



The influence of Bolsonaro in the deforestation of the Amazon

An analysis of the Brazilian
president's discourses

by Thaína Lima

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Thaína Lima
s1042609
limafthaina@gmail.com

This research project was conducted individually, without funding or support from any organisation. This study is more than a Master's thesis, it is an indictment of the most environmentally destructive government in recent Brazilian history.

Supervisor Radboud University:
Olivier Kramtsch



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Author: Thaína Ferreira Lima

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Supervisor: Olivier Kramsch

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ABSTRACT

For decades, the Brazilian Amazon has been an area of great dispute over land rights, economic development and conservation efforts. However, since the election of Jair Bolsonaro in 2018, the country has drawn public attention to the way the current government is handling environmental issues, particularly in relation to deforestation in the Amazon. Over the past 4 years, Bolsonaro had repeatedly articulated his intentions to weaken Brazil's environmental laws and curtail their enforcement. Previous research has shown that the immobilization of environmental inspection structures and the reduction of law enforcement lead to an increase in deforestation rates in the world's largest tropical forest. Massive budget cuts and political interference in environmental agencies have led to a 34% increase in deforestation rates in the Amazon between 2019 and 2020, the highest level in a decade. Moreover, a further 22% year-on-year increase was recorded in 2021. Since measurements began in 1988, this is the first time that deforestation has increased for four consecutive years. Therefore, this research conducts a discourse analysis aimed at investigating the existence of a causal relationship between the discourse practises of the Brazilian president and the current ecological emergency in the country. The theories of discourse, power and structuration and the links between them form the theoretical basis of this study. Desk research, documentary analysis and interview analysis complement the chosen research strategy. The analyses revealed that Bolsonaro's discourses on the environment focus on the country's economic development and adopt an aggressive, authoritarian and critical stance towards the enforcement of environmental laws, which creates a constant fear of social and state retaliation among environmental actors. Furthermore, the findings indicate a causal link between Bolsonaro's discourses and increasing deforestation in the Amazon, suggesting that the president propagates a push for non-compliance with environmental laws. Although this qualitative study cannot confirm that there is a specific causal link between Bolsonaro's discourses and the increase in deforestation rates and economic exploitation in the Amazon, it can be argued that the president's words and actions have explicitly incentivised environmental and social crimes related to environmental protection. Understanding the characteristics of certain political discourses and the connection they might have with specific societal responses could help to understand the extent to which existing social theories are applicable in similar situations, lead to constructive societal debate on solutions to the problems caused by these discourses, and prevent the recurrence of such social events in the future.

Key-words: Bolsonaro's discourses, Amazon rainforest, discourse analysis, deforestation.

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Chapter 1: INTRODUCTION

“We are no longer sending money to the NGOs (...) There is no more, and these people are missing the money. So there may be criminal action by these NGOs to draw attention to me, to the government of Brazil”

With these words, Bolsonaro blamed environmental NGOs when asked by a reporter about the increased rates of criminal fires in the Amazon in 2019 (Mazui, 2019).

1.1 Problem statement

For decades, the Brazilian Amazon has been an area of great dispute over land rights, economic development and conservation efforts. Although the country is a world leader in biodiversity conservation, it has recently drawn public attention to the way its government handles environmental issues. Since the election of Jair Bolsonaro in 2018, environmentalists have been concerned about the impact the government could have on the Amazon, given the president's longstanding opposition to environmental laws and indigenous land demarcations (Agência Pública, 2019).

The following sections deal with the political scenario before Bolsonaro's election and the socio-environmental situation in Brazil after the beginning of his term as president of the country. Some of the president's speeches on the environment during his election campaign and in the first years of his presidency are explored. The research questions are then presented and the social and scientific relevance of the study is explained.

1.1.1 The 2018 Presidential Elections

At the beginning of 2018, few candidates seemed likely to win the presidential election in Brazil. Following an investigation that later turned out to be fraudulent, popular former Brazilian president and promising candidate to win the election, Luis Inacio Lula da Silva, was convicted and arrested and declared unfit to contest the October election.

In this scenario, defending the values of morality and religion, the far-right candidate and federal deputy Jair Messias Bolsonaro emerged as a counter-candidate to the left-wing environment that has characterised the country since 2003, when Lula was first elected president. Bolsonaro, who has been described as a "populist politician with an authoritarian flavour" (Chagas-Bastos, 2019, p.94), has developed a controversial and aggressive rhetoric in his almost three decades in Congress and had only one bill eventually passed.

Until 2018, advertising on TV was the main channel to reach the country's electorate. However, in the last presidential election, social media played an important role. Bolsonaro's campaign focused on political micro-targeting on social media, professionalising a "fake news" industry in a country where 70% of the inhabitants are considered functionally illiterate (Chagas-Bastos, 2019). In the 2018 elections, religious actors also emerged as protagonists in the political debate. During his election campaign, Bolsonaro allied himself with conservative evangelicals - Protestants - and pushed for the support of churches (Burity, 2021).

As for his campaign promises, Bolsonaro indicated in September 2018 that, if elected, he would withdraw Brazil from the Paris Agreement. As he explained, the premises of the agreement would affect national sovereignty and lead to "the 136 million hectares of the Amazon being given to other countries" (Bolsonaro, 2018). The candidate also promised to abolish the Ministry of Environment and transfer its responsibilities to the Ministry of Agriculture, which is known for its links to the 'ruralists' - large landowners who are usually associated with the economic exploitation of the Amazon (Ferrante & Fearnside, 2019). Furthermore, Bolsonaro's government programme makes no direct mention of the environmental sector. The document only hints at the issue when talking about a new structure for the Ministry of Agriculture (Brito, 2018).

In October, presidential candidate Jair Bolsonaro, a favourite in the second round of the elections, revealed his stance against the control activities of the national environmental authorities. In interviews, he criticised what he called the "fine industry" for the environment, naming organisations such as the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA) and the Chico Mendes Institute for Biodiversity Conservation (ICMBio). Two days after the first round of the presidential election, Bolsonaro said he wanted to end "Shiite environmental activism" as well as the "indigenous land demarcation industry" in the country (Pontes, 2018).

Amid claiming that indigenous rights and environmental policies hinder the country's economic development and being called 'the tropical Trump', the former army captain has made his way into the country's highest political office. Supported by a third of the population, Jair Bolsonaro won Brazil's 2018 presidential election with 57.8 million votes (Chagas-Bastos, 2019).

A few days after his election victory, the new head of state declared in an interview on a well-known channel TV, that there would be no more demarcation of indigenous lands in Brazil. He also indicated that both protected areas and indigenous territories should be opened to mining and agriculture (Ferrante & Fearnside, 2019). A month before his inauguration (scheduled for 1 January 2019), the incoming president also criticised environmental control agencies for imposing too many fines: "I will no longer allow IBAMA to fine everyone, nor will ICMBio. This 'party' will come to an end" (Gilly, 2018). In 2012, Bolsonaro was fined R\$10,000 for fishing in a nature reserve. His fine was lifted in December 2018 (Servidor do Ibama, 2019).

In the last weeks of the year, the future president, fearing international export restrictions on Brazil, abandons the abolition of the Ministry of the Environment and appoints Ricardo Salles as minister. Salles is a rural politician, a former legal director of the Brazilian Rural Society who was convicted of abuse of office for falsifying land use plans for a protected area (Oxford Analytica, 2018). Moreover, Bolsonaro did not abolish the Ministry of Environment altogether, but shifted some of its responsibilities to the Ministry of Agriculture, headed by a 'ruralist'. The department dealing with climate change was extinguished and the sector dealing with combating deforestation was transferred to the Ministry of Agriculture (Ferrante & Fearnside, 2019).

1.1.2 Enforcement of environmental legislation

After a disastrous participation in the 1st United Nations Conference on the Environment in 1972, environmental protection gained momentum and the Brazilian government established the first federal agency to deal with environmental issues at that time, the Special Secretariat for the Environment (SEMA). Following developments in the management of natural areas, the first national environmental policy was approved by Congress in 1981 (Menezes & Barbosa, 2021).

Seven years later, in 1988, a new constitution was drafted to re-democratise the country after a 21-year military dictatorship. The new document lists environmental protection as a constitutional guarantee and "is considered one of the most important achievements of organised civil society in the fight against powerful economic interests and the threat posed by those who want to exploit the country's natural resources" (Menezes & Barbosa, 2021, p.236). The country's main environmental agency was established in 1989, the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA). The following year, a separate Ministry of the Environment was created. These organisations, together with other national and regional bodies, form an important institutional framework for environmental protection in the country (Menezes & Barbosa, 2021).

