McGregor et al., "Practical critique: Bridging the gap between critical and practice-oriented REDD+ research communities," *Asia Pacific Viewpoint* 55, no. 3 (2014): 279.
[105] Andrew McGregor et al., "Practical critique," 280.
[106] Andrew McGregor et al., "Practical critique," 280.

way to redirect the "responsibility for mitigating climate change to developing nations, while not requiring 'real' emission reductions by advanced industrial nations."[107] But McGregor et al. acknowledge the counterargument to these positions and how these projects can provide financial benefits to developing countries while helping to work towards sustainability efforts.[108] These two points and others led McGregor et al. to conclude that the two sides (critical and practical research) seem to be working towards the same goal and would greatly benefit if they could find a way to effectively share the knowledge they both possess together. But significant challenges need to be overcome if this possibility of collaboration is going to occur.

Understanding what scholars see as the benefits and consequences regarding carbon markets would be incomplete without discussing what the commodification process offers buyers. In his piece, Bumpus (2011) discusses the creation of carbon credits to gain a more comprehensive understanding of why some scholars believe the commodification of carbon has been problematic. For Bumpus, the status of carbon as a commodity is not intrinsic.[109] But this commodification results from "conscious and unconscious actions of people in specific circumstances; global capitalist processes shape localities and the transformation of nature into commodities."[110] This understanding is essential because it presents the social dynamics of creating carbon credits. From here, Bumpus explains that because it has been recognized that carbon is now a commodity, then it has also been recognized as needing to be sold. According to Bumpus, "Under market environmental modes of governance, emissions reductions have to be assigned rights of ownership—the assignation of legal title to a named individual, group or

[107] Andrew McGregor et al., "Practical critique," 281.
[108] Andrew McGregor et al., "Practical critique," 281.
[109] Adam G. Bumpus, "The matter of carbon: understanding the materiality of tCO2e in carbon offsets," *Antipode* 43, no. 3 (2011): 615.
[110] Bumpus, "The matter of carbon," 615.

institution— so that they can be traded as commodities allowing future exchange."[111] Bumpus then explains how during the process, when a buyer purchases the credit, they now receive "control of the commodity," which enables them the "allowance to emit."[112] These understandings presented by Bumpus are necessary in order to understand Lohmann's argument regarding what he believes are the true intentions of carbon markets and why they target developing countries.

Larry Lohmann (2011) takes a critical stance on carbon markets by attempting to answer the question, "How do you make a market out of climate?"[113] Throughout his analysis, Lohmann discusses why there is some debate about how critics and advocates of carbon markets differ in their rationales of the cost-benefit analysis to present part of the complexities associated with carbon markets. While Lohman sees some positives that can result from carbon finance, he centers his arguments around the misunderstanding of creating a carbon market, their goals, and the complications surrounding the actors in purchasing the credits. To explain where he sees the slippery slope of carbon markets, he discusses how they allow Northern industries and countries to evade pollution caps from projects outside their restrictions.[114] He explains that this ability of corporations to purchase beyond their caps enables them to purchase control of resources (carbon, land, trees, etc.), allowing "offsets to have a redistributive or 'Third World development' purpose rather than a climatic one."[115] For Lohmann, this conversation is particularly important because it exposes the intentions of those who have a hand in creating these markets to impose neoliberal conservation systems on the global South, helping to relieve

[111] Bumpus, "The matter of carbon," 621.
[112] Bumpus, "The matter of carbon," 619.
[113] Larry Lohmann, "The endless algebra of climate markets." *Capitalism Nature Socialism* 22, no. 4 (2011): 100.
[114] Lohmann, "Algebra of climate markets," 97.
[115] Lohmann, "Algebra of climate markets," 97.

the pressure from the global North. Lohmann highlights this point again in explaining how "Equating reductions with saleable property rights takes another step away from the climate issue," to him, the point it brings it closer to is the ability to bring about change to communities on the ground that could create alternatives to pollution.[116] He closes out his argument by addressing the need for regulation and de-commodification, stating, "Commodity solutions always reinterpret and transform the social and environmental challenges that they confront," which will continue to have unpredictable consequences."[117]Therefore, according to Lohmann, phasing out carbon trading needs to be done to provide avenues for restricted access and significant change.

vi. A Brief History of the Suruí Peoples in Relation to Economic Access in Rondônia

Settler's desire to infiltrate the Suruí people's territory is not a new reality, rather, it is the continuation of a structural issue that dates back to the 1940s, 50s, and 60s.[118] During this time, the economic cycle within Rondônia began to undergo new changes as rubber exploitation, cassiterite mining, and agricultural expansion began to take hold within the state.[119] As more settlers came to Rondônia, the state's population increased by nearly fifty-percent, forcing the Suruí people to abandon their villages.[120] Trouble would occur once again following the construction of the Cuiabá-Porto Velho (BR-364) highway in 1968.[121] The highway's completion sparked a rise in dispossession, not just for the Suruí people, but for settlers across

[116] Lohmann, "Algebra of climate markets," 107.
[117] Lohmann, "Algebra of climate markets," 112.
[118] Betty Mindlin, "Surui Paiter," *Provos Indígenas No Brasil*, March 26, 2018, https://pib.socioambiental.org/en/Povo:Surui_Paiter
[119] Mindlin, "Surui Paiter."
[120] Mindlin, "Surui Paiter."
[121] Mindlin, "Surui Paiter."

Rondônia as the state's population went from 85,504 in 1960 to nearly 490,153 in 1980.[122] Between the 1970s and 80s, things continuously intensified for the Suruí people as they began to engage in various armed clashes as thousands of non-indigenous settlers continued to move into their territory.[123] Despite some efforts made by the state to stop the intense migration, the National Institute for Colonization and Agrarian Reform (INCRA), the government's land agency, continued fueling settlers' entrance into Rondônia by illegally selling plots of land, which further added to the chaos taking place within the state.[124]

In the 1980s and 1990s, things only continued to intensify for the Suruí people as two massive rural development initiatives continued introducing new actors into Rondônia.[125] The first occurred in 1981 when the WB helped launch the $1.5 billion Northwest Brazil Integrated Development Project (POLONOROESTE), which would be responsible for providing finances to pave the BR-364 upon the condition that the "federal government would demarcate indigenous lands and that the states would implement environmental reforms."[126] However, these conditions were not upheld, resulting in the WB eventually halting payments after facing pressure from environmental NGOs. During this time, Rondônia underwent another economic transformation as the state began receiving nearly 200,000 migrants per year, many of whom were loggers, mining companies, and land speculators, which continued the cycle of invasions and deforestation of indigenous lands.[127] With this intensified outside contact, the Suruí began to experience many health and cultural issues.[128] Therefore, with a lack of resources to meet their

[122] Mindlin, "Surui Paiter."
[123] Mindlin, "Surui Paiter."
[124] Mindlin, "Surui Paiter."
[125] Steve Zwick, "The Suruí Forest Carbon Project a Case Study." *Ecosystem Marketplace a Forest Trends Initiative*, March 2019, https://www.forest-trends.org/wp-content/uploads/2019/03/doc_5751-1.pdf
[126] Zwick, "Suruí Forest Carbon Project."
[127] Zwick, "Suruí Forest Carbon Project."
[128] Mindlin, "Surui Paiter."

needs and limited options, the Suruí people began to commercialize their available resources as they started to sell their trees as lumber.[129] This point would be extremely important for the Suruí people as it would mark a turning point for how some of the tribe's members would begin to relate to their forests. These changes to the Suruí regarding their health, culture, and logging will be further elaborated in Chapters Three and Four.

The shortcomings of the POLONOROESTE helped contribute to the second initiative, the launching of the Rondônia Natural Resources Management Project (PLANAFLORO) from 1992 to 2001 with the help of the WB. This project aimed to remedy some of the impacts the POLONOROESTE had on indigenous peoples while also focusing on new uses for the land, biodiversity conservation, and improving local transportation infrastructure.[130] The project also engaged in botanical expeditions in different areas across the state to introduce arboreal plants that could help the wood industry.[131] It also introduced a series of actors into Rondônia as the governing structure began incorporating local and global NGOs.[132] Despite these actors seeking to help reverse some of the wrongdoings towards indigenous peoples as presented throughout the literature, as new actors are positioned into debates regarding land, economic interests surrounding access begin to take hold. This element began to present itself as the WB, which was in charge of allocating the project's funds, began to question its feasibility, especially regarding the funds that were supposed to be given to indigenous peoples.[133] Those on the local level would heavily criticize this specific aspect of the project's delivery because this lack of direct

[129] Mindlin, "Surui Paiter."
[130] Zwick, "Suruí Forest Carbon Project,"; Samuel Carleial and Narcísio C. Bigio, "What survived from the PLANAFLORO project: Angiosperms of Rondônia State, Brazil," *Check List: Journal of Species Lists and Distribution* 10, no. 1 (2014): 33.
[131] Carleial and Narcísio, "PLANAFLORO project," 33.
[132] Zwick, "Suruí Forest Carbon Project."
[133] David S. Brown, J. Christopher Brown, and Scott W. Desposato, "Promoting and preventing political change through internationally funded NGO activity." *Latin American Research Review* 42, no. 1 (2007): 107.

economic delivery began to foster the belief that the money used for creating the project was only to help restructure the State agencies and infrastructure, meaning that the use of the grassroots organizations to bring awareness to the issues occurring was simply a tool used by the state to secure funding for their goals.[134]

Furthermore, in discussing this brief history of the infiltration of the Suruí's territory through economic justification, it is also critical to address the narratives surrounding the Amazon during the time of the PLANAFLORO's creation and how these thoughts impacted views regarding how the forests and land should be treated, during that time but also some of which are still relevant today. The first narrative was that the Amazon was the "lungs of the world."[135] The second was that the rainforest was a "treasure chest"[136] that foreigners outside Brazil sought to invade and steal its resources. The first narrative, with the rainforest being considered the "lungs of the world," positions the Amazon only in its use to the carbon cycle, not as its own unique entity. This understanding shows how the forest is not respected in and of itself but for what it does. As the use of forests for carbon purposes became more clearly connected to climate change, this view of the forest as a carbon vacuum helps explain why ideas regarding the necessity of a project such as the Suruí Forest Carbon Project would be needed due to the project's ability to limit deforestation, thus limiting carbon emissions. The second point regarding the idea that the forest was a treasure chest that foreigners sought to steal from is equally important because it helps further the understanding of the history of settler colonial access within Brazil, where, throughout history, various actors and entities have taken what they wanted from the land with little repercussions. This understanding helps explain why some

[134] Brown, Browen, and Desposato, "Promoting and preventing," 107.
[135] Beth A. Conklin, "Shamans versus pirates in the Amazonian treasure chest," *American Anthropologist* 104, no. 4 (2002): 1057.
[136] Conklin, "Shamans versus pirates," 1057.

indigenous peoples might hesitate to receive internal or international assistance when handling the preservation of the Amazon. The complexity of both narratives surrounding the Amazon will be touched upon throughout this chapter and the third and fourth chapters.

vii. The Creation, Unfolding, and Suspension of the Suruí Forest Carbon Project

Going into 2005, nearly ten percent of the Suruí's territory had been subject to logging practices resulting in some of the tribe's leaders seeking new environmentally sustainable economic outlooks to support their people.[137] Almir Suruí, one of the tribe's most influential leaders, strongly opposed logging and had heard about "Life Plans" being implemented across the Amazon by other indigenous groups. These Plans outlined ways for indigenous peoples to develop sustainable economies based on reviving traditional practices.[138] After working with two NGOs, the Amazon Conservation Team (ACT) and the Association of Ethnic and Environmental Defense (AEED), Amir secured a grant for $250,000 to help develop and implement the Paiter Life Plan.[139] Some of the initiatives outlined in the plan were to map the territory's resources, hunting grounds, and places of cultural importance.[140]

Following the creation of the project's outline, Almir presented his plan to the Forum of the Clans, where fourteen of the tribe's eighteen chiefs agreed to the project and imposed a moratorium on logging while the mapping process occurred.[141] As a result, several loggers began threatening Almir's life, and he then went to the United States for his safety and to attempt to raise more funds for the project's further development.[142] On a fundraising trip to San Francisco

[137] Zwick, "Suruí Forest Carbon Project."
[138] Zwick, "Suruí Forest Carbon Project."
[139] Zwick, "Suruí Forest Carbon Project."
[140] Zwick, "Suruí Forest Carbon Project."
[141] Zwick, "Suruí Forest Carbon Project."
[142] Zwick, "Suruí Forest Carbon Project."

in 2007, Almir Suruí approached Beto Borges of the Forest Trends Association, looking to receive a grant to continue the Life Plans project. However, Borges suggested that carbon finance might be a better solution for achieving long-term funding for the Suruí people. During this time, Almir was first introduced to the idea of "avoided deforestation" (the term used before REDD+ carbon credits) as a way for the Suruí to move away from logging practices while still receiving finances from their forests.[143]

After meeting with Almir, Borges contacted the Brazilian law group of Baker and McKenzie to see if it would be possible for the Suruí people to earn income from carbon sequestration under Brazilian law. Following an analysis of the law, the group notified him that it would be possible for the Suruí to obtain finances from the sale of carbon credits because indigenous peoples have ownership rights to their land in Brazil under the Constitution.[144] When discussing this point with Borges in an interview, he expressed the importance of this point and what this means for the ability of the Suruí to use their trees to create and sell carbon credits. He explained,

> In the case of Brazil, these rights are very clear according to the Brazilian Constitution. All the indigenous peoples in Brazil have the privilege of having a very strong framework. The framework of different laws, including the Constitution, is very important and related to the topic here of carbon credits. Article 231 of the Brazilian Constitution speaks to the rights of indigenous peoples to have their exclusive right to use their territories to derive economic benefits. They have the exclusive rights to make use of their territories for their economic benefits and livelihoods. And it's important that it's there, that it's explicit.[145]

As a result, the idea for the project moved forward. The firm did point out that because avoided deforestation was not recognized under the Clean Development Mechanism (CDM) of the UNFCCC's Kyoto Protocol, it would need to be verified by an outside credible carbon standard

[143] Zwick, "Suruí Forest Carbon Project."
[144] Zwick, "Suruí Forest Carbon Project."
[145] Beto Borges, interviewed by Faith Howard, Zoom, March 22, 2023.

organization for the carbon credits sales to become legitimate. The organization chosen for the project was Verified Carbon Standard (VCS), which now operates under the title of Verra.[146]

In June 2009, the project began to take form as all acting chiefs signed off on the agreement, and the project started to go into effect. During this time, various actors became more heavily involved as the project's framework became incorporated under the emerging program REDD.[147] Those involved in the project outside of the Suruí leadership included NGOs such as Forest Trends, ECAM, Metareilá, Kanindé, the Katoomba Group, and the Brazilian Biodiversity Fund.[148] Funders like the United States Agency for International Development, the Norwegian Agency for Development Cooperation, the Gordon and Betty Moore Foundation, the David and Lucile Packard Foundation, the Overbrook Foundation, the Blue Moon Fund, the World Bank Development Grants Facility, the Global Environment Facility, the Citi Foundation, Google, and the United Kingdom Department for International Development.[149] As well as various other organizations, including the Kanindé Associação de Defesa Etnoambiental, which consulted the Suruí on the project's development, and the IDESAM, which bore the technical responsibility for the coordination of forest carbon-related aspects of the project.[150] A key point to note is that as the project began to unfold, many of these project partners began inviting state and federal authorities to join the process to ensure that the project continued to develop in a way that confirmed the Brazilian government's policies and objectives.[151]

For the creation of the project's carbon credits to be possible, the Suruí first had to establish a "business as usual" deforestation baseline to prove that the actions they would be

[146] Zwick, "Suruí Forest Carbon Project."
[147] Institute for Conservation and Sustainable Development of Amazonas - IDESAM, "Suruí Forest Carbon Project."
[148] Zwick, "Suruí Forest Carbon Project."
[149] Zwick, "Suruí Forest Carbon Project."
[150] "Suruí controversial Forest Carbon Project, Rondônia, Brazil." *Environmental Justice Atlas.* July 23, 2017, https://www.ejatlas.org/conflict/surui-forest-carbon-project
[151] Zwick, "Suruí Forest Carbon Project."

taking through the creation of their carbon credits would help counter the expected levels of deforestation in their territory.[152] This process was very complicated and required the mapping assistance of the IDESAM and Forest Trends to help determine what this baseline would be. It would ultimately be decided that the project's baseline would follow a historical reference model (2000–2009) based on the deforestation caused by land use and land cover changes that had occurred in the area during this span.[153] But following the model's completion in June 2012, the VCS validated the project, meaning that they approved of the project's design and believed the baseline to be a recognizable measurement, thereby allowing the Suruí to create carbon credits.[154] In June 2013, the project was validated by the Management and Certification of Forests and Farms (IMALORA) and the Rainforest Alliance, meaning that the Suruí could now sell their credits to buyers.[155] Later that same year, the project made its first sale to the Brazilian cosmetic company Natura Cosméticos which purchased 120,000 tonnes of carbon credits.[156] The following year FIFA purchased the same amount of credits to help with the emissions caused from the World Cup, that was being hosted in Brazil in 2014.[157] In the interview, Borges explained that "the project was going really well for a while. At the time of the onset of the project, there were 100 logging trucks coming out of the Suruí territory daily. It's even hard to imagine. And we brought that to a halt."[158] During this period, the project appeared to be a success, as deforestation in the area between 2009 and 2014 had almost entirely halted.[159] But, a

[152] Zwick, "Suruí Forest Carbon Project."
[153] Vitel et al., "Land-use change modeling," 808.
[154] Zwick, "Suruí Forest Carbon Project."
[155] "Brazilian Cosmetics Giant Buys First Indigenous REDD Credits," *Ecosystem Marketplace a Forest Trends Initiative.* accessed on February 12, 2023, https://www.ecosystemmarketplace.com/articles/brazilian-cosmetics-giant-buys-br-first-indigenous-redd-credits/
[156] Ecosystem Marketplace a Forest Trends Initiative, "Cosmetics Giant Buys REDD Credits."
[157] Nathanson, "Suspended due to illegal mining."
[158] Beto Borges, interviewed by Faith Howard, Zoom, March 22, 2023.
[159] Zwick, "Suruí Forest Carbon Project."

vital thing to highlight is that just because the project might have temporarily suspended settlers, most notably loggers and miners, the ability to access the Suruí's land, it did not suppress their desire for access.

As laid out briefly in Chapter One, the struggle for economic access to the Suruí territory peaked in 2015 and 2016 when gold and diamonds were discovered on the project's site leading to the massive infiltration of garimpo (illegal small-scale miners).[160] When I addressed Borges about this component of the project's suspension, he stated, "We didn't predict the diamond and gold mining that all of a sudden was discovered. Putting this all together,[161] we said, let's put a hold on it because we figured that if we couldn't verify the project again based on that."[162] This verification that Borges refers to in this comment is the verification under the VCS. According to a report by the Guardian, in 2017, the project's territory had lost approximately 653 hectares (1,614 acres) of the forest making the deforestation rate nearly 256% higher than the project's approved limit.[163]

This issue surrounding the project's downturn was further fueled by the intrusion of the Catholic Church's Indigenous Missionary Council (CIMI), which strongly opposed the project on the basis that they believed that the use of carbon credits allowed for the implementation of a green economy which distorted indigenous peoples' relationship with their land through the commodification of nature.[164] In an interview with REDD-Monitor, Cleber Buzatto, one of the

[160] Nathanson, "Suspended due to illegal mining."
[161] The "all" issue that Borge's is referring to in this statement is that there had just been a fire in the Suruí territory that had destroyed some of the forest, in addition to the illegal mining now taking place.
[162] Beto Borges, interviewed by Faith Howard, Zoom, March 22, 2023.
[163] "How diamonds and a bitter feud led to the destruction of an Amazon reserve." *The Guardian*, September 27, 2017, https://www.theguardian.com/environment/2017/sep/27/how-diamonds-and-a-bitter-feud-led-to-the-destruction-of-an-amazon-reserve
[164] Zwick, "Suruí Forest Carbon Project."

CIMI's leaders, commented on how the organization saw the project unfolding and why they felt they needed to strongly oppose it. For Buzatto and the CIMI

> REDD on indigenous lands can be equated to a land lease mechanism. Therefore, the indigenous peoples and communities would no longer have exclusive usufruct. This is against our Constitution. The lease was one of the main strategies used by the settlers to implement the practice of dispossession of indigenous lands in Brazil. We consider the way REDD is being developed in Brazil to be illegitimate.[165]

From the perspective of the CIMI, REDD+ functions as a land lease mechanism on the Suruí territory because the project's crediting period was intended to occur between 2009 to 2038, which means that any credits purchased during that time would provide the owner of the credit control over a specific tree or section of forest throughout the project's thirty-year span. Because trees must be left untouched for credits to be valid under the project's baseline basis being from a land use design, the more credits the project generated, the less control the Suruí people would have regarding how their forests could be used in other ways. Because any country or corporation could purchase one of the Suruí's credits, significant portions of their forests could continue to become restricted over the project's span. Regardless, after much debate and deliberation, the project was suspended indefinitely in September 2018.

viii. An Analysis of the Suruí Forest Carbon Project's Creation, Unfolding and Suspension: A Tale of Two Economic Paths

While the project's layout might have been composed of good intentions of promoting indigenous agency, it was full of complications and contradictions as actors, internally and

[165] "Interview with Cleber Buzatto, CIMI: The REDD mechanism is not a solution to the climate problems regardless of the colour of money and funding sources," *REDD_Monior*, October 23, 2015, https://redd-monitor.org/2015/10/23/interview-with-cleber-buzatto-cimi-the-redd-mechanism-is-not-a-solution-to-the-climate-problems-regardless-of-the-colour-of-money-and-funding-sources/

externally, had economic motives regarding how they saw the project unfolding and how this could influence their ability to access land. When analyzing the project, few have explained these struggles through a settler colonial lens, which I will show is vital in helping to understand why the project developed and suspended the way it did and why the project had such significant challenges surrounding indigenous autonomy. In this discussion, I will focus on how economics once again provides another avenue for access, specifically focusing on the recurring theme of indigenous dispossession due to economic motivations for access. Throughout this analysis, I will explain that because Brazil is a settler state, enforcement of territorial division and protections are not always upheld despite outlined policies in their Constitution. Additionally, I also look to show how because the Brazilian state is also situated within the global economy where the global North looks to abstract from the Amazon, economic-related access and questions of agency were always going to be an issue for the Suruí people as they received pressure to develop from many forces. For this case, views on whether the Suruí Forest Carbon Project provided access or restricted access to the Suruí territory for the Suruí people would largely be dependent if one took the perspective of Henrique or Almir Suruí. This conversation will experience some overlap with settler colonialism's two other principles, the elimination of the native and the understanding that settler colonialism is a structure and not an event. But I will flesh out these principles more heavily in the third and fourth chapters.

To analyze the role of economics in providing different avenues to access the Suruí's land through the Suruí Forest Carbon Project, some of the essential factors that occurred even before the project's conception must be addressed. Specifically, the issue that needs to be highlighted is how the creation of the POLONOROESTE led to massive amounts of migration, leaving the Suruí with few avenues for meeting their health needs or ensuring their cultural

survival, resulting in them turning towards logging practices to fulfill their financial necessities as they would now need to find ways to participate in the economically competitive Rondônia state. Here settlers imposed their economic will upon the territory as loggers, miners, and land speculators began overrunning the land, dispossessing the Suruí and causing them to abandon their previous harmonious relationship with the forests to a capitalistic one.[166] Once the Suruí gave into these logging practices, the repercussions would be massive as they, as a people, would begin to constantly experience divisions amongst their tribe because there was no longer a clear understanding regarding how their forests should be used. This debate between the Suruí is evident in the dramatically different viewpoints of the Suruí Forest Carbon Project by cousin and tribal leaders Almir and Henrique.

Regarding the project's creation, addressing the collaboration between Almir Suruí and Borges from Forest Trends is essential. To begin, understanding that the solution put forward by Borges to Almir was a neoliberal environmental solution presents how, from its proposition, the project possessed a Western perspective on viewing the Suruí's people's forest. Although Borges is Brazilian himself, he works for Forest Trends, which is a non-profit organization based in Washington, D.C. Therefore, the power dynamics of the situation still must be addressed and recognized as this organization is based in the global North and is suggesting a neoliberal mechanism of dealing with deforestation and climate issues towards tribal people located within a developing country that are constantly facing pressures to develop. In the interview, Borges recognized that his position brings a unique dynamic that he felt was important to address. He stated,

> So, the way that I've been working with indigenous people is always trying to find ways to support their own strategies for conservation and for promoting their rights and livelihoods. Everywhere I worked, I tried to find, okay, where is my leverage from where

[166] Mindlin, "Surui Paiter."

> I am? I worked even in the private sector for a few years in philanthropy. I was trying to find, being a Brazilian out here in the West, how I can support indigenous peoples back home. And I had to kind of adjust in the places where I had the privilege to work.

From his statement, Borges attempts to recognize the privilege in his positionality in the West and wants to use it to promote indigenous rights in Brazil. However, his statement also highlights a need for adjustment in the West, where the view towards things like land and forests is an economic opportunity. Regardless of Borges's good intentions, his suggestion follows much of the same thinking that Apostolopolou et al. warn about in their analysis regarding how neoliberal conservation programs, over the last fifteen years, continue to impose unequal power distributions between the global North and South through the markets. It begs the question of who is responsible for addressing the issues associated with climate change. This debate is one of the core components to which McGregor et al. and Bumpus engage, surrounding the complications surrounding what scholars see as the benefits and consequences of carbon markets and why access is viewed positively or negatively.

In my interview with Borges, I asked him what his role was with Forest Trends and what kind of responsibilities the organization had regarding forest conservation and finance. He answered that,

> The main mission of Forest Trends is to create, develop, and promote economic instruments for conservation. That's what we do. And we do that in different ways, and we have different programs that do that. And the community initiative I have been running for Forest Trends. We do that for indigenous peoples and local communities, creating economic instruments to support their rights and livelihoods and integrated management of their forests through supporting their own autonomous vision for development.[167]

The mission of Forest Trends is just one of the many examples that will be addressed regarding how the Suruí Forest Carbon Project was designed with the hope of promoting indigenous

[167] Beto Borges, interviewed by Faith Howard, Zoom, March 22, 2023.

agency and autonomy but would be faced with the reality that the project is situated within a settler state that continuously implements policies to restrict indigenous land rights, despite these rights being outlined in places like the Brazilian Constitution. As also pointed out by Yacobi and Tzfadia, even when the privatization of land is done with the 'intention' to 'help' marginalized groups, national interests can still implement policies designed to limit and restrict these rights. Borges may not have intentionally realized that his organization could contribute to new avenues for access to the Suruí territory through economic instruments. However, it should be noted that because the financial instruments put in place for this case are carbon credits, the Suruí's land would automatically be situated in the broader global market where the Suruí's autonomous ambitions would compete with other actors who look to have their economic interest implemented. Therefore, while the project's proposal looked to provide agency, it still opened the door for economic settlers to penetrate the territory in different ways than before. This point would become an extreme area of contingency for various actors surrounding the project's creation and implementation phases.

When attempting to work within settler states, it must be acknowledged that although indigenous people's right to use their land is recognized under the law, it does not mean that the law and other legal enforcement mechanisms always uphold them. As noted previously in the interview with Borges, one of the reasons he was very confident in the ability of the Suruí to create the carbon credits and retain their autonomy to their land right was because "All the indigenous peoples in Brazil have the privilege of having a very strong framework." But, later in the interview, Borges highlighted some of the contradictions that occur when working within the Brazilian legal system. He discussed how one of the challenges in creating the project on indigenous lands was to

> navigate the legal framework in Brazil, given that up till today, it is not really certain how Brazil sits on this.[168] There isn't yet a REDD national policy. And so, we were faced with this uncertainty. I guess the challenge would be the uncertainty of the legal framework in Brazil to develop a carbon project which still exists even though we stand by the legal finding because it's very strong. But you never know, right?[169]

As seen throughout Wolfe and Scott's discussion, economic intentions have long been avenues for governments to undermine the legality of indigenous claims to land. The case is undoubtedly still true in Brazil, as even highlighted by Borges. For instance, without an extensive background into Brazil's history as a settler state, one can see how through the continuous cycle of infiltration of the Suruí territory and the failure of the PLANAFLORO to uphold indigenous peoples right to their assigned land, Brazil has struggled with the economic intentions of settlers at the state and local level and now internationally. While this complication would not be recognized as an important concern in the beginning years of the project's activity, it would be a significant consequence of its eventual suspension, as Almir explains that the Brazilian authorities ignored his pleas for help following the miners' infiltration into the territory.[170]

As discussed throughout the literature, implementing carbon markets is one of the most significant ways economic accesses has occurred in environmental conservation projects. The Suruí project is a prime example of the complications surrounding this new environmental economic reality. For instance, the understanding that for the project to become operationalized, it needed to create a voluntary carbon market shows how from its basis, the project provided an avenue for allowing actors to have new control either by helping with its design or purchasing the credits. When it comes to the control regarding the purchase of credits, this is where Bumpus's conversation is helpful because he notes that carbon's status as a commodity is

[168] The "this" which Borges is referring to is the ability of indigenous peoples to use their land for economic benefit while restricting the land's use.
[169] Beto Borges, interviewed by Faith Howard, Zoom, March 22, 2023.
[170] Lang, "Suruí Forest Carbon Project."

partially reliant on its ability to be given a legal title, and through purchase, the owner now receives "control of the commodity." This is one of the reasons why Henrique Suruí says he had become so opposed to the project. In an interview with Patricia Bonilla, communications advisor at the CIMI, Henrique said that when it came to the negotiation process of selling the carbon credits to Natura, he never went to the discussions because he was so strongly opposed to the project. But soon after the project's launch, he became more active in this opposition because "I discovered through friends and support groups that one day we would lose [access to] the territory because the funding would take away our right to live on the land."[171] He said that due to the sale of the carbon credits, many cultural practices, such as traditional crafts, fishing, and hunting, on their land would be ended, leaving his people with a loss of autonomy because they would no longer have the freedom to use the land as they desire during the project's intended thirty-year span.[172] Much of this conversation follows the lines of thinking presented by Liboiron and Lohmann, where Liboiron outlines how when settlers purchase land, they believe they possess the right to do with it whatever they please, and for Lohmann, carbon markets move the issue away from climate mitigation to third world development. Therefore, from this perspective, it can be more easily understood why Henrique Suruí would actively put forward efforts to undermine the project.