Since the 2018 elections and the rise of a far-right scenario in Brazilian politics, the dismantling of environmental protection agencies and policies has become a source of concern in the scientific community and among environmental activists. As Ferrante and Fearnside (2019) noted, Bolsonaro had repeatedly articulated his intentions to weaken Brazilian environmental laws and curtail their enforcement. Thus, under the Bolsonaro government, IBAMA stands out as having the lowest performance in history. "It now often gives advance warning of where it will carry out inspections for illegal logging" (Ferrante & Fearnside, 2019, p.261). According to a press release from the Brazilian Climate Observatory (Observatório do Clima, 2021c), a network of non-governmental organisations and social movements, Bolsonaro has not only regularly taken a stand against IBAMA and ICMBio, but has also "changed the rules and immobilized the inspection structure". From October 2019 to May 2021 - when Observatório do Clima had access to the information - there was no actual collection of environmental fines in the country due to an administrative change in the processing of fines. In 2020, the number of fines in the nine states where the Amazon forest is located decreased by 51% compared to 2018, the last year before the Bolsonaro government.



Figure 1: Amazon deforestation and infraction notices drawn up by IBAMA between 2003 and 2021. Source: Observatório do Clima (2019b).

The chart above compiles information from IBAMA and the National Institute for Space Research (INPE). INPE is a research institution that has been using satellite imagery to track deforestation in the Amazon since the 1980s. When analysing deforestation rates and the number of environmental violations, it is noticeable that the environmental fines imposed by IBAMA have decreased significantly since 2015, especially between 2018 and 2021. These figures interact with the increase in deforestation rates, which had decreased since the early 2000s, but increased again after 2015.

1.1.3 The 'day of fire' and other events

Although key environmental laws in Brazil have not changed in recent years, publicly released data show that enforcement of these regulations has declined significantly, particularly in the Amazon, leading to increased deforestation and undesirable episodes in Brazil's environmental history.

On 10 August 2019, the 'Day of Fire' took place in the world's largest tropical forest. On that day and the following days, dozens of farmers, traders and squatters organised massive criminal fires in the Amazon via WhatsApp (Agência Pública, 2019). Fires are often used in the region as a quick and inexpensive means to clear the area or remove vegetation cover in order to use the land for extensive agriculture or to create pasture for livestock. On this day, the group cut and burned forests on public land with the intention of showing their support for Bolsonaro and alerting the authorities that there is economic progress in the region (Agência Pública, 2019). The fires were so intense that in the city of São Paulo, some 3,000 kilometres away, the smoke from the Amazon turned day into night. At no time has the Bolsonaro government publicly repudiated the attacks on the rainforest (Menezes & Barbosa, 2021).

Just a month before the 'Day of Fire', in July 2019, the National Institute for Space Research (INPE) released compiled scientific data showing that Amazon deforestation increased by 60% in June compared to the same period last year. When confronted with the figures, Bolsonaro called them a "lie", questioned the accuracy of the alarm (Bodker & Morris, 2021) and said the INPE should consult the government before disclosing the deforestation data "because it damages Brazil's image abroad" (Escobar, 2020, p.419). Ricardo Galvão, a physicist who was head of INPE at the time, was fired days later. As expected, news of the increasing deforestation and the dismissal went through the media and took on international dimensions. Germany and Norway suspended funding for environmental protection in Brazil in response to Bolsonaro's lack of interest in upholding environmental agreements between the countries (Bodker & Morris, 2021). A few months after his dismissal from INPE, Ricardo Galvão was named one of "Nature's 10", an annual tribute to "ten people who mattered in science" by the scientific journal Nature (Tollefson, 2019).

Another negative episode on the environmental agenda occurred - and is still occurring - in another Brazilian biome: the Pantanal. The Pantanal, relatively small compared to the Amazon but equally important for the country's ecological balance, is the largest wetland on earth and has also been severely burned recently. In the first 8 months of 2020, the region lost 12% of its vegetation to fires. Despite the waterlogged surface, small fires occur in the Pantanal every year due to the low rainfall and high temperatures. Recently, however, the region has been out of control, with thousands of fires per month. To minimise the damage caused by the fires, the Brazilian government usually sets a firefighting plan before the dry season begins. In 2020, the recruitment process for firefighters began in the middle of the dry season, when the fires had

already started (Barbosa & Grelle, 2021). At the same time, the government denied the existence of an environmental crisis in the country in public speeches (Missiatto et al., 2021). These (and other) actions have resulted in 2020 breaking the historical record of 12,500 fires set in 2005. It is estimated that 60% of the 22,000 fires in 2020 were caused by agricultural activities. In addition, the area destroyed by fires exceeded the 2005 record of 13,000 square kilometres, with 40,000 square kilometres of wetlands burnt in 2020. The impact on fauna is still difficult to measure, but it is estimated that 4 billion invertebrates and 65 billion vertebrates were affected or died from the fires (WWF, 2021).

In addition to the above-mentioned incidents, conflicts between indigenous peoples and loggers, land squatters and farmers have also joined the ranks of unfortunate events since 2019.

Indigenous lands are crucial for environmental protection in Brazil because they are protected areas and therefore cannot be designated for large-scale economic use. According to Mueller (2022) indigenous peoples were only granted official rights to their land in 1976 and after many struggles, the area designated for indigenous peoples has been expanded with each government. However, since Bolsonaro took office, no new land has been demarcated for these communities and the number of encroachments on indigenous territories is increasing every year. Some 800 thousand indigenous peoples (0.4% of the Brazilian population), living mainly in the Amazon and Pantanal regions, claim 14% of the land and 20% of the Brazilian Amazon (Ferrante & Fearnside, 2019). With so much rich and productive land allocated to such a small portion of the population, the increasing number of conflicts related to activities such as agricultural production, illegal logging and mining has led to another social and environmental crisis in the country. The number of encroachments on indigenous territories has increased by 135% in the first year of Bolsonaro's government. In addition, 182 indigenous people were killed in violent conflicts with land squatters, loggers and peasants in 2020, a figure that is 63% higher than the previous year (Mueller, 2022).

1.2 Research Aim and Research Questions

It can be argued that the words and actions of the Brazilian president have a negative impact on environmental protection in the country and could lead to an increased rate of deforestation, especially in the Amazon forest. In order to analyse the relationship between Bolsonaro's discourse practices and the increase in deforestation in the region, this research conducts a discourse analysis aimed at answering the following research question:

Do Bolsonaro's discourse practices promote deforestation and economic exploitation in the Brazilian Amazon?

In order to be able to answer the main research question, three sub-questions were also formulated:

- i) *What are the President's dominant discourses concerning Amazon conservation and other environmental issues?*
- ii) *What has changed in environmental governance in Brazil since the election of Bolsonaro?*

- iii) *To what extent has deforestation of the Amazon increased since Bolsonaro was elected?*

1.3 Scientific and Societal Relevance

1.3.1 Scientific relevance

Some studies suggest a causal link between the discourse practices and actions of the Brazilian president and the current ecological emergency in the country. Ferrante and Fearnside (2019) state that "the actions of President Bolsonaro and his ministers favour the expansion of monoculture plantations and cattle ranching in the Amazon" (p. 262). They also suggest a link between acts of vandalism against indigenous peoples and the environment committed by loggers and farm workers and the president's discourses.

In addition, Menezes and Barbosa (2021) conducted an institutional analysis of the country's environmental policies to link the president's attacks on environmental protection and its defenders to his authoritarian populist agenda, and Missiatto et al. (2021), in analysing colonialism in environmental policy and its consequences for Brazil, notes that instead of strengthening existing conservation laws, the current government is working to further increase the economic exploitation of natural areas by dismantling the country's existing environmental administration and "refusing to implement adequate public policies to promote the defense of the environment" (p. 86).

Therefore, these and other studies do not address the issue comprehensively and in depth. Although existing research is an important source of insights into the environmental situation in Brazil since Bolsonaro's election, exploratory research examining the consequences of his actions is limited. To fill this gap, this study will combine the analysis of the president's recent discourses on environmental protection and the possible social reactions they trigger. By using qualitative methods to gather information, this research draws attention to the general understanding that has emerged in the country regarding environmental legislation and its enforcement, and provides insights into human behaviour.

By analysing the president's discourses, current developments and the consequences that interviewees believe this may have had in the region, the study can contribute to further political and social research on the behaviour of politicians and the reactions of civil society, particularly on how these power relations affect individuals. The findings may help to understand the extent to which existing theories of discourse, power, discipline and framing apply in this particular context and in similar situations.

1.3.2 Social relevance

In recent years, deforestation in the Brazilian Amazon has become the focus of social and political debates in the country. As mentioned in the introduction, no significant environmental laws and regulations have changed during Bolsonaro's term, but deforestation rates have increased rapidly since the beginning of his presidency. Providing an overview of the current political and environmental situation in Brazil by analysing the evolution of a government's discourses practices can contribute to a constructive social debate on the human use of natural spaces and the consequences for the environment. Furthermore, analysing the issue through theories mentioned

in chapter 2 can help to understand the reasons for this development, initiate further debates on the issue and prevent the recurrence of such social events in the future.

Furthermore, deforestation is a major contributor to human-induced climate change due to the enormous amount of carbon it releases into the atmosphere. As the fight against climate change is one of the biggest concerns in the world today, studying the issue and its causes and proposing solutions can help reduce deforestation and thus carbon emissions.

1.4 Structure of the Thesis

This thesis is divided into five chapters. After an introduction to the research topic and recent developments in relation to the themes of this study, the following chapter discusses the theoretical framework and literature review, leading to a set of expectations that will be tested in the analysis of the qualitative data.

Then, the methodology chapter discusses and justifies the methodological approach adopted in this study. Section 3.1 provides a visual representation of the expected hypotheses for the research. In this section, the conceptual model is presented. Chapter 3.3 then explores a systematic interpretation of the analysed data and literature.

Finally, comments are made in answering the research questions. A discussion of the findings and a reflection on the research process are then presented. Final recommendations for further research conclude the paper.

CHAPTER 2: THEORETICAL FRAMEWORK AND LITERATURE REVIEW

This chapter begins with the theoretical framework of the research. First, the theories of discourse and power are examined. Then, a link between these theories and Practice, Framing and Structuration theories is formulated to facilitate the analysis of the research objects. As theories are conceptual attempts to grasp reality and explain something, they will not provide an absolute answer to the research questions, but an interpretation of the real world and its meaning.

The following is a literature review. An overview of the Brazilian environmental governance, the different environmental discourses present in the country in the last decades and the impact of Bolsonaro's government on Amazon deforestation is provided. Together, the theoretical framework and the literature review form the basis of the study in answering the research questions.

2.1 Theoretical Framework

2.1.1 Discourse and Power theories

In the academic world, the term discourse has received many definitions and meanings. Since the term is of paramount importance in this study, it is necessary to analyse its various interpretations. The most relevant definition of discourse for this study is that of Hajer (1995): "a specific ensemble of ideas, concepts and categorizations that is produced, reproduced, and transformed in a particular set of practices and through which meaning is given to physical and social realities" (p. 44). In other words, "discourse is a system for producing, interpreting, framing, knowing, and

attributing meaning to reality and truth, or more specifically particular subject or event like climate change" (Keller, 2012, p. 11).

In a discourse, statements are not just "cluster[s] of sentences addressing a common theme" (Keller, 2012, p.12), but include words, images, gestures and behaviours that emerge through a set of internal rules (Foucault, 1969). According to Foucault, various background assumptions form the basis of a particular discourse (Talja, 1999), and they can determine the way we think, speak or act in society. Likewise, Foucault defines discourse as an act of power, a way of normalising behaviour "which could control people in far more subtle, insidious and effective ways than had previously been possible" (Inglis & Thorpe, 2019, p. 169).

In the archaeological period of his thought, Foucault attempts to describe how knowledge is represented in discourse and how it emerges from a particular context. Furthermore, he addresses the multiplicity and omnipresence of power forces in modern society. By drawing an analogy between the mediaeval gaolers, who only had control over the bodies of prisoners, and the 'masters of discourse' - as psychiatrists who could very effectively control the minds of patients - Foucault suggests that discourses are not controlled by a single ruling class, as Marxism claims, but are invented and operated by different kinds of knowledge specialists, giving rise to multiple forms of power that produce different individuals and populations (Inglis & Thorpe, 2019). According to Miller (2021), power for Foucault is not only a coercive concept but also a constructive force: 'it does not just compel certain forms of behaviour; it actually produces a certain kind of being'. In *L'archéologie du savoir* (1969), Foucault suggests that "discourse is not to be treated as a mere 'document' of the mental qualities 'behind' it, but as a sequence of external events in which symbolic structures ('formative rules') are manifested" (Reckwitz, 2002, p.248). This interpretation can be related to Foucault's ideas about the "death of the subject": With the dominance of the structure over the subjects, agency is lost and individuals have no possibility to do what they want. The subject, also called the "prisoner of the discourse", disappears and becomes only a marionette (Inglis & Thorpe, 2019).

In Foucault's terms, discourse and power are understood as inseparable (Miller, 2021), as power is perceived as omnipresent, diffused and personified in discourse (Schneck, 1987; Wright et al., 2006). According to Inglis and Thorpe (2019), Foucault's structuralist ideas assume continuous 'layers' of knowledge systems in society, referred to as 'epistemes'. Certain epistemes enable certain discourses, and in a social structure the dominance of an epistem will determine a certain period of history. Foucault identifies "knowledge to be power, and power to be knowledge" (p. 169) and states that they are systematically interconnected and interdependent.

When he associates discourse with power, Foucault implies that a discourse produced in a society is a result of having gone through various forms of adaptation and adjustment. Adapting and adjusting, then, means that the parts that make up a discourse have been controlled and selected, but also organised and redistributed by certain social actors. How much influence a particular actor can have on the shaping of a discourse depends on his or her power in society. For example, norms and rules in societies are shaped by those who have a certain amount of power. In this sense, power becomes a social phenomenon that can influence the discourse of the actor (Foucault, 1970). Jørgensen and Phillips (2002) add to this theme by explaining that "power is responsible both for creating our social world and for the particular ways in which the world is formed and can be talked about, ruling out alternative ways of being and talking" (p.2).

One element of discourse theory that is important for this research is the framework of discursive formations - or discourse coalitions, as defined by Maarten Hajer - proposed by

Foucault. According to Hajer (1995), a discourse coalition is a group of actors who share a particular set of storylines over a period of time, in this sense storylines are fundamental to the framework. They refer to a set of propositions that determine what may be said, what behaviour is appropriate and how a particular topic may be spoken about. (Foucault, 1970; Hajer, 1995). Therefore, actors with similar strands of action - or converging views on a particular topic - form a discourse coalition with the intention of validating their way of thinking (Hajer, 1995).

Moreover, according to Inglis and Thorpe (2019), Foucault's genealogical period of thought focuses on how knowledge is actually used, how we deal with it and use it as an instrument of power. His earlier ideas about the dominance of discourse define it not as something that affects us, but as something that is consciously made by us. By addressing the material conditions, space and temporal circumstances of power, Foucault emphasises how discursive powers exist and how we can resist these discursive powers. However, when analysing discourse in a different way, Foucault suggests that we can be someone who takes advantage of this domination, or that we can resist it by using the same kind of tools: organising a counter-discourse (Mousa & Scapp, 1996). In the political sphere of interest for this study, the production of a counter-discourse can be a political act aimed at resisting previously established power relations. The actor and agency are then reintroduced: they are not just marionettes. Instead, they have a choice. They can follow the dominant discourse or resist it.

2.1.2 Discursive practices

For this research, the analysis of discourse theory and related discursive practices is of great importance, as it will attempt to answer the research questions on the influence of a politician's discourse on individual practices. Different authors have dealt with the theory of practice, which has led to different conceptions and definitions of it. However, many of them agree in characterising practice as a social phenomenon that is always shared between individuals and can both constrain and inspire (Giddens, 1984; Schatzki, 1996, Reckwitz, 2002; Shove, 2010). In this study, practices and discursive practices are treated as different concepts. Practices are understood as ordinary things that people do, and discursive practices are what individuals do repeatedly in the face of a particular discourse. These discursive practices can be reinforced or inhibited depending on the dominant discourse at the time (Hand et al., 2005; Shove, 2010).

Giddens' structuration theory states that human activities and the social structures that shape them are inextricably linked. This means that these activities are shaped, enabled and/or constrained by a structure of social meanings and rules. This structure is simultaneously reproduced through human action. Giddens (1984) emphasises that this flow is not the conscious goal of human actors, but that these processes lie within the realm of discursive consciousness: one can frame their actions in terms of conscious intentions and purposes, but the ability to reproduce largely routinised actions depends on practical knowledge guided by structural rules, meanings and resources of the social system that shapes everyday behaviour. In his words, "constitution of agents and structures are not two independently given sets of phenomena, a dualism, but represent a duality" (p.25). Furthermore, Giddens states that the daily activities of social actors "draws upon and reproduces structural features of wider social systems" (Giddens, 1984, p.24). Adding to that, Shove (2012) argues that while these statements are plausible, generalising such social reproduction leaves some questions unanswered, such as how some practices arise, change and disappear.

According to Fox (1998), Foucault's perspective on the dichotomy of action and structure suggests that while actors can interpret the superficial meanings of discursive practices and develop an apparent 'knowledge', the real and 'deeper' knowledge is not accessible, mainly because in the everyday sense of the world, it is not knowledge at all, but also because of systems of rules that control the production and operation of discursive statements and also regulate power and the 'will to power'. These systems thus control the will to create possibilities of power. Furthermore, Graham (2005) explains Foucault's theorization on the characteristics of discursive practices within social and political power relations as a demonstration of "how language works to not only produce meaning but also particular kinds of objects and subjects upon whom and through which particular relations of power are realised" (p.10).

Over the years, Foucault's discourse theory has been further developed through the work of Maarten Hajer. Hajer (1995) proposes a link between discourse and the practices associated with it, classifying a discourse as a collection of ideas and concepts produced through practices. The author focuses on the relationship between discourse, practice and politics and describes his notion of practices using the political process as an example: in conflicts, politicians and decision-makers try to impose their understandings of reality on others, usually through discussion and persuasion, but often through manipulation.

2.1.3 Discourse Analysis, Framing and Structuration theories

In order to answer the main research question and the first two sub-questions, it is important to identify and interpret the main elements of Bolsonaro's discourses in relation to the environment with the help of a discourse analysis.