When looking at the project from the viewpoint of Almir Suruí, it is understandable why he believed the project would be an avenue for increasing indigenous agency and forest conservation. According to Almir Suruí, "REDD+ is a bridge between the indigenous world and the non-indigenous world…It creates a vehicle through which the capitalist system can recognize

[171] "What are projects for that destroy life?" Interview with Henrique Suruí about the Paiter-Suruí REDD project, Brazil," *REDD_Monitor*, December 17, 2014, https://redd-monitor.org/2014/12/17/what-are-projects-for-that-destroy-life-interview-with-henrique-surui-about-the-paiter-surui-redd-project-brazil/
[172] *REDD_Monitor*. "What are projects for."

the value of standing forests, and indigenous people can be rewarded for preserving them."[173] Based on the understanding provided by this quote, for Almir, REDD+ is a way of bringing together the project's various international, state, and local actors. He likely thought that his efforts allowed his forests to be saved *through* capitalism rather than *from* capitalism, as many of the actors backing the project also had economic intentions for keeping the project viable. But there are significant areas to be cautious of following Almri's understanding of why he believes REDD+ is valuable. For instance, Mrozowski and Kopenawa explain throughout their works that commodifying land requires recognizing that nature and society are separate realities. After this recognition, the land can become commodified and deemed valuable because it can be bought and sold, which is where colonizers believe they possess the right to dominate the land. Mrozowski and Kopenawa explain that bringing capitalism into a relationship with nature is where things go wrong because when land is awarded a price, owners believe they possess the right to dominate it, often resulting in a loss of indigenous autonomy. From this perspective, there also arises the argument that if mining makes more money, it should be done. Once a price is given, money becomes the main measure of value or morality. Especially due to the reality of Brazil facing significant economic pressure on the global stage, it must also be recognized that the small-scale miners who infiltrated the Suruí's territory resulting in the project's suspension, were also facing economic pressures resulting in their desire to access land. I do not highlight this last point to justify their efforts; rather, to recognize the challenges of the situation within which the project is attempting to operate.

Throughout this comparison of economic access through the viewpoints of Henrique and Almir Suruí, it should be noted that both sides of their arguments should be considered with

[173] Ecosystem Marketplace a Forest Trends Initiative, "Cosmetics Giant Buys REDD Credits."

some reasonable skepticism. For instance, in 2011, following his return to his position from a health sabbatical, it was discovered that Henrique had broken the tribe's logging moratorium and had resumed logging operations along "Line 14."[174] Following this discovery, Suruí members responsible for patrolling the area traced logging trucks to a nearby logging mill where they discovered Henrique, collaborating with the loggers there.[175] When this evidence was brought to local and state authorities, few efforts were made to curb the issue, allowing the logging to continue and expand. Almir Suruí then appealed to the president of Brazil at the time, Dilma Rousseff, and to Marta Azevedo, the president of FUNAI. Yet, these requests for intervention were ignored.[176] Although he confessed to working illegally with loggers at one point, Henrique denies any responsibility for why the project site was eventually overrun, resulting in the project's suspension.[177] Thus, it can see how Henrique's efforts to undermine the mechanisms for the Suruí Forest Carbon Project could have opened up economic access opportunities for the miners that eventually overran the Suruí's project site. But, as mentioned before, perhaps Henrique thought logging provided ways to obtain money and retain agency of their forests and way of life without needing actors from the global North, which, as seen in the failure of the POLONOROESTE and PLANAFLORO projects, resulted in indigenous land dispossession and loss of autonomy.

On the other side of the conversation, it can also be seen how Almir opened avenues for new opportunities for access by creating carbon credits. Throughout many analyses of the project, critics fail to account for the sheer volume of actors involved in the project's creation and how even the sale of the credits impacted the Suruí's ability to use the land. For example, as

[174] Zwick, "Suruí Forest Carbon Project."
[175] Zwick, "Suruí Forest Carbon Project."
[176] Zwick, "Suruí Forest Carbon Project."
[177] Lang, "Suruí Forest Carbon Project."

touched on earlier with the Borges example, the project comprised a variety of actors from the global North and South, especially when it came to creating the project's cultural map, verifying, and validating the project's design. The involvement of some of these actors will be more clearly outlined in Chapter Three. With this understanding in mind, through the project's implementation, approval of policies, and funding, the economic interests outside the Suruí had access to influence how the land would be used. Even when it came to purchasing the credits by Natura and FIFA, both are international organizations with consumer demand in large part coming from the global North. These entities saw the Suruí project as an opportunity to purchase their way out of pollution, thereby trading the Suruí money in exchange for controlling their forests, specifically the carbon the trees hold.

Therefore, regardless of how one examines access concerning the Suruí Forest Carbon Project, it is evident that many factors would have caused the project to struggle in the long term. For instance, the various examples presented throughout this chapter help highlight the difficulties of settler colonialism in creating environmentally sustainable projects because with either avenue the Suruí people selected (the project or logging), gaining autonomy for themselves was not an entirely realistic possibility, as and access to land was always going to be an issue. In the next chapter, I will discuss how settler colonialism's second core principle, the elimination of the native, can also be seen in many of these same facets of the project and how this led to further complications for the Suruí people.

Chapter 3: The Elimination of the Native

i. Introduction

This chapter will explore settler colonialism's second principle, according to Patrick Wolfe: the elimination of the native. In this discussion, I will analyze how elimination has taken place in the history of the Suruí people's struggle for land and how elimination continued to occur during some of the core components involved in creating the Suruí Forest Carbon Project. The following literature review will focus on elimination as outlined by Wolfe, how the settler logic of elimination relates to climatic concerns and environmental movements, and how settler colonialism has taken form in Latin America, specifically Brazil. Throughout this discussion, I will provide new information regarding the project's creation while referencing previous actors and examples from Chapter Two. My overall goal for this chapter is to show the correlation between how the settler's logic of native erasure and assimilation presented itself with the Suruí following their initial contact with the Western world and how this same logic continues to be implemented through "soft conquests" such as in the creation of the Suruí Cultural Map. While I am not suggesting that indigenous knowledge held by the Suruí has been erased or that indigenous resistance is not possible, I am attempting to show how the neoliberal settler state attempts to integrate indigenous peoples and the complications that arise when the natives take up the project of the settlers as their own.

ii. Elimination According to Wolfe

To understand how elimination occurred in relation to the Suruí Forest Carbon Project, it is first essential to note how Wolfe saw elimination occurring. In his discussion on the

elimination of the native, Wolfe (2006) makes two fundamental points regarding this principle. The first point is that when the settlers came to possess the land, there were often already indigenous peoples occupying it.[178] Wolfe explains that because indigenous peoples' presence made it difficult for settlers to quickly and easily access land, "their increase was counterproductive."[179] Ideologically, settlers believed they had the right to acquire the land by whatever means necessary because 'we' know better how to use it; thus, 'we' should have it.[180] Such an ideology results in the settler's logic being one of "elimination of the native."[181] This logic of elimination would lead to many instances of settlers forcibly removing indigenous peoples from their territories. Wolfe makes a crucial point in this initial discussion of elimination: elimination could be genocidal, but it does not have to be.[182] This distinction leads Wolfe to his second point on elimination, where he addresses how settler colonialism has both positive and negative dimensions. According to Wolfe, "Negatively, it (settler colonialism) strives for the dissolution of native societies. Positively, it erects a new colonial society on the expropriated land base."[183] Here, Wolfe addresses how in building a new colonial society, settlers would attempt to separate natives from their former ways of being, thereby transforming them socially.[184] This second form of elimination requires the native to be eliminated as a *native.*[185]

iii. Western Climatic Justifications for Forest Control Over Native Control

[178] Wolfe, "Settler Colonialism," 388.
[179] Wolfe, "Settler Colonialism," 388.
[180] Wolfe, "Settler Colonialism," 389.
[181] Wolfe, "Settler Colonialism," 388.
[182] Wolfe, "Settler Colonialism," 388.
[183] Wolfe, "Settler Colonialism," 388.
[184] Wolfe, "Settler Colonialism," 390.
[185] Wolfe, "Settler Colonialism," 388. [italics my own]

Many of the same logic that persists in environmental movements today correlate with ideas that originated during imperialism. Throughout his work, Barton (2002) presents how imperialism and environmentalism possess a conjoined past allowing him to argue that environmentalism has long been a policing agent to enforce Western conceptions and attitudes toward the domination of forests, people, and climate.[186] To make his case, Barton references various examples of how scientists realized that deforestation and climate correlated in Britain during imperialism, leading to climate theories that helped partly contribute to European imperial expansion. Here, Barton references English scientist Reverend Landsown Gilding who conducted rain collection experiments between 1825 to 1829, allowing him to establish a theory that climate and deforestation were linked.[187] In his theory, Gilding wrote, "Climate has been considerably affected by the continued industry of man and his daily encroachment on the primeval forests."[188] From here, Britain began to be curious if deforestation issues that impacted their climate also affected other areas. While this curiosity was not the primary reason for their colonial expansion, Barton argues it contributed. He explains that Britain's forest curiosity took place most notably in India and southern Africa, where they began to employ conceptions of law and property rights to Westernize the country's people and legal system.[189] To do this, they would set up different forest management systems based on the British model to 'fix' their colonies' forests from the 'inferior' natives' inability to care for their trees.[190] He closes his discussion by describing how British officials rejected the idea that they had ever exploited or suppressed the people they had colonized during their colonial occupation. Instead, these

[186] Gregory Allen Barton. *Empire forestry and the origins of environmentalism*, Vol. 34. Cambridge University Press (2002): 6.
[187] Barton, "*Empire forestry,"* 31.
[188] Barton, "*Empire forestry",* 31.
[189] Barton, "*Empire forestry,"* 99-106.
[190] Barton, "*Empire forestry,"* 99-106.

officials believed their efforts were always justified because their work allowed nature to be 'saved' from those unfit to govern and protect it.[191]

Martin Mahony and Georgina Endfield's (2018) work follows much of the same thought line discussed by Barton regarding how Europe and other parts of the West have always possessed attitudes of superiority towards the use of nature and who should govern it. This piece is essential because it presents a growing consensus among academics regarding climate and empire's connection to show how the history of forest management has always been imperial and is still largely the case today. This consensus is vital for the validity of my analysis of the Suruí project because it helps present how there is becoming even more agreement in the literature regarding how Western attitudes towards governing forests concerning their impact on climate are still actively being implemented within modern environmental projects. In their analysis, Mahony and Endfield describe how colonizers began to study how different factors could influence climate during European imperialism. They highlight how Europeans believed that race was a significant factor in climate and label this idea "climatic determinism."[192] Mahony and Endfield explain how Europeans thought there were climatically fixed differences between races and cultures, making some inherently superior to others, meaning that they possessed scientifically backed racial, cultural, and moral superiority to spread their influence, experiment, and exploit other territory's forests treating many of them as "laboratories" for experimentation.[193] With the logic of climatic determinism, Western empires believed they had a duty to "civilize" the barbarous peoples and the wild nature they encountered.[194] As a result, the

[191] Barton, "*Empire forestry,"* 75.
[192] Martin Mahony and Georgina Endfield. "Climate and colonialism." *Wiley Interdisciplinary Reviews: Climate Change* 9, no. 2 (2018): 2.
[193] Mahony and Endfield. "Climate and colonialism," 2.
[194] Mahony and Endfield. "Climate and colonialism," 10.

colonizers believed that their expansion efforts to manage their colonies' forests were justified because they were attempting to 'fix' the climatic problems that they thought the natives of their colonies had. This explanation provided by the European empires continues to build upon what Barton's literature had outlined specifically concerning how the governing of forests often presented Western attitudes of superiority being applied to nature, justifying colonizers' invasion actions, and excluding native control of their forests.

iv. Elimination in Environmental Movements

Understanding how settler colonialism's principle of elimination of the native helped to undermine the success of the Suruí Forest Carbon Project requires noting how the settler's logic towards eliminating the native has generally been a foundational component of various environmental movements. In their piece, Joe Curnow and Anjali Helferty (2018) discuss how environmental movements have historically been white settler spaces and how settlers' logic of elimination and dispossession continues in various environmental projects today.[195] To support their claim, the two analyze various historians' accounts of the origins of Western environmentalism to explain that regardless of the author's starting point, they all agree that environmental projects have often led to settler colonial practices such as the expansion of capital, indigenous dispossession, and the exploitation of slaves and workers.[196] The scholars continue to build their argument by discussing how many of the same ideological logics used during colonialism towards land, particularly regarding the ownership of "wild" spaces, continue to be reproduced today by modern mainstream conservation movements that justify

[195] Joe Curnow and Anjali Helferty, "Contradictions of solidarity: Whiteness, settler coloniality, and the mainstream environmental movement," *Environment and society* 9, no. 1 (2018): 146.
[196] Curnow and Helferty, "Contradictions of solidarity," 147.

indigenous land dispossession and enclosure under the logic that they must 'protect' the land.[197] Another component of the scholar's discussion that will be important to my analysis is the understanding that even when indigenous people are invited to help in environmental campaigns, settler logic of elimination persists as they are often used as "props" rather than "partners."[198] The scholars demonstrate this unfortunate reality with a picture of the "ecological Indian." For Curnow and Helferty, the "ecological Indian" depicts the understanding of the absence of the former Indian with the modern Indian, implying that indigenous peoples and nature have disappeared with modern society.[199]

Kyle Whyte's (2018) work is a significant addition to Curnow and Anjali Helferty's piece because it helps fill in some of the gaps regarding how settlers' logic of elimination is employed in environmental efforts, helping to undermine how environmental justice might look to counter settler logics. To examine this, Whyte investigates the philosophy under which settler colonialism commits environmental injustices and works to undermine indigenous people's collective continuance when examined with an ecological framework.[200] In his analysis, he explains how two kinds of violence occur under this system: vicious sedimentation and insidious loops.[201] For Whyte, vicious sedimentation is defined as "the pattern of how environmental changes compound over time to reinforce and strengthen settler ignorance against Indigenous peoples."[202] Insidious loops refer to "the complex feedback from ecological systems that are particularly harmful to Indigenous peoples."[203] Throughout this discussion, Whyte argues that

[197] Curnow and Helferty, "Contradictions of solidarity," 148-149.
[198] Curnow and Helferty, "Contradictions of solidarity," 149.
[199] Kyle Whyte, "Settler colonialism, ecology, and environmental injustice," *Environment and Society* 9, no. 1 (2018): 149.
[200] Whyte, "Settler colonialism, ecology, and environmental injustice," 125.
[201] Whyte, "Settler colonialism, ecology, and environmental injustice," 125.
[202] Whyte, "Settler colonialism, ecology, and environmental injustice," 138.
[203] Whyte, "Settler colonialism, ecology, and environmental injustice," 138.

examining ecological movements through a settler colonial lens is critical in understanding how these movements still allow for the domination of indigenous peoples. To begin, Whyte explains how an essential component of settler colonialism is settler domination of indigenous homelands, seeking to erase the 'other's' economies, political organizations, culture, etc., to establish their model of moral authority.[204] For instance, Whyte highlights that when settlers worked to build their ecologies in places where indigenous ecologies already existed, settlers would introduce new materials from abroad in attempts to alter Native relationships to their resources while serving settler desires.[205] He explains that as the settlers continued to impose these new ecologies, they looked for ways to continuously undermine indigenous social resistance by working to further separate indigenous peoples from their land.[206] In discussing the looping effects of settler colonialism, Whyte explains how human-caused climate change has provided greater avenues for indigenous dispossession as different indigenous territories are now being opened up for settler exploitation.[207] In closing out his discussion, Whyte addresses how understanding that settler colonial domination has transpired in ecology helps provide insights into reconciliation projects and justice for indigenous peoples, particularly focusing on the need to secure indigenous land rights.[208]

v. Elimination in Latin America and Brazil

Because the Suruí Forest Carbon Project took place in Brazil, it is essential to address how settler colonialism has occurred in Latin America and within the country to gain a more

[204] Whyte, "Settler colonialism, ecology, and environmental injustice," 135.
[205] Whyte, "Settler colonialism, ecology, and environmental injustice," 135.
[206] Whyte, "Settler colonialism, ecology, and environmental injustice," 136.
[207] Whyte, "Settler colonialism, ecology, and environmental injustice," 140.
[208] Whyte, "Settler colonialism, ecology, and environmental injustice," 141.