Discourse analysis aims to understand interactions in society. By analysing texts and conversations, discourse analysis focuses on identifying and interpreting a person's socio and psychological characteristics and intentions rather than examining language or focusing on textual structures (Jones, 2012). Discourse analysis explores how these discourses are used in real life to present oneself in a particular way or as part of a particular group (Hajer, 2005; Jones, 2012). In this sense, it is used to analyse the social context in which people produce their discourses and what kind of meaning emerges depending on who creates the discourse and to whom the discourse is addressed (Jones, 2012). Shove (2010) and Dagevos et al. (2005) acknowledge the gap between discourses and discursive practices: a discourse can affect people differently depending on the situation they are in. In this sense, discourse analysis is based on and must take into account the social interactions within a discourse.

Furthermore, Hajer and Versteeg (2005, p.175) highlight three characteristics, or strengths of discourse analysis: "its capacity to reveal the role of language in politics, its capacity to reveal the embeddedness of language in practices and its capacity to answer 'how' questions and to illuminate mechanisms". For this research, all three strengths of discourse analysis are applicable. They can reveal that different actors can use the same discourse for different meanings, how discourse can be used to influence the definition of a problem, and why and how certain meanings emerge and others do not.

In order to support the discourse analysis and the interpretation of the results, additional concepts and theories need to be considered in this study, namely framing theory and the structure-agency debate. Frames are a topic of interest to many social movement scholars in understanding the ways in which ideas and meanings are mobilised. Goffman (1974), the founder of frame

analysis, describes frames as designs that individuals use to interpret the world around them, enabling them to distinguish, identify and name phenomena as they develop. In this way, individuals and groups of individuals can order their experiences and plan for future change. According to Benford and Snow (2000), frames, along with the media, the state and local governments, are an essential part of the 'politics of signification' because they are active, processual and exercise power through social movements. Framing thus involves the kind of power explored by Foucault.

The structure-agency debate is also related to the discourse analysis carried out in this study as the analysis depends on the perceptions whether reality is essentially produced by structure or by agency, or even both. Anthony Giddens, the author of the structuration theory, states that “social structures are both constituted by human agency, and yet at the same time are the very medium of this constitution” (Giddens, 1976, p.161, cited in Bryant & Jary, 2003, p.253). Hereupon, it can be argued that structures are constructed through action as action is produced within structures. Moreover, connecting discourse and the structure-agency debate, Hajer (1995) argues that:

“we should find out how institutions are made to operate through subject positionings and structure positionings that lend closure to an institutional machinery that can be put to different uses. In this respect analysis should illuminate two things. First, the way in which cognitive and social commitments are routinely reproduced. Second, the way in which discursive 'interpellations' take place, whereby interpellations are understood as those moments where routinized proceedings are interrupted” (p.59)

Framing theory is therefore an important element for this study as, together with discourse analysis, it helps in interpreting the issues related to the influence of Bolsonaro's and his government's discourse practices on Amazon deforestation. Consequently, both the principles of discourse analysis and the insights of framing theory are helpful in answering the research questions.

2.2 Literature review

In the previous section, discourse and power theories, discursive practices and discourse analysis were examined. In order to explore the extent of the influence of the Brazilian President's discourses on Amazon deforestation and to provide an answer to the research questions, it is crucial to also understand the broader context of environmental politics, the recent developments regarding environmental legislation and enforcement, the different environmental discourses and corresponding social responses in the country. Therefore, the following literature review examines what has already been written about the topic under study in order to identify possible research gaps and provide further background for the research.

2.2.1 Brazilian Environmental Governance: who is involved?

2.2.1.1 State - and the motto of economic development

Brazil, like many developing countries, strives for economic development. When the focus is on the economy, the environment usually takes a back seat. In recent decades, however, an unusual scenario has played out in the country: economic growth and a certain level of environmental protection practices have coexisted within its borders.

Between 2003 and 2014, Brazil significantly increased its GDP and reduced poverty and social inequality. During the left-leaning governments of Lula and Dilma Rousseff, a series of macroeconomic policies and government investments in social programmes resulted in the country being the seventh largest economy in the world between 2010 and 2014. Therefore, the economic development has led to a significant increase in energy and electricity consumption. To provide the necessary energy for this growth, the government planned the construction of large hydropower plants, most of which are located in the Amazon, close to indigenous territories and biodiversity hotspots. Although hydropower plants generate clean and renewable energy, the impact of such projects on the Amazon is still not well understood. As a result, they have attracted a lot of attention in the media and among the population, as they can lead to deforestation, flooding and other socio-ecological impacts (Prado et al., 2016).

On the other hand, the Lula and Dilma Rousseff governments have taken important steps to protect the environment. According to Viola and Franchini (2018), the initiatives implemented include investing and allocating international funds to promote sustainable development in the region and the strengthening of environmental monitoring and enforcement through restructuring and equipping IBAMA, ICMBio and other environmental agencies. These and other initiatives led to an 82% reduction in deforestation in the Brazilian Amazon between 2004 and 2014.

Another successful measure implemented during this period was the preparation of the National Plan for Protected Areas (PNAP). The plan, developed with great popular participation, includes the definition and sustainable management of Brazil's protected areas and aims to cover 40% of the country's territory, including indigenous lands. In addition, the strategic Action Plan for the Prevention and Control of Deforestation in the Legal Amazon (PPCDAM) was elaborated in 2003 by the Minister of Environment, Marina Silva, and commits 13 ministers directly involved with the Amazon to a joint approach, sharing burdens and rewards for government performance. The mentioned decrease in deforestation in the region during the period demonstrates the success of the actions (Kageyama & Santos, 2011).

However, in face of international commitments to climate change mitigation and adaptation, Viola and Franchini (2018) argue that Brazil, which has tried for decades to position itself as a climate leader, is instead seen as a 'climate myth', with a strong resonance between its discourse of commitment to the international environmental agenda and its actual policy implementation. Furthermore, the authors add that after Bolsonaro's election, the position of "climate myth" was abandoned because the country no longer aspires to be a climate leader. In fact, the current government is trying to evade environmental standards and commitments and is allying itself with the most conservative countries in international environmental negotiations. Since 2019, the Brazilian government has withdrawn from discussions related to international policies to combat climate change and global warming.

The current government has not only cut the country's budget for environmental protection and disbanded environmental agencies, but has also proposed or supported projects that prioritise economic development over socio-environmental concerns. According to Abessa et al. (2019), in 2021, a legislative project (PL #3729/2004) that reduces or eliminates the criteria for environmental permits for infrastructure projects and other economic activities has passed Congress. In practice, this regulation provides automatic environmental permits for most infrastructure projects, and for those that still require an environmental impact assessment, the deadlines associated with the regulation make it impossible for environmental authorities and society to assess in detail the risks and negative impacts of the projects. The president's main

argument for passing this law is that the need for an environmental permit should not be an obstacle to infrastructure development and economic growth. In addition, another bill is currently being discussed in the country (#215/2000). This bill aims to prevent the demarcation of new indigenous territories and could even lead to the cancellation of already designated protected areas.

While successive attacks on the environment have taken place since Bolsonaro's election, the Brazilian economy has not developed as expected. GDP growth is expected to be 0.8% in 2022, placing the country among the bottom performers in terms of GDP growth: 180th out of 193 countries. Looking at the Bolsonaro government as a whole, cumulative GDP growth from 2019 to 2022 is expected to be 2.6%, while the global average is 9.6%. Meanwhile, the unemployment rate remains one of the highest in the world (Chernavsky, 2022).

2.2.1.2 Market - and the agribusiness lobby

The influence of agribusiness and mining lobbies in shaping public policy and dismantling Brazilian environmental legislation is notorious (Ferrante & Fearnside, 2019). According to Milmanda (2022), by financing electoral campaigns, mobilising votes, funding like-minded politicians and investing in self-representation in Congress, the agrarian elite has gained great influence on non-agricultural issues and direct access to agenda-setting in the country, becoming one of the most powerful actors in Brazilian politics. Apart from being one of the major contributors to the country's GDP, the agribusiness industry's size and technical resources are a necessary tool for implementing the president's agenda. In this scenario, it is common for politicians to adopt policies that promote the expansion of agriculture, mining and cattle ranching in the country. In return, the 'ruralists' finance the politics. According to Pereira et al. (2020), since taking over the presidency, Bolsonaro, seeking political support from deputies and senators linked to the agricultural sector, has introduced and approved several measures that benefit the expansion of agriculture, mining and livestock activities. Since a large part of Brazil's environmental problems are related to the agricultural sector, this relationship between politicians and the agricultural elite usually hinders environmental policy and its enforcement.

Nevertheless, international demand also plays a role in environmental governance in Brazil. Recently, international markets and financial institutions have begun to demand better socio-environmental performance of the country's agricultural products, which can potentially improve compliance with environmental laws. Nepstad and colleagues (2006) argue that:

“Cattle ranchers and soy farmers who have generally opposed ambitious government regulations that require forest reserves on private property are realizing that good land stewardship – including compliance with legislation – may increase their access to expanding domestic and international markets and to credit” (p.1595).

However, according to Souza et al. (2020), the economic interests of mining, agribusiness and logging sectors dominate the country, especially in recent years, creating a market structure that fosters environmental crimes and is largely intertwined with the global market. In an interview, Alexandre Saraiva, a former head of the federal police in the state of Amazonas, mentions that one of the main causes of deforestation in the Amazon is illegal logging to supply the international timber market (Oliveira & Saraiva, 2021). In this scenario, the EU emerges as the main importer of wood from Brazil, followed by the US. Despite some international efforts to improve the certification of wood products, not enough policy measures and international regulations for the wood market have been taken by the US and the European Union. Their ever-increasing demand

for timber products, combined with the lack of credibility of these certifications, encourages illegal logging practices (Martins & Nonnenberg, 2022).

2.2.1.3 Civil Society – and the role of NGOs

After 21 years of military dictatorship in Brazil, the 1988 Constitution created new institutional mechanisms to promote the participation of civil society in the definition and implementation of public policies in the country. During this period, a participatory system emerged in which local organisations were given new tasks, received international funding and expanded their influence on public affairs (Campos et al., 2011). Furthermore, Roper (2001) notes that because of the larger space these organisations occupied, discourses on nature conservation became part of a new institutional framework in Brazil. Macdonald (1997) adds that the country was one of the highest priorities for environmental NGOs in the 1990s due to the high rates of deforestation in the Amazon in the 1980s and the associated impacts on climate change. As these organisations are responsible for the implementation and management of protected areas, they have helped shape the discourse on nature conservation in the country.

More recently, however, environmental NGOs have been defined by the Brazilian government as organisations seeking to 'internationalise' the Amazon (Menezes & Barbosa, 2021). As mentioned in the introduction of this study, the president often claims that NGOs are setting the forest on fire to draw international attention to his government (Mazui, 2019). But according to Menezes and Barbosa (2021), these attacks on NGOs and environmentalists are an attempt to reduce their agency, legitimacy, voices and influence in the country.

The potential impact that NGOs can have in Brazil is also influenced by the way the current government deals with these organisations. According to Ramos (2021), Bolsonaro uses different instruments to control the activities of environmental NGOs in the country. During his election campaign, when he called for an end to all kinds of activism, the president threatened to expel international environmental NGOs such as WWF and Greenpeace from Brazil. Later, in 2019, in violation of the Constitution, the government took on the task of "monitoring, coordinating, controlling and accompanying the activities and actions of international and non-governmental organisations on the national territory" (p. 302). Furthermore, in one of his first acts as Minister of the Environment, Ricardo Salles suspended all contracts that the ministry had signed with non-governmental organisations (Fearnside, 2019). Recently, Bolsonaro complained that he could not end the "cancer called NGOs" (Ramos, 2021).

2.2.2 Different discourses on Amazon conservation

In analysing the political and social scenario regarding environmental protection in Brazil from 2003 to 2021, it is clear that there are different discourses on the issue that have led successive governments to implement and enforce misguided and often contradictory environmental policies. The corresponding societal reactions that these misguided discourses generate are of great importance to this research. Two recent and contrasting discourses on environmental protection are examined in order to analyse their influence on Brazilian society. To this end, two former environment ministers will illustrate and introduce their government's discourse practices, time periods and social developments: Marina Silva, who was in office from 2003 to 2008, and Ricardo Salles, minister from 2019 to 2021 and in charge when the 'Day of Fire' took place. The analysis of Bolsonaro's discourse practices will be further explored in the next chapters of this study.

2.2.2.1 Marina Silva and the conservation approach

In 2003, during Lula's first term as president of Brazil, Marina Silva, a black woman from the Amazon region, rubber tapper, rural activist and illiterate until her teens, was appointed environment minister. Silva's years in office were marked by great successes. From 2005 to 2011, the deforestation rate in the Amazon fell by 50%, bucking the country's historical trend and leading to a 30% drop in greenhouse gas emissions (Hochstetler & Viola, 2012). In 2007, 'for championing conservation while taking account of the perspectives of people who use the resources in their daily lives', Silva was named one of the Champions of the Earth by the United Nations Environmental Programme (Nunes & Peña, 2015, p.507).

Rising as an emission-reduction leader, Silva championed a sustainability discourse that had hitherto been absent from Brazilian politics and raised Brazil's profile in international environmental discussions (Nunes & Peña, 2015). The Plan to Combat Deforestation in the Amazon (PPCDAm, in Portuguese) is an example of many successful measures implemented during Silva's tenure. The plan revolutionised the definition and implementation of public policy in the Amazon by dispelling the notion that deforestation was only a problem for the Ministry of Environment. By assigning responsibilities to all ministries, especially those related to the country's economic development, Silva managed to reduce incentives for projects that directly or indirectly increase deforestation in the region. From 2003 to 2008, the period of Silva's tenure, more than 700 environmental criminals were arrested, 1,500 illegal logging companies were shut down and 37,000 illegally appropriated rural properties were reclaimed (Veiga, 2009).

According to Nunes & Peña (2015) Silva's ideas and interests, however, often clashed with those of the industrialist faction in the government. During her tenure as environment minister, pro-industry and pro-development policies and projects led to the expansion of environmentally hazardous sectors such as mining, agribusiness and oil. As a result, Silva resigned from her post in 2008. Outside of government, Silva continued to advocate for environmental issues and bring them into political debates and public opinion. Silva wanted Brazil to take on the role of 'environmental power' and use its competitive advantages to lead the transition to a low-carbon economy.

2.2.2.2 Ricardo Salles and the prioritisation of economic development

In this study, Salles' actions are not only treated as individual matters, but also as part of Bolsonaro's discourse practices, since every ministerial office is subject to the direct recommendation and responsibility of the President of Brazil. Therefore, it can be assumed that Salles acted according to Bolsonaro's will, giving voice to the president's discourses and implementing measures that were in line with the government's objectives.

According to Menezes and Barbosa (2021), Salles, who is known as an advocate of predatory agriculture, shares the president's belief that economic growth should not be held back by environmental concerns. His first actions as environment minister involved targeting, harassing and even transferring officials responsible for enforcing environmental laws. Well-prepared professionals were regularly replaced by military personnel. For example, all five regional managers of ICMBio were dismissed and their posts subsequently filled by appointed military personnel.

Salles, who was convicted of administrative disloyalty for changing zoning plans and favouring mining companies during his time as São Paulo's environment secretary (2016-2017),

was again in the spotlight in the course of his time as environment minister. In April 2020, at a recorded meeting of the presidential cabinet, while participants were discussing the intention to relax environmental policies, Salles stated that: "In terms of press coverage, we are in a good moment because COVID-19 is the only thing they are talking about and we need to push through changes, to change all the regulations and simplify norms" (Menezes & Barbosa, 2021, p.238). Salles' words flooded the media at the time and still resonate two years later as an example of the Bolsonaro government's intentions in environmental policy.

As Menezes and Barbosa (2021) note, eight former environment ministers signed an open letter in June 2020 condemning Salles for his words and actions against the environment. In April 2021, Salles was linked to the largest recorded illegal timber confiscation in the Amazon. He was accused of pushing the federal police to clear the timber and close the case. Alexandre Saraiva, then head of the federal police in the state of Amazonas, was removed from office for denouncing the minister's involvement in the environmental crime (Oliveira & Saraiva, 2021). Two months later, Salles resigned as Minister of the Environment (Menezes & Barbosa, 2021).

According to Bodker and Morris (2021), Salles and Bolsonaro adopt an anti-environmentalist discourse, often making use of incorrect or distorted information (Silva, 2020), leading to erratic environmental understandings and policies in the country. In this scenario, extensive agriculture, mining and other predatory industries are portrayed by them and other members of the government as positive activities that are necessary for Brazil's economic development. On the other hand, environmental conservation and indigenous rights are often framed as 'leftists' or 'communists' issues that should be banned from the country. Vargas et al (2018) elaborated a discourse analysis of Bolsonaro's discourses on public events during his presidential candidacy. In the study, two main actors were identified in the future president's aggressive discourses and linked to a series of political views: 'us' and 'them'. Us refers to, among others, landowners, industrialists and military personal. 'Them' was often used to refer to 'leftists groups' (according to Bolsonaro's words): human rights activists, socialists, feminists, journalists, indigenous people, environmental organisations, and others. Thus, the sets of elements present in Bolsonaro's discourses distinguish the allies and their positive characteristics and the opponents, a negative group that must be fought in society.

Additionally, Bolsonaro contradicts himself when he states his opinions regarding Amazon conservation. He often argues that international funding for conservation interferes on national sovereignty on Amazon-related issues (Bodker & Morris, 2021) and accuses developed countries of being interested in exploring the forest (Silva, 2020). However, during his presidency campaign in 2018, when defending the opening of the region to international economic exploitation, Bolsonaro stated that "The Amazon is not ours and it is with great sadness that I say this, but it is a reality and we can explore this region in partnerships". The candidate's discourse raise awareness among environmentalist and indigenous communities about the future of the region. Moreover, in his speech at the United Nations (UN), in September 2019, Bolsonaro defended that the chief of the Kayapó people, Raoni Kayapó, one of the most notorious indigenous leaders in the world, serves as a "maneuver piece" by international governments to "advance their interests in the Amazon" (Silva, 2020).