comprehensive understanding of the impact of elimination. Wolfe's discussion primarily focuses on the U.S., Europe, Australia, Israel, and Palestine, allowing Shannon Speed (2017) to fill in the gaps of Wolfe's discussion by centering her conversation within Latin America. Speed argues that although many Latin American states are rarely considered settler states, they should be.[209] To help support her argument for why Latin America should be viewed in a settler-colonial context, Speed draws from many of Wolfe's ideas and definitions regarding settler colonialism but explains why some of his points are short-sighted when incorporating the Latin American experience. One area that Speed focuses on to support her argument is Wolfe's idea that to provide an accurate definition of settler colonialism, the importance of land must be addressed, especially when analyzing the settler's logic of elimination.[210] Here, the issue she takes with Wolfe is his division between the Anglophone North and the South, allowing the North to be characterized by land dispossession and the South, focusing on resource extraction and the control of indigenous labor.[211] For Speed, such an understanding is incomplete because indigenous land dispossession played a fundamental role in the colonization of Latin America in addition to labor extraction.[212] In this discussion, Speed also highlights how during the "colonial period," settlers ingrained the racialization of indigenous peoples as uncivilized, savage, and unfit for modern life and that this "colonial structure against the Native did not disappear when states gained their independence."[213] For Speed, these racialized and gendered logics regarding elimination can still be seen in Latin America in the modern-day. But she argues that neoliberalism is now the driving force behind elimination, as neocolonialism and extractive

[209] Shannon Speed, "Structures of settler capitalism in Abya Yala," *American Quarterly* 69, no. 4 (2017): 783.
[210] Speed, "Structures of settler capitalism," 784.
[211] Speed, "Structures of settler capitalism," 784.
[212] Speed, "Structures of settler capitalism," 784.
[213] Speed, "Structures of settler capitalism," 785.

logics continue to force indigenous labor on their expropriated lands and, in some cases, the continued dispossession of indigenous peoples from their land.[214]

While Speed's work is essential to helping to contextualize settler elimination in Latin America, Desirée Poets' (2021) work is vital because she explains how settlers' logic of elimination has historically occurred in Brazil and still takes place even now. In her work, Poets focuses on how elimination has been practiced through land dispossession, assimilation, miscegenation, and now multiculturalism. Poets traces these eliminatory practices back to Jesuit settlements, where missionaries placed indigenous peoples into a territory to "educate them in civilized ways."[215] She explains how the Catholic church believed these indigenous souls could be 'saved.' But for this to be possible, the indigenous peoples would need to be disconnected from their land and ways of life to fill their souls with "Europeanness/civilization."[216] Poets describes this idea as "an attempt to eliminate the Native while 'saving the man.'"[217] This process of indigenous dispossession left the land open for settlers. She then explains how these ideas of dispossession and assimilation continued, noting that when land in Brazil became scarce during the nineteenth century. The state began dissolving *aldeamentos* based on the argument that "one could no longer identify indigenous peoples in them,"[218]again providing access to indigenous lands. According to Poets, miscegenation (whitening) continued through labor into the nineteenth and twentieth centuries, primarily with indigenous peoples becoming national workers.[219] The way this was thought to have worked is that when the native was put into these roles, then they were "civilized," and thus, the 'native' was eliminated. She explains how the

[214] Speed, "Structures of settler capitalism," 788.
[215] Desirée Poets, "Settler colonialism and/in (urban) Brazil: black and indigenous resistances to the logic of elimination." *Settler Colonial Studies* 11, no. 3 (2021): 273.
[216] Poets, Settler colonialism and/in (urban) Brazil," 273.
[217] Poets, Settler colonialism and/in (urban) Brazil," 273.
[218] Poets, Settler colonialism and/in (urban) Brazil," 274.
[219] Poets, Settler colonialism and/in (urban) Brazil," 273.

ideas surrounding these assimilating discourses would be broken following the 1988 Constitution as Brazil turned to multiculturalism, but how this would still be used as a tactic by the state for assimilation/elimination.[220] To describe how multiculturalism operates, Poets references Charles Hale, who describes the situation as the "permitted Indian," meaning the "Indian who is granted recognition and rights within the constraints of dominant interests and institutions."[221] Therefore, despite this transition away from miscegenation, the logic of elimination persists through "neoliberal multiculturalism" or "soft conquests" that often still result in violent efforts against indigenous people who do not conform to the state's wishes for their territories.[222]

Lastly, Tracy Devine Guzmán (2013) offers a unique perspective for analyzing the Suruí case through her *Native Critique of Sovereignty*. Throughout her discussion, Guzmán explains the hurdles native peoples in Brazil still face due to the state's perception of them. To help contextualize the indigenous experience, she provides various examples of how people of indigenous descent rose to different positions of power in Brazil. However, despite their ability to reach the position they achieved, there was still the stigma surrounding their "Indianness." She describes this challenge as "the perception of 'Indianness'" and how their identity is seen as "something one must abandon or overcome to play a productive role in modern society or deserve the full rights of national belonging."[223] This understanding is essential to addressing the current situations of indigenous peoples in Brazil because it explains how even though there are mechanisms to provide for greater equality, the image of them being lesser still persists. Another critical example Guzmán highlights is regarding the building of the Belo Monte, which began

[220] Poets, Settler colonialism and/in (urban) Brazil," 276.
[221] Poets, Settler colonialism and/in (urban) Brazil," 272.
[222] Poets, Settler colonialism and/in (urban) Brazil," 279.
[223] Tracy Devine Guzmán, *Native and national in Brazil: Indigeneity after independence*, UNC Press Books (2013): 164.

construction in 2010 under President Lula da Silva, who advocated for the project as a way to "improve" the lives of the Indians, river people, and farmers who reside along the Xingu River.[224] She explains that despite "so-called discussion forums," indigenous peoples felt their voices were largely ignored in the dialogue around the dam's creation.[225] For Guzmán, what the creation of the dam implied for indigenous peoples was that "Feast or famine, then, "progress" for the "Indians" remains fundamentally unchanged: a never-ending promise of a better life, but "better" always according to someone else's measure and due to someone else's efforts."[226] The content provided by this quote is critical to understanding how many of the projects in Brazil work from the standpoint that they are going to "progress" indigenous people, which means that because of the project, they are in some way 'better' than they were before, but better in regards to the state's perception. Perhaps the most important thing this piece contributes is how Guzmán systematizes what it takes to make a nation-state built on principles of sovereignty. Here, she explains that indigenous peoples in Brazil do not claim to want a separate nation-state.[227] The indigenous peoples are saying to the government that they have a different understanding of sovereignty that gets erased in the national understanding of sovereignty, and the thing they desire is for the state to allow indigenous peoples to be both native and Brazilian.[228]

vi. A Brief History of the Suruí People in Relation the Elimination of the Native

As discussed in Chapter Two, economic motivation had a significant role in the continuous dispossession of the Suruí people from their territory. In this chapter, I will address

[224] Guzmán, Native and national in Brazil," 190.
[225] Guzmán, Native and national in Brazil," 190.
[226] Guzmán, Native and national in Brazil," 190.
[227] Guzmán, Native and national in Brazil," 175.
[228] Guzmán, Native and national in Brazil," 175.

how the elimination of the native also played a fundamental role in the continuous acts of land dispossession for the Suruí people even before the Suruí Forest Carbon Project's creation. In Chapter Two, I noted that in the 1940s, 50s, and 60s the desire to access the land in Rondônia began to take hold, causing the Suruí to become widely dispossessed as rubber exploitation and cassiterite mining began to expand in the area. However, September 7, 1969, is when many who discuss the Suruí people begin their initial analysis because that was the first time the Suruí encountered the "white man," more specifically, the National Indigenous Foundation in Brazil (FUNAI).[229] The FUNAI is the "Brazilian government body that establishes and carries out policies relating to Indigenous peoples."[230] Their work aims to protect indigenous peoples by "bringing them into 'mainstream' national society."[231] In the years following their initial contact with the FUNAI, the Suruí began to suffer from several illnesses they had never encountered before. As a result, their population plummeted from approximately 5,000 in 1969 to 290 in 1973.[232] In 1973, the Suruí reached out for medical assistance to help combat the measles, which had killed many tribal members.[233] During this time, they began interacting more with the outside world, opening the possibility for more eliminatory efforts.

In addition to the POLONOROESTE project launched in 1981, the early 1980s also saw another significant contribution to changing the Suruí's relationship with their forests. During this time, Itabira, one of the tribe's chiefs, formed a bond with one of the FUNAI agents named Apoena Meireles.[234] As their relationship progressed, Meireles taught Itabira how to navigate the

[229] Will Tucker and Iza Hoyos, "Surui and Yawanawa Etch Their Past into the Future," *Forest Trends*, January 23, 2017, https://www.forest-trends.org/blog/surui-yawanawa-indigenous-voices/
[230] "FUNAI - National Indian Foundation (Brazil)" *Survival International*. accessed on February 5, 2023, https://www.survivalinternational.org/about/funai
[231] Survival International, "FUNAI - National Indian Foundation (Brazil)."
[232] Tucker and Hoyos, "Surui and Yawanawa Etch."
[233] Mindlin, "Surui Paiter."
[234] Zwick, "Suruí Forest Carbon Project."

Brazilian legal system. This resulted in the Suruí people earning a small, recognized portion of their land in 1983, well before many indigenous groups around the same area gained legalized land recognition.[235] However, to secure their land rights, the Suruí needed to make many trips to Brasilia, resulting in the tribe allowing loggers to harvest some of the trees from their territory to fund their travel expenses. But even after the Suruí's land rights were formally established, they still battled various health issues and economic insecurity as thousands of migrants poured into the area in the years following the POLONOROESTE project's launch. This intense migration resulted in the continual logging of the Suruí's forests,[236] setting a precedent regarding how the Suruí would now economically relate to their forests, whether or not they desired this relationship, and allowing outside actors to become involved within their territory.

vii. More on the Creation of the Suruí Forest Carbon Project

In 2007, on a visit to an Internet cafe, Almir Suruí, the tribal leader spearheading the creation of the Suruí Forest Carbon Project, logged onto Google for the first time and discovered Google Earth.[237] Later that same year, Almir would go to the Google headquarters in Mountain View, California, with a proposal for Google to collaborate with the Suruí to create a cultural map that would pinpoint villages, hunting grounds, and areas where illegal logging and mining had occurred.[238] June 2008 was the first time the Google outreach team would come and train the Suruí on various technologies such as Picasa, Docs, and YouTube.[239] In 2009, members of the

[235] Mindlin, "Surui Paiter."
[236] Zwick, "Suruí Forest Carbon Project."
[237] "Chief Almir and the Surui tribe of the Amazon," *Google Outreach*, accessed on March 7, 2023, https://www.google.com/earth/outreach/success-stories/chief-almir-and-the-surui-tribe-of-the-amazon/
[238] Rebecca Moore, "Trading a bow and arrow for a laptop." *Google Maps*, June 15, 2007, https://maps.googleblog.com/2007/06/trading-bow-and-arrow-for-laptop.html
[239] Rebecca Moore, "The Suruí Cultural Map." *Google Earth*, June 18, 2012, https://blog.google/products/earth/surui-cultural-map/

Google team came again to visit the Suruí territory, bringing with them laptops, Android cell phones, GPS tracking devices, and surveillance systems to help create the cultural map.[240] During this second visit, Google also provided the Suruí with an Open Data Kit with software that allowed the Suruí to monitor carbon levels on an Android cell phone and upload the data to the Google Maps website. This technology would be vital in allowing the Suruí to monitor their forest's carbon levels so that they could use the information to create carbon credits to sell while also alerting them of any illegal logging activities.[241] In 2012, Google workers returned for a final time to provide more training and to finish creating the cultural map, which can still be seen on Google Earth today.

In 2008, around the same time as the cultural map's initial creation process, Almir Suruí and Beto Borges of Forest Trends introduced another actor into the Suruí Forest Carbon Projects creation. Jacob Olander of the Katoomba Incubator would also be responsible for helping the Suruí structure their project's framework.[242] The Katoomba Incubator was launched in 2007 by Forest Trends in partnership with EcoDecisión and would be responsible for helping to create an outline for how the project's PES could work so that the Suruí project would have a basis for their project to become operationalized once it was formally approved.[243] Following his time with the Suruí, Olander describes his experience "We're offering our expertise, but we're also learning a lot. The lessons we learn here will help us to help others down the road."[244] The work done by the Katoomba Incubator helping to outline how the PES could look would be

[240] "Chief Almir and the Surui tribe of the Amazon." *Google for Nonprofits*, accessed on March 7, 2023, https://www.google.com/nonprofits/success-stories/surui-tribe/
[241] Google for Nonprofits, "Chief Almir and the Surui tribe of the Amazon."
[242] Steve Zwick, "Brazilian Tribe Solidifies Claim on Carbon," *Ecosystem Marketplace*, accessed on March 8, 2023 https://www.ecosystemmarketplace.com/articles/brazilian-tribe-solidifies-claim-on-carbon/
[243] Zwick, "Brazilian Tribe Solidifies Claim on Carbon."
[244] Zwick, "Brazilian Tribe Solidifies Claim on Carbon."

foundational for allowing the Suruí Forest Carbon Project to fall under the category of a REDD+ project after it received its validation to sell carbon credits in 2012.

Figure 4: The Suruí's forests in relation to the deforestation in Rondônia on Google Earth
Source: "It's Amazon View! Google shows off new map of Brazilian rainforests (put together by an indigenous tribe)," *Dailey Mail,* 2012.

Figure 5: The Suruí's borders in relation to Rondônia's borders on Google Earth
Source: "It's Amazon View! Google shows off new map of Brazilian rainforests (put together by an indigenous tribe)," *Dailey Mail,* 2012.

viii. An Analysis of Elimination of the Native as Displayed by the Suruí Forest Carbon Project

As presented throughout the literature, the settler logic of eliminating the native has continued to guide climate concerns and environmental movements through acts of land dispossession and assimilation/erasure of indigenous peoples. In Chapter Two, the discussion regarding how economic opportunities such as logging or creating/purchasing carbon credits provided different avenues for various actors to access the Suruí's territory was a significant component regarding why the project was eventually suspended. Here, I will follow up on some examples discussed in Chapter Two and analyze some of the new factors surrounding the Suruí peoples before and after contact with the FUNAI and creating the Suruí Forest Carbon Project. I will then present how many of the same issues that occurred with economic access to land also hold in an analysis of the elimination of the native. In this analysis, the question of indigenous autonomy becomes further complicated, which will help set up the final principle of settler colonialism, the notion that settler colonialism is a structure and not an event. This principle will be the focal point of Chapter Four.

In analyzing the role of elimination concerning the creation of the Suruí Forest Carbon Project, it is necessary to revisit some of the factors that occurred to the Suruí people even before it was created. When addressing the Suruí people's point of contact with the 'Western' world in 1969, it is essential to note how the consequences of that encounter would further open the avenues for eliminating the native, even further than the economically motivated dispossession that was already occurring in the 1940s, 50s, and 60s. Their encounter with the FUNAI would be fundamentally different from the other encounters because it would open the door for the Suruí to not only change their way of life economically but would change them culturally. For instance, they would now need access to Westernized medicine to help combat the illness to

which they did not have immunity. This point relates to Wolfe's discussion that elimination does not have to be genocidal, but it still could be. Additionally, the Suruí's new reliance on Western medicine opened the door for possibilities of other forms of outside contact, which would be filled by various economic actors who were largely responsible for the Suruí people's continuous land dispossession and struggles to maintain autonomy.

Another point regarding the transformation of the Suruí following their initial contact with the FUNAI references a point presented by Poets regarding how the Brazilian legal system before 1988 had continuously worked to eliminate indigenous peoples through different ways of assimilation. In the case of the Suruí people, proceeding their initial work with Meireles, the FUNAI agent, to gain recognition for their territory, the Suruí became assimilated into the Brazilian legal system that continuously made efforts to 'civilize' indigenous peoples throughout that time. Although their work with Meireles might have allowed the Suruí to gain legal recognition for their land, it would come at a high cost to them culturally and ultimately further their autonomous struggles. For instance, to acquire recognition of their land, the Suruí had to finance their trips to the capital by allowing loggers to cut down their trees. Allowing loggers into their territory changed the Suruí's way of relating to the forest and how it would now be used. This example highlights some fundamental contradictions in recognizing the rights of indigenous peoples in settler states. In an attempt to obtain legal rights for their territory, the Suruí forfeited their traditional way of relating to their forests. Additionally, the Suruí now had to operate in a Westernized legal system that continuously struggled to enforce indigenous land rights even when they were granted in 1988. Despite the Suruí's efforts to acquire legal recognition, they still struggled to keep settlers from accessing their land. Also, as previously

noted, now that the Suruí related to their forests economically, it would result in division among tribal members as there was no longer a consensus on how to treat them.

In furthering the discussion around the creation of the project itself, it is essential to note some crucial factors surrounding the role of the Katoomba Incubator and others responsible for creating the project's framework, specifically when referencing the discussion had by Mahony and Endfield regarding climatic justifications for eliminating the native. Throughout their argument, Mahony and Endfield address how climate concerns were one justification Europeans used to advance their colonial conquests in India and southern Africa, especially when understanding forests' connections to climate. A fundamental point that these scholars explain throughout their analysis is how European colonizers would use colonial forests as 'laboratories' for experimentation, meaning they used their forests as a place to try new climate-understanding tactics. One can see this same understanding in how the Suruí Forest Carbon Project had to create its methodology for creating its carbon credits. Because the Suruí Forest Carbon Project did not explicitly follow the UN's REDD+ framework, it was largely the work of actors such as the Katoomba Incubator and various others outlined in Chapter Two who used the Suruí territory as a place for an experiment on how to keep forests standing.

To get to the core of how the Suruí Forest Carbon Project worked to eliminate the native, it is also essential to address the role of the Google outreach team coming to the Suruí's territory to educate them on how to use various technologies in creating the Suruí Cultural Map. This discussion follows one of the core thoughts presented by Guzmán, who references the perception of "Indianness" as something indigenous peoples must lose to have a productive role in modern society. This troubling logic can be detected in the language used by Almir Suruí, one of the tribe's leaders, to describe why he reached out to Google to help create the Suruí Cultural Map.

According to Almir, he realized he needed to "put down the bow and arrow and pick up the laptop,"[245] assuming that the deforestation struggles the Suruí's territory underwent required Western assistance to help solve. This reflects a historical logic that indigenous peoples must be civilized in order to combat deforestation properly, as the modern world does. The quote by Almir also follows some of the core concerns highlighted by Whyte. In Whyte's discussion regarding indigenous help in environmental movements, he explains how the settler colonial logic of elimination has continuously undermined such efforts to implement indigenous knowledge authentically. Whyte addresses how when settlers worked to build their ecologies in places where indigenous ecologies already existed, settlers introduced new materials to serve their desires which altered indigenous people's relationships with their land. Such an example is evident in Google's efforts to provide the Suruí with new technology to train them to care for their forests more effectively through their Open Data Kit, which shows how the goals of implementing a Western ontology over an indigenous one took place in one of the core parts of the Suruí Forest Carbon Project.

Although Borges is a supporter of many aspects of the Suruí Forest Carbon Project, he was seemingly skeptical of the role of Google after their engagement with the Suruí people. In the interview, I asked him: what do you think of Google's role? How do you think it impacted the project positively or negatively? Borges' response to the question was,

> Google just did what was smart of them. What do you expect of Google? They're smart. Trying to find opportunities to develop new technologies. And that's what they did. And they got on the, what's the expression? Bandwagon. They jumped into the project, but they didn't do anything for the project. They just were, if anything, opportunistic.[246]

[245] Moore, "Trading a bow and arrow for a laptop."
[246] Beto Borges, interviewed by Faith Howard, Zoom, March 22, 2023.

This statement by Borges is significant in helping to tie in some of the ideas discussed in Chapter Two about the dangers of access to land and economic motivation to conservation I have been having regarding the elimination of the native. For instance, I noted that as the more actors became involved in the project's creation, the more complicated its design became as some of these different actors looked to have their personal interests served. The recognition by Borges regarding the opportunities that Google saw in front of them helps present that, at least, this part of the project should be considered a straightforward way in which the project allowed for direct access to the Suruí's territory. Also, the understanding that Google's involvement in the project allowed them to develop new technologies connects again to Mahony and Endfield's piece regarding using the Suruí's land as a "laboratory" to test new technologies. In terms of what Borges thought were the positive impacts of Google's involvement, he touched on a few points. Specifically, the area where he thought their work may have had a positive role is "they (Google) were getting visibility for the project."[247] This point regarding the risks associated with visibility is something that I will explore in the next paragraph.

On June 16, 2012, Google released the first of two short documentaries explaining their role in creating the Suruí Forest Cultural Map. The first was titled "Trading Bows and Arrows for Laptops: Carbon and Culture." In the documentary, those who worked on the project explain its impact in narratives that express a logic of assimilation while allowing for Western accessibility and incorporating the indigenous people into 'modern communication.' Jessica Moore, Google's engineering manager and head of Google Earth Outreach, says, "The cultural map is going to be a new digital way to share their culture, their story, and get that published for

[247] Beto Borges, interviewed by Faith Howard, Zoom, March 22, 2023.

the world."[248] While creating the cultural map might appear to be a harmless experience to help the Suruí people present their story, there are also some serious risks involved with this kind of surveillance. From the point of view of Google and many in the global North, having more available data and accessibility is a good thing. This is why analyzing the Suruí Forest Carbon Project from a settler colonial framework is necessary. It must be addressed that historically marginalized groups have continuously been under surveillance by the state as a method to suppress indigenous peoples. With the creation of the Suruí Cultural Map, anyone from anywhere can log onto Google Earth and see the Suruí's territory and learn information about them, their land, and their trees, which presents some real dangers when attempting to preserve autonomy over their territory from settlers who desire to penetrate it for their own use.

Curnow and Helferty's discussion on the role of native identity also helps to understand how the Suruí Cultural Map worked to eliminate the native. In their piece, they explain how, in many environmental movements, indigenous peoples have been used as "props rather than partners." The same understanding used in their discussion of the 'ecological Indian' can be seen in how Google is giving the Suruí the ability to 'present' their culture while bringing them into the modern world of mass communication, thereby allowing their land to become more easily monitored by the world. Such an understanding is also evident in the documentary's title, "Trading Bows and Arrows for Laptops: Carbon and Culture." Here, Google is putting forth the idea that the Suruí are surrendering an old way of life (bows and arrows) for the modern one (laptops), and the project is responsible for this modernization. This comment rejects the idea that indigenous people are already modern and cannot use advanced technologies while also using traditional tools. Such a statement suggests that an indigenous way of life is incompatible

[248] Google Earth, "Trading Bows and Arrows for Laptops: Carbon & Culture," June 16, 2012, *YouTube*, 6:01 to 6:08, https://www.youtube.com/watch?v=XFIieYbNl6Y

with modernity and must be changed to adapt to the modern world where their way of life has now become 'improved.'

As discussed in the first chapter, one of the primary reasons there is such focus on Brazil internationally to help address climate change is the ability of trees to act as carbon vacuums. But, in that discussion, I noted how that perspective of the Amazon is a Western view that only looks at the forest concerning its environmental purpose. This same perspective towards forests' role in only addressing climate change is presented in Google providing the Suruí people with their Open Data Kit. In the first Google documentary, Vasco Van Roosmalen, director of Equipe de Conservação da Amazônia, explains how the Open Data Kit provides the Suruí a new way of tracking their forests through an app that allows the Suruí to go into the forest and monitor the levels of carbon within the trees. In an interview asking him what the Open Data Kit provides for the Suruí people, Roosmalen's explanation follows the Western view of the Suruí's forests. Roosmalen states, "So the Suruí today use that (Open Data Kit) to monitor their biodiversity, their borders, and also to monitor their forests in the context of climate change."[249] The essential notion from this quote is that the Suruí will be able to monitor their forest in the context of "climate change." This statement reinforces the idea that climate change is the primary reason for the Suruí to protect and care for their forests. Such a narrative enforces the idea that the forest should not be protected because it is an entity in and for itself and that it can provide benefits for the Suruí beyond carbon credit sales. The idea of monitoring the forest discredits the idea that the health of the forest could be examined more effectively in ways besides an app because an app can measure quantitative things. But it cannot measure how the forest provides life in other ways.

[249] Google Earth, "Carbon & Culture," 3:54 to 4:02.

Shortly after releasing its first documentary regarding its involvement in helping to create the Suruí Cultural Map, Google released a second documentary titled "I am Innovation-Carbon Credits." In this video, the narrator explains how carbon credits work as a cap-and-trade system for forests, allowing different organizations to pollute to set limits while also purchasing these credits if they over-pollute. From here, the narrator then shifts their conversation toward the role of indigenous peoples concerning deforestation, climate change, the selling of carbon credits, and the income that this could provide for them. The narrator says,

> Nowadays, those who really manage to protect the forest (Amazon) are the indigenous people. For them, this is an alternative source of income to live with more autonomy in the lands that are theirs by right. That is, indigenous territory carbon credit may be the guarantee for keeping the forest standing.[250]

Throughout the video, the role outlined for corporations is simply to purchase carbon credits while providing no conversation about their role in taking steps to reduce their pollution practices. In this quote from the documentary, it is also essential to address the understanding that the best way for the Suruí to have autonomy over their forests is by selling carbon credits. This understanding provided by Google directly correlates to the ideas presented by Barton, Mahony, and Endfield regarding how Google, the UN through REDD+, and a variety of other global North actors are presenting that they need to step in and help indigenous peoples 'protect' their forests through the sale of carbon credits because there needs to be a mechanism put in place to ensure that trees are left standing. In this discussion, the Suruí peoples are offered one choice if they desire to keep the autonomy of their forests – to sell the carbon credits. As discussed in Chapter Two, the ability to create carbon credits projects and buyers to purchase the

[250] "I am Innovation- Carbon Credits." *YouTube*. July 9, 2017. 1:04 to 1:21, https://www.youtube.com/watch?v=sGDDceqHYJY&t=1s

credits is one of the main issues regarding access to land and struggles for the Suruí to preserve their autonomy.

Lastly, to fully understand Google's role in allowing for native elimination during the Suruí Forest Carbon Project, the role of indigenous labor must be addressed. In their works, Speed and Poets both address how settlers have continuously used indigenous labor to eliminate them. For Speed, settlers' control of indigenous labor is one of the points that makes Latin American states settler states. Poets' analysis provides more context regarding how the use of indigenous labor has transpired in Brazil and why this history could be taking place once again. First, Poets explains how when Portuguese settlers began exploiting the new colony, their efforts heavily relied on disposing of indigenous lands through indigenous labor. She later discusses how labor remained key in the state's efforts to employ miscegenation (whitening) by eliminating the native through assimilation. While these points by Speed and Poets might not rely specifically on the context of environmental movements, they are vital in showing how indigenous labor has been an integral part of allowing settler colonialism to persist. These understandings regarding the role of indigenous labor are crucial to understanding how the creation of the Suruí Cultural Map once again exploited indigenous labor for the global North. For instance, as the Suruí worked on the project, they provided unpaid indigenous labor for Google, providing detailed information about their territory and making it accessible worldwide. Additionally, by allowing the Suruí to use the Open Data Kit to upload information about their trees onto the Google Maps website, Google allows anyone on the Google search engine to become a freeloader of this information. In this situation, the Suruí might believe they receive a neutral deal by allowing Google to present information about their territory and culture. However, this indigenous labor reproduces another form of access, as now anyone (loggers,

corporations, etc.) can analyze the Suruí territory and possibly use this information to continue the cycle of displacement, which is the other core part of native elimination.

Therefore, the elimination of the native played a significant role for the Suruí people before and following the creation of the Suruí Forest Carbon Project. The examples provided highlight the ways the Suruí people have faced both forms of elimination discussed by Wolfe and that this treatment does not seem to be ending; as discussed throughout the literature, environmental movements have continuously struggled with combatting settler colonialism. Understanding that the Suruí were constantly faced with efforts to eliminate them and their way of being leads to the last core principle of settler colonialism, that the system is a structure and not an event. This final principle will be the focal point of Chapter Four. The discussion will help bridge why avenues for economic access and elimination of the native continued to persist throughout all stages of the Suruí Forest Carbon Project.

Chapter 4: Structure Not an Event

i. Introduction

This chapter will explore settler colonialism's third principle, the understanding that settler colonialism is a structure, not an event. In this discussion, I will further analyze some of the examples addressed in Chapters Two and Three to present how, historically, injustices such as land dispossession and deforestation continue to happen to the Suruí indigenous peoples and the Rondônia state resulting in the creation of projects to amend the various wrongdoings. In creating these projects there lies the intention to acknowledge past harms and attempt to amend these wrongful acts through policies and financial support. However, part of the problem with these projects is that they operate under the assumption that because the harm has been acknowledged and these new projects are designed with good intentions, the past harms are amended and will not continue. Therefore, it must be acknowledged that, in large part, a significant reason why these projects have continuously been suspended is that they operate within a settler colonial framework that continually undermines them internally and externally. To help contextualize this argument, I will analyze the POLONOROESTE and PLANAFLORO projects discussed in Chapter Two to show how they failed to address the structural issues occurring within Rondônia and Brazil, helping to contribute to their failure. I will also present how the Suruí Forest Carbon Project through REDD+ is now the current attempt to remedy the injustices against the Suruí people using a new neoliberal economic project. But I will highlight that because the project still failed to address the core structural issues of settler colonialism, access to land, and the elimination of the native, the project ultimately ended up being suspended despite its initial success.