CHAPTER 3: METHODS

This chapter introduces the research methodology by describing the expectations of the research, the research philosophy and design, and the approach to data collection and analysis. The first section, Research Model and Expectations, forms the structure of the research. The research expectations are a set of assumptions that are tested in the analysis of the collected qualitative data and literature. Section 3.3 explains the choice of methodology and the following sections provide detailed information about the data collection and the discourse analysis.

3.1 The research strategy and research expectations

According to Van Thiel (2014), research strategy can be described as "the overall design or logical procedure that is followed" (p. 57). In this study, the research strategy includes desk research, documentary analysis and interviews. Desk research offers the possibility of describing the development of a particular object over a period of time (Van Thiel, 2014). As this is the intention of this study - to explore recent developments in environmental discourses in Brazil and their impact on Amazon deforestation - the current research builds on previous studies discussed in the literature review in several ways.

The theoretical framework provided the starting point for the research, and the literature review uncovered contrasting discourses related to environmental protection in the country between 2003 and 2021. In addition, a documentary analysis of environmental legislation was conducted to identify possible changes and/or regressions in the legislation within the period studied. Moreover, Guba and Lincoln (1994), Moon and Blackman (2014), van Thiel (2014), Miles at al. (2013) and others provide guidance on research methodology and discourse analysis.

As can be seen in Figure 1, the conceptual framework derived from the theory and the literature review begins with the main characteristic of Bolsonaro's discourses in relation to environmental issues: the need to prioritise the economic development of the country. The amendment or weakening of environmental legislation and the reduction of inspections also contribute to his discourse. Recent research suggest that the amplification of these discourse practices lead to the increased deforestation of the Amazon, object of investigation in this study. A literature review, expert interviews and a discourse analysis provided important information on this scenario.

As expected, not all identified discourses practices are examined in this research with the intention of producing results and contributing to answering the research questions. The discourse on economic development has been included in the conceptual model because it is assumed to produce the type of practices that is the subject of this study: economic and large-scale exploration of the Amazon forest. The conceptual model is a "simplified version of reality, which shows, first of all, what kind of phenomenon is being studied" (van Thiel, 2014, p. 29). It is expected that the findings of this study will provide sufficient qualitative insights to tease out the relationship between the president's discourse practices on the environment and the increased rates of deforestation in the Amazon forest.

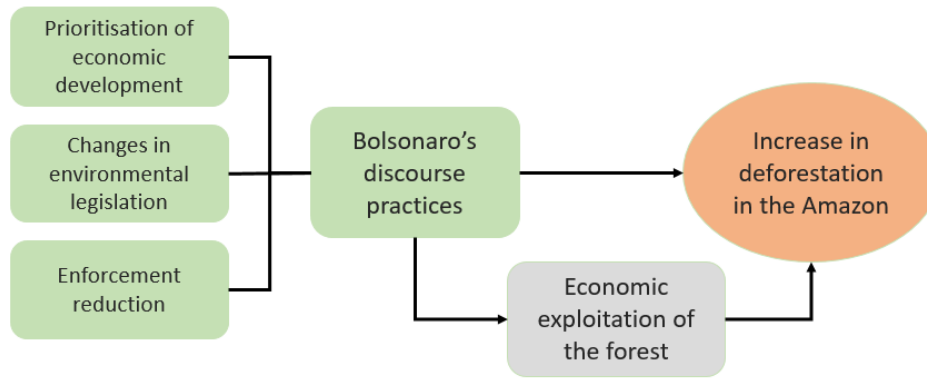


Figure 2: Conceptual framework on the influence of Bolsonaro's discourse practices on the current deforestation rates in the Amazon.

3.2 Research Philosophy

Research philosophy can be defined as "the philosophical orientation of the researcher that guides her or his action" (Moon & Blackman, 2014, p. 1176). Research philosophy thus determines how a research is conducted. This research follows a constructivist ontology and an interpretivist epistemology.

According to Bryman (2012), a constructivist ontology means that the social phenomena under study are seen as outcomes of the individual's interactions, rather than as 'out there', separated from the individuals involved in the construction of meaning. The constructivist perspective also implies that it is important to think on the role of the researcher and to consider that the data collected is transactional and subjective in nature, assuming that reality consists of "multiple, intangible mental constructions" (Guba & Lincoln, 1994, p. 110).

Furthermore, an interpretivist epistemology implies understanding the social world through the participants' 'lens' or their interpretation of it, focusing on understanding behaviours rather than explaining them (Guba & Lincoln, 1994). Interpretivist studies seek to understand the meanings behind a particular action. As this study seeks to tease out the meanings behind actions and changes related to Amazonian deforestation, it is expected that the research strategy will be receptive to several different viewpoints (Bryman, 2012; Marsh & Furlong, 2002) on environmental discourses in Brazil and their influence on deforestation figures. Therefore, the use of qualitative data to explore these issues is most appropriate as it allows for interpretation of the data.

3.3 Data collection and Analysis

The methodology used in this study is determined by the ontology and epistemology mentioned earlier. Therefore, qualitative data collection was chosen as the most appropriate way of collecting data, as it supports the analysis and interpretation of the information related to the research problem. Discourse, documentary and interview analysis therefore form the basis of this qualitative research.

As suggested by Silverman (2017), a limited and manageable data set is necessary to conduct a productive qualitative analysis. Based on this recommendation, the need to collect relevant material from the dataset was taken into account when conducting the discourse analysis.

Since the subject of this study are the presidential discourses related to the environment or the Amazon, and this topic is not frequently addressed by Bolsonaro, in some cases only the relevant parts of larger and more general discourses were analysed. In other cases, only small statements or publications in the social media on the topic of the environment were used. All relevant content found on the topic was analysed in this research.

The study also includes desk research on the theoretical framework and recent publications on the topic under investigation. Semi-structured interviews with experts and social actors in the Amazon region provide up-to-date insights. The interviews were conducted in Portuguese, as this is the native language of both the interviewees and the interviewer. Therefore, the recording was first transcribed in Portuguese. After a faithful translation of the sentences and expressions, the English version of the material was coded using the Atlas.ti software. It was then analysed using the proposed theoretical framework to determine whether Bolsonaro's discourse practices play a significant role in promoting deforestation of the Amazon forest. By collecting and analysing academic publications on the subject, the study also expands the understanding of concepts, social interactions and cultural phenomena in the region.

The data was collected between June 2021 and June 2022 and the information resulting from the study provides sufficient insights to answer the research questions.

3.3.1 Expert interviews

In order to gain insights into the current environmental situation in Brazil, three interviews were conducted as means of qualitative data collection. According to (Alsaawi, 2014), interviews in qualitative research are a way of gathering stories and personal experiences of others in a communicative process that involves shared cultural knowledge. Based on the constructivist and interpretivist approach of this study, interviews are of great importance as they are sensitive to the context, arguments and viewpoints of different actors. With the aim of collecting information from different contexts of the political and environmental scenario in Brazil, semi-structured interviews were conducted as they allow for more flexibility and improvisation during the conversation, but still provide a clear list of questions and topics to work on. This flexibility gave the respondents the opportunity to express their ideas and elaborate on the previously structured topics. The 'Interview Guide' in Appendix 1 was used and the interviews were conducted with the profiles listed below.

Interviewee	Location	Description
R. Bonifácio	Goiânia, Brazil	BSc in Social Sciences; MSc. PhD in Political Science. Professor at Universidade Federal de Goiás.
(anonymous)	Goiás, Brazil	Biologist, working in the wildlife subdivision at IBAMA.
(anonymous)	Goiás, Brazil	Biologist; MSc. PhD in Environmental Sciences. Works in environmental licensing and monitoring and in the drafting of local environmental legislation.

Considering the ethical concerns in the study, respondents were also asked if they agreed to the recording of the interviews and the mention of their names in the study. All participants gave their consent for the recording. However, two respondents preferred to remain anonymous for fear of retaliation.

3.3.2 Documentary Analysis

In addition to interview analysis, media and academic documents were also used as a means of data collection. By analysing documents such as articles, reports, books and other publications, documentary research can uncover important information about a topic. According to (Denscombe, 2012), a key feature of documentary sources is that they are easily accessible. Nevertheless, it is important to reflect on the credibility of the material. Denscombe therefore identifies four criteria that must be considered when analysing the credibility of documents: authenticity, meaning, representativeness and validity. These characteristics ensure that documents are genuine, representative, clear and accurate. This was taken into account when selecting the authors and publications mentioned in this study, as well as if the documents received financial support and what the intentions were. Public documents such as environmental laws and regulations were also analysed with the intention to check for possible changes and/or throwbacks.