This chapter will also focus on some thoughts presented by indigenous scholar Glen Coulthard (2014) regarding space and time. This analysis will allow me to explore the spatial and temporal aspects of the structure of settler colonialism. The Western assumptions about space and time shape the proposals that have aimed to right the previous injustices against the Suruí, meaning they also carry with them Western assumptions regarding indigenous people's way of life and land relations. In this discussion, I will present these different government projects as examples of 'events' occurring within Brazil's settler colonial structure. The notion of 'an event' provides an undertone of a productive narrative, highlighting the understanding that something has taken place in the past and the actions going forward will not only amend these things but improve them as well. Also, these projects carry an assumption that to see progress, indigenous peoples must show the goodness of their way of life according to a Western matrix. During this discussion, I will also critique how environmental projects such as the Suruí Forest Carbon Project are created with a techno-rational perspective, meaning that those involved assume that issues taking place within Rondônia, such as deforestation, land dispossession, logging, mining, and carbon emissions, can be solved with technology and the market. When analyzing the Suruí Forest Carbon Project's eventual suspension, it can be seen how mechanisms that were supposed to enhance indigenous autonomy failed to address the structural issues of settler colonialism occurring in the area, which is why they were ultimately undermined.

ii.Wolfe's Explanation for How Settler Colonialism is a Structure Not an Event

To understand how the Suruí Forest Carbon Project was undermined by the structural issues of settler colonialism persisting within Rondônia, it is essential to understand why Wolfe believes settler colonialism is a structure and not an event. By referring to the first and second

core principles of settler colonialism, access to land, and elimination of the native, Wolfe argues that both are connected and, in tandem, create the persisting structure. As discussed in Chapter Two, Wolfe believes the settler's primary motive for elimination is not race but access to territory.[251] In this quest for access, elimination occurs as the positive and negative dimensions of settler colonialism discussed in Chapter Three occur. Here Wolfe describes how settlers dissolved native societies and erected new colonial societies on the expropriated land base.[252] Wolfe describes this occurrence as "destroy to replace"[253] and explains how when settler colonizers came, they came to stay, making invasion a structure, not an event.[254] Understanding that settler colonialism is a structural establishment helps explain why settler states resist change despite efforts to amend them.

iii. Coulthard on Space and Time

In his work *Red Skin, White Masks: Rejecting the Colonial Politics of Recognition*, Glen Coulthard explains the differences between indigenous and Western relationships to land by distinguishing how indigenous relations are based on concepts of space while Western philosophies are based on an understanding of time. In making this distinction, Coulthard references the ideas of Lakota philosopher Vine Deloria Jr. who argues that there is a significant philosophical difference between indigenous and Western metaphysics regarding land relations.[255] Deloria argues that "American Indians hold their lands—*places*—as having the

[251] Wolfe, "Settler Colonialism," 388.
[252] Wolfe, "Settler Colonialism," 388.
[253] Wolfe, "Settler Colonialism," 389-390.
[254] Wolfe, "Settler Colonialism," 388.
[255] Glen Sean Coulthard, "Red skin, white masks: Rejecting the colonial politics of recognition," Minneapolis Minnesota Press (2014): 60.

highest possible meaning."[256] In contrast, "Most Western societies tend to derive meaning from the world in historical/developmental terms, thereby placing time as the narrative of central importance."[257] This distinction in philosophical mindsets is essential to understanding the ontological framework for indigenous people's land relations and why the Western world refuses to recognize indigenous sovereignty. In their argument, Deloria concludes that when two groups have such drastically different perceptions, they rarely make sense of one another without acknowledging the differences in their viewpoints.[258] But, Coulthard is not only concerned with these rudimentary differences between space (place) and time but how these distinctions between space and time create an indigenous way of being and relating to the land that is drastically different than the Western understanding. Coulthard states, "Place is a way of knowing, of experiencing and relating to the world and with others."[259] For Coulthard, "place" not only provides indigenous people with necessities for survival but explains how to relate to the land in a non-exploitative way. Understanding that Western philosophies are centered on time helps present why they are driven by a narrative of progress. From this standpoint, the West believes they should take from the land what they need because their efforts focus on progress.

iv. The Faults of Environmental Techno-solutions

Techno-solutions carry with them a time-based view of problems occurring, which is one of the primary reasons why the West endorses them. To understand why techno-rationalist approaches fail to address settler colonial structures on local, state, national, and global levels, one must understand the limitations of these methods when applying them to environmental

[256] Coulthard, "Red skin, white masks," 60.
[257] Coulthard, "Red skin, white masks," 60.
[258] Coulthard, "Red skin, white masks," 60.
[259] Coulthard, "Red skin, white masks," 60.

projects. In their piece, Michael Huesemann and Joyce Huesemann (2011) critique techno-optimism to show how technological approaches to environmental problems create policies based on technological innovations that often have negative and unpredictable consequences.[260] A core part of their discussion is how proponents of these approaches often ground their arguments in narratives of progress but largely fail to define what progress even is.[261] Throughout their work, Huesemann and Huesemann argue how "modern technology, in the presence of continued economic growth, does not promote sustainability, but hastens collapse."[262] To support this claim, the two examine how historical events that resulted in the wide-scale implementation of new technologies, such as World War I, World War II, and large-scale industrialization, ultimately ended up creating many instances of environmental pollution and ecosystem destruction, helping to contribute to global climate change.[263] They also point out that in the modern-day, many in the global North live overly materialistic and resource-intensive lifestyles resulting in the continual desire for advancing technologies.[264] Perhaps the most significant discussion this piece provides is how technology is often used to create social fixes, but in doing this, these policy ideas fail to recognize the larger neoliberal political systems within which they operate.[265] Huesemann and Huesemann make this point clear when they state, "Environmental problems will not be resolved if we don't deal with the social issue of overconsumption."[266] From this understanding, the two show the multiple dimensions that must

[260] Michael Huesemann and Joyce Huesemann, "Techno-fix." *Why Technology Won't Save Us or the Environment, Gabriola:* New Society Publishers (2011): 3-4.
[261] Huesemann and Huesemann, "Techno-fix," 3-4.
[262] Huesemann and Huesemann, "Techno-fix," 1.
[263] Huesemann and Huesemann, "Techno-fix," 4.
[264] Huesemann and Huesemann, "Techno-fix," 3.
[265] Huesemann and Huesemann, "Techno-fix," 9.
[266] Huesemann and Huesemann, "Techno-fix," 9.

be addressed to tackle environmental issues. Yet, they do not seem overly optimistic that there will be a large-scale breakaway from technological based policies anytime soon.

v. A Breakdown of the POLONOROESTE and PLANAFLORO Projects

To understand how the Suruí Forest Carbon Project presents issues of attempting to amend indigenous and environmental injustices within the structure of settler states, settler colonialism's other two principles, access to land and the elimination of the native, need to be situated in the Rondônia state and Brazil. Here, I will show how even projects designed with good intentions and an acknowledgment that indigenous peoples have been harmed, such as the POLONOROESTE and PLANAFLORO projects, struggled to succeed because they only addressed indigenous and environmental issues at the project level, not the systemic logic of settler colonialism that has been embedded into the Brazilian state since Portuguese colonization. Here, I will also present how the actors involved in creating these projects, most notably the WB, continued to use a Western approach of time and progress in creating these projects, which is part of the reason why these projects were eventually suspended. When analyzing the Suruí Forest Carbon Project specifically, it is important to note how its framework attempted to provide avenues for indigenous autonomy by attempting to place control of the project in the hands of the Suruí people. However, because the project still failed to address ways to overcome the problems of settlers' assumed access to land and elimination of the native, partly due to its design and partly due to Brazil being a settler state, it, too, resulted in suspension.

One of the core points discussed in Chapter Two was how economic motivation had long played a role in settlers attempting to access the land in Rondônia, resulting in the Suruí people continuously being dispossessed from their territory. As noted, in the 1940s, 50s, and 60s, the

Suruí's territory began experiencing population increases as rubber exploitation, cassiterite mining, and agriculture expansion began to take a foothold in the state, leading to the common occurrence of dispossession that would continue to be a pressing issue in the coming decades. This economically motivated desire for access reached its initial climax following the completion of the BR-364 highway in 1968, which resulted in massive waves of migration until the 1980s. As a result, the WB and the Brazilian government launched the POLONOROESTE project in 1981. In the project's outline, the Bank agreed to pave the BR-364, allowing Porto Velho (the capital city of Rondônia) to be connected to Cuiaba´(the capital city of Mato Grosso) and the rest of Brazil's national highways.[267] Although, this service was supposed to be contingent on the government's attempt to amend some of the harm caused to indigenous peoples and the environment in Rondônia during the increased infiltration periods.

When creating the framework for the POLONOROESTE project, the Brazilian government and WB agreed that one of the most significant issues jeopardizing the indigenous people's claims to their land and the environmental integrity of the forests in Rondônia was the massive uncontrolled migration coming into the Northwest.[268] Their plan for solving this migration issue was to create a way to control the flow of people entering the territory by demarcating indigenous land, establishing forest reserves, and placing invaders on small plots of land suitable for agricultural use.[269] But, despite the project's intention to help limit the uncontrolled migration coming into the state since the late 1960s, it failed to address some of Brazil's social and political issues of the time. For instance, rising inflation, recession,

[267] John O. Browder, "Conservation and development projects in the Brazilian Amazon: Lessons from the Community Initiative Program in Rondônia," *Environmental management* 29 (2002): 752.
[268] Stephen Schwartzman, "World Bank Holds Funds for Development Project in Brazil," *Cultural Survival*, February 19, 2010, https://www.culturalsurvival.org/publications/cultural-survival-quarterly/world-bank-holds-funds-development-project-brazil
[269] Schwartzman, "World Bank Holds Funds."

unemployment, and the reality that landholding reserved for export agriculture consumed much of Brazil made Rondônia, which was still more open than many other areas around the country, appealing to settlers.[270]

It came to be that adding the POLONOROESTE project would worsen the migration problem in Rondônia as additional settlers began to occupy the land set aside for non-indigenous peoples. In 1984 more than 150,000 settlers migrated to the area designated for non-indigenous peoples, but the site only provided room for approximately 5,000 to 20,000 families.[271] The problem would worsen as it was discovered that the land set aside was unsuitable for sustainable farming. As a result, many settlers moved into more heavily forested parts of the state and began cutting down trees, attempting to create more agricultural land.[272] During this expansion, settlers again began invading the territory marked for indigenous peoples resulting in continual conflicts over possession of the land with little government interference. Agriculture in the area continued to struggle, resulting in many settlers turning to mining practices, further destroying the territory's land and resources.[273] The struggles between indigenous peoples and settlers continued to be exacerbated by the fact that little infrastructure was put in place for things such as sewage or mine drainage, leading to increased health issues in the area, most notably malaria.[274] With few viable options for receiving medical treatment, many died, and the Bank began receiving increasing pressure to end the project.

[270] Schwartzman, "World Bank Holds Funds."; Robert H. Wade, "Boulevard to broken dreams, Part 2: Implementation of the Polonoroeste road project in the Brazilian Amazon, and the World Bank's response to the gathering storm," *Brazilian Journal of Political Economy* 36 (2016): 649.
[271] Schwartzman, "World Bank Holds Funds."
[272] Schwartzman, "World Bank Holds Funds."
[273] Burton H. Singer, and Marcia Caldas de Castro, "Agricultural colonization and malaria on the Amazon frontier," *Annals of the New York Academy of Sciences* 954, no. 1 (2001): 189.
[274] Singer and Castro, "Agricultural colonization and malaria," 190.

In February 1985, the Bank began halting their payments for the POLONOROESTE project after receiving significant pressure from indigenous rights and environmental projection NGOs to quit financing the project or be at risk of losing some of the Bank's funding coming from the United States.[275] An important point to note is that during the Bank's withdrawal, the paving of the BR-364 had already been completed. The portion of the project set aside for the highway's completion had occurred between 1981 to 1984, the first three years the project was operational.[276] But in an attempt to save the project, a change in leadership was made. Maritta Koch-Weser was hired as the new project officer to help prove that the project could uphold indigenous protections since Brazil had broken away from a military dictatorship.[277] In 1987, just two years after her appointment, the project experienced another change in command, ultimately contributing to the project's complete suspension. After taking command, the new project director was openly hostile towards indigenous people and encouraged the WB to push for the absorption of indigenous peoples into national society and to increase cattle ranching in the forests.[278] On September 14th, 1987, the Bank allocated the final funds for the POLONOROESTE project.[279] Following the final dispensing of project funds, the Bank's president, Barber Conable, offered a statement explaining why the project had failed. Conable stated that the project's failure served as

> a sobering example of an environmentally sound effort which went wrong. The Bank misread the human, institutional, and physical realities of the jungle and the frontier. In some cases, the dynamics of the frontier got out of control. Protective measures to shelter

[275] Singer and Castro, "Agricultural colonization and malaria," 190.
[276] Wade, "Boulevard to broken dreams," 648.
[277] Wade, "Boulevard to broken dreams," 654.
[278] Wade, "Boulevard to broken dreams," 655.
[279] "Project Completion Report Brazil Northwest Region Development Program Highway Project (LOAN 2062-BR)" *The World Bank*, April 15, 1991, https://documents1.worldbank.org/curated/en/319911468020724354/pdf/multi-page.pdf

> fragile land and tribal people were included; they were not, however, carefully timed, or adequately monitored.[280]

This statement by Conable offers a prime example of the project being a progressive 'event.' Particularly, the idea of the frontier getting out of control assumes that the Western mechanisms implemented were civilized systems and hence viable mechanisms for providing protection. Therefore, this statement offers the understanding that these issues could have been avoided if the system had been implemented correctly or quicker and not that the logic behind their design had been faulty. As a result, in 1989, the Bank canceled the outstanding balance, and the POLONOROESTE project was concluded.[281]

In 1992, the Brazilian government and the WB created the PLANAFLORO project to amend the grievances caused to indigenous peoples and the environment due to the POLONOROESTE project's various failures. Acknowledging that the POLONOROESTE project was heavily criticized for its shortcomings in protecting Rondônia's forest resources and indigenous peoples, the Bank outlined how the new project would be "an improved approach to natural resource management conservation and development in the state."[282] The Bank and Brazilian state government believed that to do this, they needed to more clearly outline the project's objectives and specifically focus on improving the role of conservation and development within Rondônia. The four main objectives were:

> 1. to institute policy reforms aimed at propitiating a coherent structure of incentives for sustainable development; 2. to conserve biodiversity for the direct economic benefits of the local population; 3. to protect the boundaries of conservation units, indigenous, forest, and extractive reserves; 4. to develop intensive and integrated systems of permanent agriculture, agroforestry, and forest management systems.[283]

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[280] Jon Redwood III, "World Bank Approaches to the Brazilian Amazon: The Bumpy Road toward Sustainable Development," *The World Bank*, November 2002, https://web.worldbank.org/archive/website00905D/WEB/PDF/AMAZONIA.PDF
[281] The World Bank, "Project Completion Report Brazil."
[282] Carleial and Bigio. "What survived from the PLANAFLORO," 33.
[283] Browder, "Conservation and development projects," 752.

However, as seen with the POLONOROESTE project, these assumptions and others would continue to carry ideas of improving the land and narratives of progress. For instance, a core part of the project was engaging in botanical expeditions to different areas across Rondônia to introduce arboreal plants that could help increase production for the wood industry.[284] Such a goal references the idea that the project will improve the land and help promote economic enhancement. In these efforts, it was recognized that there also needed to be a way to develop more sustainable farming systems within the settler's zones to help limit desires to deforest and push into indigenous areas.[285] To help ensure these efforts and other environmental measures would happen, the Bank believed they needed to enlist the help of local and international NGOs in the project's development, monitoring, and implementation stages, as well as create measurable environmental process trackers that certain components of the project would need to meet in order to receive funds.[286] With the ability to measure the progress of their mechanisms, the Bank attempted to ensure that they could show the goodness of their project over time. The Bank also thought that a way to ensure these things happened quickly would be to allocate funds directly to the Brazilian federal and state governments, who would then be responsible for the disbursement process.[287] By focusing less money on transportation and infrastructure and more on environmental protection efforts and agroforestry, the project appeared to have addressed many reasons critics believed the POLONOROESTE project had failed.

When it came time for the PLANAFLORO project's funds to be dispersed, the unfolding followed a much different path than what the WB and the Brazilian state government had

[284] Carleial and Narcísio "What survived from the PLANAFLORO project," 33.
[285] Marcos Antonio Pedlowski, *An emerging partnership in regional economic development: non-governmental organizations (NGOs), local state and the World Bank: A case study of PLANAFLORO, Rondônia, Brazil*, Virginia Polytechnic Institute and State University (1997): 101.
[286] Brown, Browen, and Desposato, "Promoting and preventing," 128.
[287] Brown, Browen, and Desposato, "Promoting and preventing," 134.

initially proposed, especially regarding what areas received the funds, the monetary amount being given and the timing in which it happened. For instance, when many of the ecological benchmarks tied to the project's funding, especially concerning deforestation and forest degradation, failed to be upheld by the state's government agencies, many project areas began experiencing funding delays.[288] Although, infrastructure was one project area that did not receive delays or shortages. Despite the Bank's initial claims to limit funding towards infrastructure spending, a significant point of the budget provided would be responsible for revamping the state agency's infrastructure.[289] One project area where funding experienced substantial delays was the finances for indigenous peoples, especially as the Bank began questioning the project's feasibility.[290] At the end of 1995, following pressure from indigenous leadership, the Bank provided $350,000 to be divided between the forty-six different projects.[291] This delay and lack of funding sparked wide-scale frustration among various tribal leaders across Rondônia, including Henrique Suruí, who was the main contributor in organizing inter-tribal conflict against the creation of the Suruí Forest Carbon Project.[292]

In 1995, the Bank sent in an independent inspection panel to analyze the PLANAFLORO project up until that point. In their findings, they concluded that many of the area's environmental issues were not improving and that the rate of deforestation loss in the area was continuing to increase by approximately 450,000 hectares per year.[293] They stated that these deforestation increases were primarily due to illegal logging activities and that indigenous

[288] Brown, Browen, and Desposato, "Promoting and preventing," 102.
[289] Brown, Browen, and Desposato, "Promoting and preventing," 107.
[290] Brown, Browen, and Desposato, "Promoting and preventing," 107.
[291] Brown, Browen, and Desposato, "Promoting and preventing," 107.
[292] Brown, Browen, and Desposato, "Promoting and preventing," 107.
[293] Lydia Fernandez, "World Bank Continues Support for Damaging Development Projects," *Native Americas* 14, no. 2 (1997): 1.

peoples continued to face dispossession as many demarcation processes were not carried out.[294] Following the inspectional panel's evaluation, they offered a report detailing their findings and recommendations for why they believed many aspects of the project were struggling. The report states, "Year after year, as in POLONOROESTE, new target dates were set for the completion of various actions. Had the Bank insisted on the timetable set out in the Project documents, intended beneficiaries and their environment would have been better rather than worse off."[295] The statement's tone provides much of the same understanding offered by the WB at the failure of the POLONOROESTE project, in that the mechanisms for the project would have solved the issues occurring on the ground if adequately implemented. The statement by the Bank carries with it no acknowledgment that the project struggled because of insufficient ways to address the structural issues occurring within Rondônia. While the project was not officially suspended until 2001, little meaningful work continued after 1995.

vi. An Analysis of the POLONOROESTE, PLANAFLORO and Suruí Forest Carbon Project in the Context of a Structure Not an Event

The breakdown of the creation, unfolding, and suspension of the POLONOROESTE and PLANAFLORO projects help to present the structural nature of settler colonialism embedded within the Rondônia state, the Brazilian federal and state governments, and the organizations involved in these project's creations, most notably the WB. As shown throughout these examples, there have been attempts to correct the failures of the previous ways in which land, forests, and people have been treated in Rondônia. However, these attempts to address the failures have assumed that the same tools can be made to work if there are good intentions

[294] Brown, Browen, and Desposato, "Promoting and preventing," 107.
[295] Brown, Browen, and Desposato, "Promoting and preventing," 107.

behind the project's creations. This analysis connects how access to land and the elimination of the native already had a hand in creating the context for the Suruí Forest Carbon Project. This breakdown also helps clarify some previous discussions from Chapters Two and Three. Specifically, this discussion helps clarify why actors such as the tribal leader Almir Suruí, Borges from Forest Trend, the Google Earth outreach team, and various others may have thought that by creating a project where the indigenous peoples were the actors financing the sale of the carbon credits, some of the struggles of the POLONOROESTE and PLANAFLORO projects where the funds were coming directly from the WB could be overcome. When analyzing the Suruí Forest Carbon Project's suspension, regardless of the 'progressive' mechanisms given to the Suruí people to 'protect' the project, settler's desire to access the gold and diamonds on the Suruí's territory led to the Suruí people once again losing the autonomy over their land. The project's suspension also helps to present the shortcoming of the Western improvement narrative of time and how the reality of the project's creation was still an indigenous ontology working within a Western ontology.

Throughout the various discussions surrounding the project's creation, I have shown how the Western mechanisms that were supposed to limit access to land furthered avenues for economic access by allowing new actors into the territory through the project's design processes and selling carbon credits. As discussed in Chapter Two, the understanding that Henrique Suruí possibly colluded with loggers to help disrupt the project's implementation also shows the complexity of the setting in which the project is attempting to operate. As mentioned, Henrique was openly critical of how the PLANAFLORO project allocated funds, which is perhaps why he was so critical of another WB economic project being implemented in his people's territory, despite its intention being a way to provide more direct finances to indigenous peoples. Also,

acknowledging that the Catholic Church Organization that was extremely influential in the area made efforts to be outwardly critical of the Suruí Forest Carbon Project shows how control of the Suruí's territory was reaching a peak as various actors had a stake in keeping the project viable or working towards its suspension.

As discussed in Chapters Two and Three, the creation of the Suruí Forest Carbon Project had many components that occurred in the creation of the project even before the project's adoption under REDD+. The Paiter Life Plan and the Suruí Cultural Map started in 2007 and were the starting points for creating the Suruí Forest Carbon Project. Both project components appeared to be putting control into the Suruí's hands by allowing them to outline how they believed they could incorporate traditional ways of life into the project and, more extensively, the world's neoliberal economic system. By having the Suruí people be the project's leading actors, the Suruí Forest Carbon Project appeared to address some of the significant problems of the POLONOROESTE and PLANAFLORO projects where indigenous peoples were being incorporated into the project's policies, not the leading policymakers. But, as noted from the previous analyses in Chapters Two and Three, this was far from the entire reality of the situation.

The appearance of letting the Suruí people be in control of the project's design helped mask how the project was an indigenous ontology that would need to conform to a Western ontology. From this understanding, the project presented an improvement narrative while placing time at the forefront of its operation. These components can be seen in how the project's creation facilitated the reliance of actors coming in from the global North. These actors situated the project into the global economic system that already targets Brazil. This combination allowed for native elimination in two ways: by providing different ways for indigenous land dispossession and attempting to further incorporate the Suruí people into the capitalist market by selling their

ability to fully control their forests through carbon credits. In our interview, Borges continuously repeated that the reason why he was so sure of the project's methodology was that,

> They (indigenous peoples) have the exclusive rights to make use of their territories for their economic benefits and livelihoods. And it's important that it's there, that it's explicit. That is exclusive economic rights to derive economic benefits because that means that others don't. If they were to work with companies, anyone, they need to do it in agreement with indigenous peoples.[296]

However, as mentioned throughout, under settler colonialism, there needs to be the acknowledgment that the state can take anything from anyone at any time. Therefore, we can agree with the project's paradigms, but if indigenous rights to their land are not being upheld, then projects such as the Suruí Forest Carbon Project cannot promote indigenous autonomy and opens the possibility of other actors seizing the land. Because settler colonialism and capitalism are so tenacious, the assumption cannot be made that because indigenous peoples possess rights over their land and that companies, or anyone, should respect these rights, they will because they are also self-interested actors.

The improvement narrative in the Suruí Forest Carbon Project is evident. For instance, the Open Data Kit provided by Google and the Katoomba Incubator, which helped create the carbon credits, allowed the Suruí to monitor their trees' carbon, transforming carbon into a commodity. This idea of turning carbon into credits refers to the ideas highlighted in Coulthard's discussion regarding what it means to operate within a philosophy of time. Coulthard explains that because the Western world operates with time at the forefront of its operations, they will abstract whatever they need from the land to obtain a profit in the shortest time possible. Any actions not to this effect would be a misuse of the land. With the ability to track carbon and sell credits, the Suruí can now prove the progress of the forest which creates pressure to develop the

[296] Beto Borges, interviewed by Faith Howard, Zoom, March 22, 2023.

forests and to do so quickly. Also, by the Open Data Kit allowing the Suruí to upload information about their trees onto the Google Maps website, Google now can argue that the way the Suruí collect data is improved, which means the ways the Suruí can care for their trees has also been improved because they can know information about their trees quickly using an Android cellphone. This again provides the assumptions discussed in the introduction and Chapter Two regarding how the West primarily views the use or knowledge of what is occurring for the Suruí's trees and the rest of the Amazon for their use in the carbon cycle, not because these trees are living entities.

Another element that highlights the persistence of the assumption that good intentions and techno-fix methods can amend past harms without addressing settler colonialism structure is the language used to describe the POLONOROESTE, PLANAFLORO, and Suruí Forest Carbon Project. As discussed in Chapter Three, Curnow and Helferty note how, historically, environmental movements have continually justified their actions under the belief that nature or "wild spaces" needs Western help to save or tame. This pattern continued in the state of Rondônia throughout the three projects. For instance, following the POLONOROESTE project's suspension, Barber Conable, the president of the WB, stated, "Protective measures to shelter fragile land and tribal people were included; they were not, however, carefully timed or adequately monitored." The idea of land and people as "fragile" reinforces the idea that the Western mechanism would have protected the indigenous peoples and the land, but they were not adequately implemented. The language used by the WB's inspection committee upon their review of the PLANAFLORO project is essential to presenting the philosophy of time discussed by Coulthard and how it ties to the narrative of progress. The investigation report stated, "Had the Bank insisted on the timetable set out in the Project documents, intended beneficiaries and

their environment would have been better rather than worse off." From this statement, the Bank's inspection committee argues that the environment and people suffered because time was not effectively used to handle the project. During the creation of the Suruí Cultural Map, Jessica Moore, Google's engineering manager and head of Google Earth Outreach, describes that when someone logs onto Google Maps and sees the Suruí territory, what they will find is "a beautiful virgin green forest, but it is surrounded by complete deforestation."[297] This description of the forest as a virgin amid destruction again follows the idea that Western mechanisms, such as the tools provided by Google, are needed to protect the Suruí's forests from the chaos surrounding them.

A critical point needed to understand how settler colonialism's structure undermined the POLONOROESTE, PLANAFLORO, and Suruí Forest Carbon Projects is noting that their policy designs operated as techno-solutions to the various human and environmental problems occurring in Rondônia. By this, I mean that the projects operated under the assumption that issues taking place within the territory could be solved by either better financial assistance, more technology, or market protections. As the projects progressed, the designers changed how funding and resources were distributed but never addressed the structural issues that allowed the problems of access to land to persist. Throughout the suspension of the three projects, one can see the structural pattern discussed by Wolfe transpire. During the suspension of all three projects, indigenous peoples obstructed settlers' ability to access land, resulting in native dispossession. In these cases, loggers and miners continuously worked to access the resources within Rondônia for their economic desires. The Suruí Forest Carbon Project offers an interesting perspective compared to the other two projects because the project's design received

[297] Google Earth, "Carbon & Culture," 2:03 to 2:08.

validation for its ability to work by the VCS, Certification of Forests, and Farms and the Rainforest Alliance, and yet was still suspended. From this understanding, I argue that even when 'proper' mechanisms are put in place to prevent things like deforestation and indigenous land dispossession, there can be limited chances of sustained, meaningful change unless structural issues that allow these things to persist are addressed on a political level with the role of governance within Brazil.

Understanding that the techno-solutions proposed by the POLONOROESTE, PLANAFLORO, and Suruí Forest Carbon Project failed to address the political contexts occurring within Brazil during their operation also helps to highlight how these projects were unable to comprehend how settler colonialism's persisting logic is a structural issue. Just because there is a change in policies or leadership does not mean these logics disappear. For instance, the POLONOROESTE project experienced a change in leadership in 1985, the same time Brazil was breaking away from its military dictatorship. In 1987 when the project again changed leadership, the new leader was openly anti-indigenous and pro-cattle ranching, and soon after, the project was suspended. During the mid-1990s and early 2000s, around the same time as the PLANAFLORO project, Brazil experienced another change in leadership with the election of Fernando Henrique Cardoso in 1995.[298] On January 6th, 1996, he signed Decree 1775, which many critics deem the policy as a "step backward in the protections of indigenous peoples' rights in Brazil" because it would open up indigenous territories to allow the government and other commercial interests the ability to challenge the demarcation of indigenous lands.[299] Not long

[298] Britannica, T. Editors of Encyclopedia, "Fernando Henrique Cardoso." *Encyclopedia Britannica*, June 14, 2022, https://www.britannica.com/biography/Fernando-Henrique-Cardoso.
[299] Sara Gavney Moore and Maria Carmen Lemos, "Indigenous Policy in Brazil: The Development of Decree 1775 and the Proposed Raposa/Serra do Sol Reserve, Roraima, Brazil," *Human Rights Quarterly* 21, no. 2 (1999): 445-446.

after, the PLANAFLORO project was suspended. This same trend of structural events also follows the Suruí Forest Carbon Projects suspension. The suspension of the Suruí project would take place in 2018, following the same timeline as when the Bolsonaro administration came into power.[300] Throughout his administration, Bolsonaro continually used his political force to undermine indigenous land rights, again showing how the elimination of the native continued to unfold in Brazil even after the project's suspension.

A discussion regarding the political climate of Brazil around the time of the project's suspension was touched on by Borges towards the end of our interview. In this discussion, I asked Borges about the change in government (leading into the Bolsonaro administration), and his answer provided some interesting insight into how settler colonial logic persisted within the Brazilian government during the time of the project. He stated, "Well, with the changing government, we tried to work under the radar as much as we could. Cause we didn't want to get attention from the government because you never know where that's going to go. Even nowadays."[301] This comment by Borges further addressed the complexity of the situation in which the Suruí Forest Carbon Project had to navigate. Touching again on Borges' commentary about the benefits of Google to the project, Borges was most pleased with their involvement because of the visibility that Google gave the project. Google's main involvement with the project was between 2007 to 2012, a few years before Bolsonaro took office. Once Bolsonaro rose to power, Borges changed his perspective from one of desiring visibility to the need to "work under the radar." This component again shows the project's complications of attempting to operate within a settler state.

[300] Jeff Wallenfeldt, "Jair Bolsonaro." *Encyclopedia Britannica*, April 10, 2023. https://www.britannica.com/biography/Jair-Bolsonaro.
[301] Beto Borges, interviewed by Faith Howard, Zoom, March 22, 2023.

However, only looking at settler colonialism at the country, state, and local levels would be insufficient to grasp the limits and possibilities of the Suruí Forest Carbon Project. There needs to be the understanding that many of these structural issues persist due to global North and South power relations, regarding how environmental issues such as deforestation and forest degradation can be solved by capturing carbon through carbon credits. From this perspective, the Suruí Forest Carbon Project was an attempt to incorporate the Suruí's forests into the global market by creating and selling carbon credits. The argument can be made that entities within Brazil purchased the Suruí's credits, the Brazilian cosmetics company Natura Cosméticos and FIFA, which was hosting the World Cup in 2014, meaning that consumer drive was only coming from within Brazil. But acknowledging that these entities purchasing the carbon credits work to help supply consumer demand worldwide shows how their involvement must also be accounted for when critiquing global North consumerism. Going back to Lohmann's arguments about the dangers of carbon markets and Apostolopolou et al.'s discussion of the global North and South power relations when implementing environmental projects in Chapter Two, the idea of the Suruí people being able to generate funds from their land shows how they are sacrificing their autonomy to their land by allowing these entities to purchase control of their trees. This point of sacrificing autonomy to land is highlighted in Librion's discussion, where she discusses how even the right to pollute is centered around access to land. Therefore, perhaps what needs to be done is a reassessment of the global North pollution practices and the acknowledgment that Western agencies do not question companies and consumers abstracting in the Amazon. Also, neoliberal economic policies such as REDD+ and the Suruí Forest Carbon Project place indigenous people responsible for protecting their forests while placing them in a structural context that prevents this from happening.