3.3.3 Critical Discourse Analysis

The main characteristic of a critical discourse analysis (CDA) is that it deconstructs discourses and their relations to various elements such as ideologies, power and social identities. According to Fairclough et al. (2011), language is thus perceived as a social practise that shapes and is shaped by society. Wodak (2001) adds that a discursive event denotes a particular perspective within social practises and is influenced by social and situational settings, while it also has an impact on existing social and political processes. Moreover, Wodak and Meyer (2016) state that "CDA is therefore not interested in investigating a linguistic unit per se, but in studying social phenomena which are necessarily complex and thus require a multi-disciplinary and multi-methodical approach" (p.2). Since CDA focuses on how different issues are communicated and legitimised through discourse, it examines language as a social practise and the context in which language is used is a fundamental component in applying the methodology.

By analysing 16 statements of the president published in various media (e.g. interviews, social media, the official government website, publications from the election campaign), the aim is to gain a more comprehensive understanding of how a head of state can promote environmental crimes through discourse practises and what strategies lie behind his discourses. The appendix II compiles the (translated) statements analysed in this study.

3.4 Methods for collecting the data

Qualitative studies allow researchers to investigate the reasons and stories behind a particular phenomenon. As mentioned earlier, this Master's thesis conducted a discourse analysis on the impact of a discourse on Amazon deforestation. Data derived from the expert interviews and from a discourse analysis were analysed using the software Atlas.ti. Together with secondary research they form the basis of the information collected for this study.

Data collection in relation to the interviews was first about defining the codes that could summarise the content of the interviews. Codes can be described as "labels that assign symbolic meaning to the descriptive or inferential information compiled during a study" (Miles et al., 2013, p.3). Using Atlas.ti, First Cycle Coding and Second Cycle Coding were then conducted. According to Miles and colleagues, First cycle coding is a method to begin analysing and summarising text segments or data; while Second Cycle Coding involves categorising these summaries into smaller groups or themes. This process thus ensures a better examination of the data, as the texts are analysed multiple times through coding and categorisation of the codes.

Descriptive coding was used to analyse the interview transcripts, as the assigned labels summarise the essence of the text fragments. The process of code definition and designation took place progressively during data collection, which means that only inductive coding was carried out (Miles et al., 2013). Based on the topics covered, 26 codes and 6 code groups were established, being the code groups: Defining Brazilian society, Interviewees opinions and characteristics, Current government characteristics, Bolsonaro's discourses on the environment, Making comparison with previous governments, and Current environmental situation in Brazil. The image below illustrates the code groups and the most important/frequent codes associated with it. Together the codes configure the overall ideas and opinions expressed by the respondents.

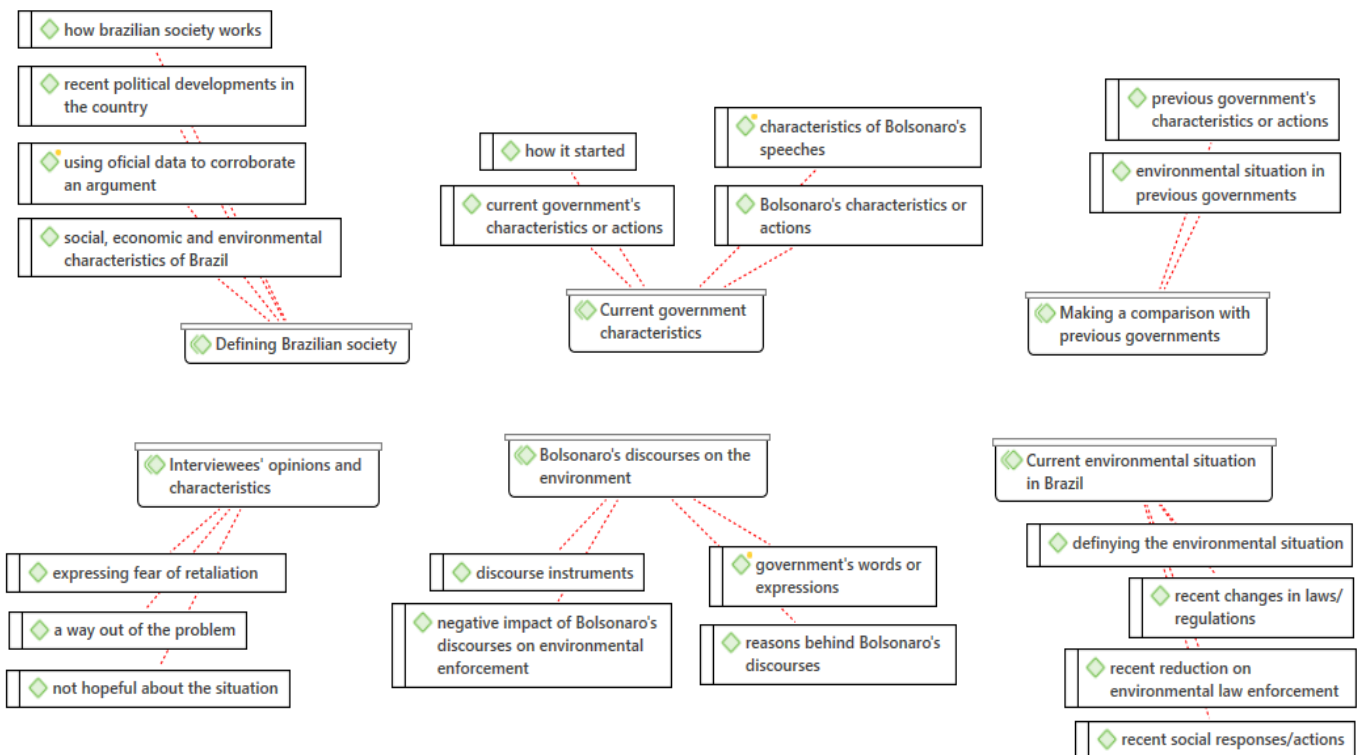


Figure 3: code grouping scheme from the expert interviews

For the discourse analysis, the same process of descriptive coding was used to explore some of the transcripts of Bolsonaro's statements on the environment. The context of each statement, meaning the audience it was intended to, the date of the speeches, their topics and the social and political situation at the time was considered as a fundamental starting point when

creating the codes. In this analysis, 5 code groups were established to cluster 37 different codes. The code groups are: Linguistic characteristics, Criticising environmental enforcement, Criticising someone, Blaming someone else for the fires and Focusing on economic development. The image below illustrates the code groups and the most important/frequent codes associated with it. Together the codes configure the overall ideas and opinions expressed by the president.

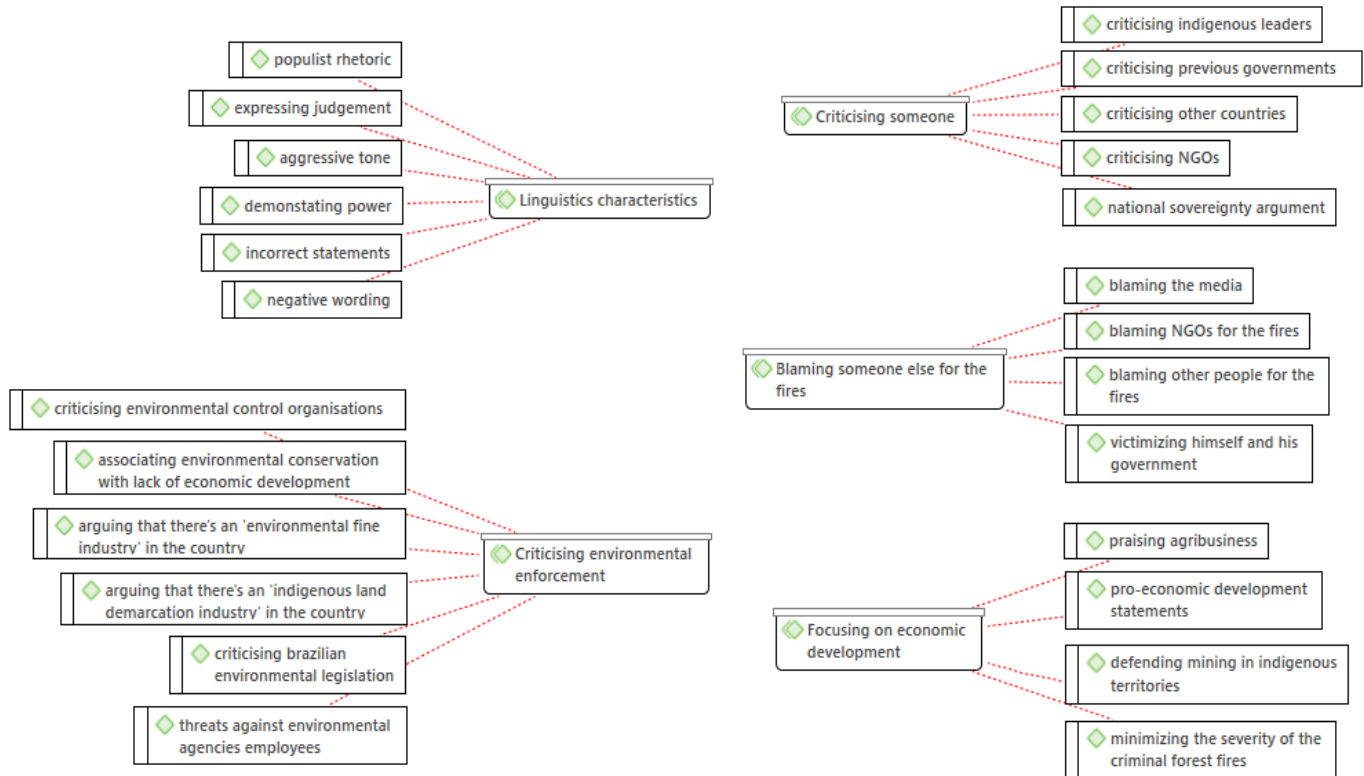


Figure 4: code grouping scheme from the CDA on Bolsonaro’s speeches on the environment

Furthermore, for the desk research conducted in this study, as Van Thiel (2014) suggests, content analysis was used to collect and analyse the existing data. To this end, content analysis was performed in two types of texts: scientific publications dealing with issues related to the objectives of this research, and public documents, mainly environmental regulations, but also official records of Presidential discourses and media publications on the subject. The information obtained from the coding processes and secondary research is used to interpret the research problem and ultimately answer the main research question.