Taking a settler colonial approach to analyze the POLONOROESTE, PLANAFLORO, and Suruí Forest Carbon projects helps explain why despite these projects recognizing past harms that occurred, they failed to address the structure that allowed these harms to persist, ultimately leading to their suspensions. This analysis shows how these projects follow a pattern of attempting to use Western mechanisms to address the issues at the project level but do not address the structure within which they were operating. The creation of these various projects, specifically the Suruí Forest Carbon Project, shows how an improvement narrative continues to unfold, helping to explain why, despite having the appearance of providing the Suruí people more autonomy in the project's design, they still must show the goodness of their way of life according to Western metrics that can account for proof and growth. These examples show that these projects continue to operate within a Western philosophy of time, making production a novelty to help mask the structure's system. The ability of production to mask the structural issue is also a contributing factor that makes these various projects' outcomes resistant to change. However, this discussion of structure should not only be limited to Brazil being a settler state but also how these projects are positioned within the structure resulting from capitalist demands from the global North. Demand from the global North calls for Brazil to develop economically while forcing them to address the deforestation and forest degradation issues contributing to climate change. It can be seen here how the Suruí Forest Carbon Project is situated in a position where it has to try to account for the double structure of settler colonialism, making it difficult to achieve any real change without major alterations occurring at the federal and global levels. Therefore, to account for the possibility of enhancing and upholding the Suruí people's land rights and the environmental issues taking place within Rondônia, the complexities surrounding the structure of settler colonialism must be addressed within Brazil and globally. In the

concluding chapter, I will propose some ways that I think the structural natures of settler colonialism and global capitalism could be addressed moving forward while also acknowledging the unlikeness of these changes happening.

Conclusion: Addressing the Structure

i. Expanded Rights, Degrowth, and New Perceptions

Thus far, I have demonstrated the complications and complexities surrounding the Suruí Forest Carbon Project due to its failure to address the structural issues of settler colonialism occurring within Rondônia, Brazil, and the global economic system. By exploring different components of the creation, unfolding, and suspension of the project through what Patrick Wolfe believes to be settler colonialism's three core principles, access to land, elimination of the native, and that settler colonialism is a structure and not an event, I have shown the limits and possibilities of attempting to create a REDD+ carbon project designed to enhance indigenous agency and autonomy while promoting forest conservation within a settler state. With actors from the global North and within Brazil looking to have their economic interest served, I have presented that whether or not the project was created, there would have been and will continue to be conflicts for control of the Suruí's territory due to the various resources that it provides such as timber, gold, diamonds, and land. I have also presented some of the contradictions associated with how REDD+ as a system is flawed but how given the restrictions of the structural limitations of settler colonialism does provide some agency for indigenous peoples who are trying to find ways to assert their autonomy.

In the final chapter, I will outline the requirements that I believe would need to be met for future forest conservation efforts within the Suruí's territory to have a legitimate chance of providing long-term success at halting deforestation. As presented throughout this thesis, market-based mechanisms cannot alter the underlying structure of settler colonialism in Brazil due to the inability to know if the government will secure indigenous land rights when the territory where a

project is located is faced with outside invasion. Also, accounting for how the Suruí Forest Carbon Project's design allowed new ways of access to land and elimination presents how financial mechanisms might be able to help promote indigenous agency, they cannot be considered authentic ways of promoting indigenous autonomy as the various actors discussed throughout looked to have their interests served. This is part of the complications and contradictions of REDD+ operating within the structural limitations of settler colonialism. The Suruí people were attempting to possess agency through the project but are operating within a context where the structure continues to neglect their rights and way of life.

As discussed in the body of this thesis, there were many factors surrounding the Suruí's territory and within the tribe that made the framework within which the project was attempting to operate challenging. For instance, the quarrels between Almir and Henrique Suruí present how there was no clear stance on how the Suruí people stood on the project from the start. Both of the tribe's leaders possessed dramatically different perspectives on how they believed they could ensure agency, autonomy, and economic benefits for the Suruí people. The understanding that the CIMI, the Catholic Church organization within the Suruí territory, took many opportunities to be vocally opposed to the project further helped complicate the situation. Also, noting how loggers were still actively working to encroach upon the Suruí's territory even when the project was created shows that the desire to access land persists even when access to land is restricted. Perhaps the most challenging component that the project faced and failed to address was the Amazon's positioning within the global capitalist system. I acknowledge that there are legitimate interests in keeping the forests left standing and that carbon emissions caused by deforestation present a real issue in helping propel global climate change. However, the Suruí Forest Carbon Project design struggled to account for how many entities in the global North are interested in

ensuring that the Amazon remains open for abstraction either directly through land dispossession or indirectly through carbon markets.

Therefore, any suggestions on how to move forward will only be helpful if they address the adherence of settler colonialism to the structure of global capitalism, as the two possess an explicitly material relationship. My analysis of the Suruí Forest Carbon Project and the POLONOROESTE and PLANAFLORO projects presents the shortcomings of employing financial and market-based mechanisms within settler states located in the Amazon. All three projects were eventually suspended because, despite attempts to change each project's design mechanisms or how the project's funds were distributed, the project's modifications still did not address the persisting structures that allowed economically motivated acts of logging, mining, and indigenous land dispossession to occur in the first place. As discussed in Chapter Three, these projects and their intentions possessed a temporal narrative of progress which is why they were able to mask the structure of settler colonialism, but only for limited periods before they were eventually suspended.

Throughout this thesis, it has been presented how the nation-state in Brazil is supposed to protect the rights of indigenous peoples. However, the neoliberal state continues to implement policies to restrict these rights. I suggest three main components are needed in order to address the persisting structure of settler colonialism in Brazil and within the global capitalist system. Although I do acknowledge that the structures of settler colonialism cannot be changed. The first is that there needs to be the expansion and upholding of what is outlined as formally recognized rights for indigenous people under the Brazilian Constitution. Next, there needs to be a turn towards degrowth in the global North. Lastly, there needs to be a change in the way land, resources, and forests are perceived nationally within Brazil and internationally. To understand

what this would entail, I will turn to Brazil's Indigenous People Articulation (APIB), Jason Hickel et al. (2022), and Anna Tsing (2005). While I do not think these suggestions are the only possible solutions to overcoming the structure, I do believe that if implemented, they would be viable solutions for finding ways to limit global carbon emissions and provide for indigenous autonomy within the Amazon. Although, I acknowledge that these suggestions are not likely to happen.

According to the APIB, the first and perhaps the most important component to allowing for the longevity of an indigenous-led forest conservation project is the Brazilian government enforcing "Indigenous lands demarcation, disinfection, and protection."[302] As discussed throughout, the Brazilian Constitution following 1988 made efforts to formally recognize indigenous land rights in Brazil. However, as also mentioned, the settler's logic of elimination is also a persisting part of the structure of settler colonialism that looks to separate indigenous peoples from their land. When examining how the APIB looks to have the Brazilian government meet these demands, they again draw on the fact that these protections are already written. But that policy mechanisms are put in place that limit the ability of these rights to be upheld, which is why they call for a "rejection of anti-indigenous legislative initiatives (LP and CAP) that try to reverse the rights secured by the 1988 Federal Constitution."[303] Because settler colonialism requires the dissolution of the native society to allow the settler society to be created, undoing the structure of settler colonialism requires the undoing of the legislative framework that carries with it the settler's logic of elimination in order to create a new system once again.

[302] "The Brazil's Indigenous People Articulation," *Brazil's Indigenous People Articulation,* accessed on March 29, 2023, https://apiboficial.org/apib/?lang=en
[303] Brazil's Indigenous People Articulation, "Brazil's Indigenous People Articulation."

However, as presented throughout, more than simply attempting to use different policy mechanisms is needed to undo settler colonialism's structure. There need to be explicit actions made that target the core of settler colonialism, which is struggles over the control and use of the native's territory. One of the demands made by the APIB seeks to address the structure is the approval of the Law Project, which would create the Indigenist Policy National Board (CNPI).[304] Allowing indigenous peoples not just to have *an* active role but *the* active role at the federal level could help ensure indigenous knowledge is not simply used in developing national policies but is the one creating these policies. This acknowledgment brings me to the most significant demand by the APIB that would allow for a longstanding indigenous-led forest conservation project: the consolidation and implementation of the Indigenous Lands Environmental Management National Policy (ILMNP).[305] This demand is critical because it would allow indigenous people to engage in forest conservation efforts without needing to use the market to make such efforts possible. Rather than having to go through mechanisms such as REDD+ to create plans for forest protection and hope that the economic desire of those who helped create the project is strong enough to enforce claims to indigenous land rights, indigenous peoples would have a direct say over how they desire to protect their land. In the ideal solution, formally recognized indigenous land rights are upheld, meaning that environmental efforts led by indigenous peoples on their land would also be upheld.

When addressing the future possibility for the demands made by the APIB to be implemented, it must be recognized how Brazil's position within the current global economic system helps contribute to the government's desire to implement policies to restrict indigenous land rights. For instance, Brazil is positioned within the global capitalist system through treaties,

[304] Brazil's Indigenous People Articulation, "Brazil's Indigenous People Articulation."
[305] Brazil's Indigenous People Articulation, "Brazil's Indigenous People Articulation."

tariffs, and organizations. The global North heavily relies on abstracting resources from the Amazon to allow it to engage in unsustainable development practices and continue producing and consuming at unprecedented rates. However, Brazil is also in a position where they are attempting to develop further and 'catch up' with the global North. Because of the bounty of resources, the Amazon possesses, it has become an area of significant conflict where the global North looks to continue deepening its grasp but is restricted in its ability to do so through policies implemented by Brazil at the national level. Within Brazil, loggers, miners, farmers, and indigenous peoples also look to use the trees, resources, and land for economic advancement. This understanding presents the broader conflict in which Rondônia and the Suruí's territory continuously find themselves. Actors are always looking to use the Suruí's land to help meet their economic needs. This brings me to the point that the economic desires of the global North are fundamentally different from the economic desires of indigenous peoples and settlers. Undeniably, everyone involved in the quest for control of the Suruí's territory knows the significance of the resources within the Amazon. But understanding the void these resources are working to fill must be addressed, leading to my second point that there needs to be a turn towards degrowth in the global North to allow Brazil to develop sustainably, allowing settlers access to resources and providing indigenous peoples with the right to maintain autonomy over their land.

According to Hickle et al., the global economy is structured on growth, resulting in wealthy nations and industries focusing on increasing production regardless of if it is needed. For Hickle and fellow scholars, such a framework for the operation could be more sustainable. Hickle et al. believe that the Global North's consistent desire to continue to grow and produce is the primary force propelling climate change. They explain that because the current economic

system is driven by the need to prove growth, corporations, and elites consume materials and energy at unprecedented rates leading to a breaking point where a change in how growth is thought of is the only way to enable decarbonization and prevent further ecological breakdown.[306] For Hickle et al., the solution to alleviating the problem needs to be a turn towards degrowth as the new standard of progress. A critical thing Hickel et al. present in their conversation is that a standard of degrowth does not mean that individuals and societies are now worse off. Instead, degrowth is simply an alternative perspective of accounting for how progress is accounted for, allowing for a more sustainable way of using resources and for consumption.[307]

Hickle et al. outline the components of degrowth as the need for wealthy economies to abandon measurement tools such as the growth of gross domestic product (GDP) and scale back on destructive and unneeded production.[308] If these entities implemented these core components and others, it would allow them to use less energy and materials.[309] Shifting away from these ways of understanding growth would allow countries to focus on economic activity that helps to secure human needs and promote well-being. The most important thing to note is how a degrowth model could enable Brazil to uphold indigenous land rights in the Amazon. The degrowth approach recognizes that not all development is bad; countries such as Brazil are still developing in many cases.[310] The degrowth model provides a way for low-and middle-income countries to increase their growth because wealthy countries in positions of power have scaled back their production and consumption, thereby freeing up energy and materials.[311] Because these countries no longer compete with the world's most powerful economic entities, they can

[306] Jason Hickel et al., "Degrowth can work—here's how science can help," *Nature* 612, no. 7940 (2022): 400-403.
[307] Hickel et al., "Degrowth can work," 400.
[308] Hickel et al., "Degrowth can work," 400.
[309] Hickel et al., "Degrowth can work," 400-401.
[310] Hickel et al., "Degrowth can work," 400-402
[311] Hickel et al., "Degrowth can work," 401-401.

focus on developing stably without causing social destabilization. Therefore, if there were a turn towards degrowth, Brazil would not be put in a position where they needed to continue looking for ways to abstract from the Amazon and then could be more inclined to promote indigenous land rights because there no longer is the need to drain its resources to increase growth. If this stipulation were upheld, it would help to drastically reduce deforestation and forest degradation within Rondônia, which and thereby help to reduce global carbon emissions.

This brings me to my final suggestion; there must be a change in how nature and its resources are perceived if there is any hope for the Amazon to be left standing in the long term. As outlined in the introduction, the mainstream perception from Western scientists is that the trees within the Amazon act as carbon vacuums, meaning that their primary purpose is to help address global climate change. But I acknowledge that this perception of the benefits of the Amazon comes from a Western perception that does not consider the Amazon as a thing in and of itself which is why REDD+ carbon credit projects are seen as viable solutions to keep forests left standing. But I have shown through authors cited throughout this thesis that when nature is considered to be something that can be bought and sold, those who purchase it feel they have the right to dominate it. In the context of the Suruí Forest Carbon Project, all actors involved believed that they should have access to the resources of the Amazon for their own economic benefit. Therefore, if there is any real chance of keeping the Amazon standing, there needs to be a shift in the perception of the forest.

In their work, Tsing (2005) highlights the friction that occurs on "resource frontiers" and how these territories (forests, coastal seas, mountain fastnesses, tundra, etc.) have continually become new areas of "discovery" for resources that deepen the already existing tension between

existing communities and colonizers.[312] While Tsing centers her argument around Indonesia, the points she brings about regarding the view of nature and its resources, I believe, apply to the conversation I have been having throughout this thesis surrounding the views of forests in Brazil and globally. In their discussion, Tsing discusses how when resources are viewed as something for development, there will always be a violent crisis to retrieve them, even when rules and regulations are put in place to protect them.[313] Tsing states, "Development requires the making and using of resources, and resources cannot be made without violent upheaval."[314] In this discussion, Tsing notes the social dynamics that take place when development pressures come at odds with environmental protection. She describes how environmental regulations might be able to keep companies off mountain slopes, but they still find ways to apply pressure on local communities to achieve the resources they desire.[315] Tsing provides various examples throughout the chapter that highlight these social contingencies allowing her to argue that "If the frontier is an environmental project, not a place, it can never fill the landscape."[316] Therefore, the only way to enact fundamental change still goes back to the understanding that there needs to be a shift in how forests are viewed that accounts for things other than how trees and their resources can be used.

My thesis has focused on addressing the limits and possibilities of the Suruí Forest Carbon Project for indigenous peoples due to a settler colonial context. Understanding that REDD+ market-based solutions do not address the broader structural issues of settler colonialism in Brazil, fail to account for how the global North primarily drives climate change, and how

[312] Anna Lowenhaupt Tsing, "Frontiers of Capitalism." *Friction: An Ethnography of Global Connection* (2005): 28.
[313] Tsing, "Frontiers of Capitalism," 42.
[314] Tsing, "Frontiers of Capitalism," 42.
[315] Tsing, "Frontiers of Capitalism," 34.
[316] Tsing, "Frontiers of Capitalism," 36.

views of the Amazon are primarily centered around how the forest's resources can be used, shows that many hurdles need to be overcome in order to achieve any meaningful environmental mitigation and halting deforestation. While my three suggestions would be viable solutions to allow for ways to promote agency and uphold indigenous autonomy within Brazil and more sustainable development practices globally, I do not believe they are the only possible solutions. When addressing how to reduce global carbon emissions, various actors are involved, and many have their own ideas of how to tackle the situation. Therefore, I hope my thesis can provide insights into things that must be considered when attempting to employ indigenous people's help within REDD+ carbon credit projects in the Brazilian Amazon and steps the global North must take to help address climate change.

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