3.5 Operationalisation

Van Thiel (2014, p. 43) states that "the process of operationalization gives direction to the empirical part of a study: it shows exactly what will be studied or measured". Furthermore, when elaborating the operationalisation of a study, the first step is to determine which interpretations of the theoretical concepts will be used and how these definitions relate to and complement each other. The second step concerns describing how the theoretical concepts are translated into

measurable variables (Van Thiel, 2014). This section thus describes the choices made in the research, and how the chosen concepts are related and measured.

In this study, discourse is analysed through different theoretical lenses, such as discourse theory, discursive analysis and framing theory. As mentioned in Chapter 2, this study uses the definition of discourse established by Foucault (1970) and complemented by Maarten Hajer (1995), as it highlights the individual level of a discourse and the connection with discursive practices. Furthermore, the discourse coalitions and the power elements are also included in the analysis as they can be linked to the subjects under investigation. In order to operationalise these concepts, i.e. translate them into measurable variables, one of the strategies concerns the interview guides (Appendix 1). When developing the interview guide, the research questions were used as a starting point. Although the interview questions did not clearly state the definitions of the theoretical concepts, as this was translated into more practical questions, interviewees were asked to explain their understanding of the influence of presidential discourses on people's willingness to explore the Amazon economically. The questions were slightly adapted depending on the respondents' experience and familiarity with the specific issues.

Maarten Hajer (1995) underlines how discursive practices are linked to discourse theory. In this study, discursive practices are interpreted as the way discourses reveal themselves in practices. For this study, discursive practices play an important role in answering the research questions. Since it can be assumed that certain discursive practices in the Amazon region (e.g. land grabbing) are linked to certain discourses (e.g. the discourse on economic development), it was decided to analyse the existence of this link. The same strategy regarding the interview guide and questions was used for this, with the enquiries being elaborated on the basis of the research questions.

3.6 Reliability and Validity

Reliability and validity are used to evaluate the quality of a research. According to Van Thiel (2014), accessing the validity and reliability is extremely important in order to produce a credible study. Lincoln and Guba (1985) describe four criteria to access the trustworthiness of a qualitative research: credibility, dependability, confirmability and transferability. Credibility refers to the confidence that the results are true, credible and convincing; dependability refers to the repeatability of the results under the same research conditions; confirmability means that the results can be validated by other researchers; and transferability imply the generalisation or transfer of the results to other contexts (Forero et al., 2018).

To minimise any possible bias in the assessment of the data and ensure sufficient validity, triangulation was used in this research: data was collected through interviews, desk research and discourse analysis. Diverse theoretical approaches also complemented the data set.

Van Thiel (2014) also addresses the reliability of a research, explaining that it refers to the accuracy of the variables measured in the investigation. Guba and Lincoln (1994) address reliability as an obstacle to a constructivist study, stating that "the findings will be partially dependent on the researcher - and as such are transactional and subjective" (p. 111). To ensure that the reliability criteria are met, a detailed overview of the methodology is provided. The decision on the chosen discourses or the method of data collection is thus documented in this study.

Chapter 4: FINDINGS

In the previous sections of this Master's thesis, the theoretical and methodological basis for the study was established. This chapter focuses on the results from the analysis of the collected data in order to answer the main research question: *Do Bolsonaro's discourse practices promote deforestation and economic exploitation in the Brazilian Amazon?*

The analysis is divided into two sections. First, the data from the interviews are examined and discussed, and some quotations are provided to allow a detailed and accurate assessment of the interviewees' exposed ideas. Then, the findings from the discourse analysis are discussed and again some quotes help to illustrate the characteristics and intentions of the speeches. The literature and documentary analysis supports the argumentation for both analyses and provides data on recent changes in environmental legislation in Brazil.

4.1 Interviews

The coding process and analysis of the interviews provided important information about the interviewees' perceptions of the influence of Bolsonaro's discourses on the recent increase in deforestation in the Amazon. The presentation of findings follows the logic of the six code groups (Figure 3), which are explained individually below.

Code group 1: Defining Brazilian society

When contextualising the environmental situation in Brazil over the course of Bolsonaro's term, interviewees frequently mentioned some socio-political features of the country that led to Bolsonaro's election. According to them, in 2013, in a context where a large part of the population was dissatisfied with the left-leaning president Dilma Rousseff, protests over the price of bus tickets in São Paulo triggered an inflation of demands and served as an engine to bring right-wing issues into the political mainstream. In this scenario, Bolsonaro's life story and far-right political trajectory gave him the most anti-left position of all. Five years later, after Lula, the country's most important political actor until then was prevented from running and politically arrested, Bolsonaro was elected to represent a country that is overwhelmingly conservative in terms of values. For the interviewees, Bolsonaro's conservative agenda is often not linked to international environmental policy.

Another issue raised by the interviewees was about the recent political developments in the country. One of the respondents explained that "we came from a tradition where it was very common to have a Minister of Environment who was very attached to the sustainable agenda and a Minister of Agriculture who took a more aggressive view of production". In this scenario, these opposing forces faced each other and achieved a political balance of issues. However, since the election of Bolsonaro, the environmental aspect has taken a back seat and the focus is now entirely on the expansion of agricultural and mining land and economic development.

Regarding Brazil's social, economic and environmental characteristics, the interviewees stated that despite the environmental problems that exist, especially in the Amazon, the country's problem is not the lack of legislation, as Brazil is at the forefront of environmental legislation in the world. According to them, "our problem is impunity". This is because, with the exception of the crime of animal and vegetable trafficking, which is enshrined in the Trafficking Act, all environmental crimes carry very lenient penalties that are often commuted to community service.

In commenting on the functioning of Brazilian society, interviewees frequently mentioned Bolsonaro's reach on the internet. For the first time in the country, Bolsonaro's campaign focused on the internet and social media. Due to his high digital popularity, the president is often seen as a winner in terms of followers. However, respondents indicated that television still holds more power over Brazilian society, as 25% of Brazilians do not have access to the internet, and of those who do, a significant proportion have insecure access. They added that "television is still the most important means of communication [in the country], influencing people's behaviour and political positions".

Code group 2: Current government characteristics

According to the interviewees, Bolsonaro, despite freely expressing his "conservative agendas, agendas that don't care about sustainable economic development, that don't care about human rights, and don't care much about social inequality", won the sympathy of voters and was elected president in 2018. In this scenario, a far-right government, based on traditional values and support for archaic political structures was established in Brazil.

As one of the interviewees mentioned, former Environment Minister Ricardo Salles perfectly captures Bolsonaro's discourse and "fulfils very well the role Bolsonaro expected him to play". They added comments on a media-tainted episode in which Salles transported illegal loggers and miners in an official air force plane to meet in his cabinet, but never received environmentalists for a conversation. "In the news you do not see this kind of agreement with environmentalists, you only see him talking and arguing with those who commit crimes". For them, the government's behaviour gives those who want to economically exploit the Amazon the "password" to do what they want. As a result, we observe records of deforestation and the encroachment of agricultural production in places that should be conserved. One of the interviewees describes the government's action as a project: "it is a project, they are planning it."

In describing the environmental discourses of the current government, respondents also mention that there is only one discourse left within the federal government, namely the anti-environmental discourse, the discourse that does not deal with sustainability. Respondents also consider it a denialist government that does not understand the problems and consequences of global warming for Brazilian society: "We have never had a president who is so irresponsible with the environment and so opposed to the logic of sustainable development".

Code group 3: Making a comparison with previous governments

"In previous presidencies, there was never any denial that the environmental issue was a relevant problem in the country. There were no anti-environmental speeches as there are now." With this statement, one respondent argues that environmental problems were never denied by government structures and in some cases, such as when Marina Silva was Minister of Environment, the problems were addressed with great success. The interviewees consider that the previous presidents, even if they did not belong to an environmental party, appointed people who dealt with environmental issues to the Ministry of Environment, which was very helpful. They also mention that before Bolsonaro, the boards of the environmental organisations were composed of environmentalists and people with technical knowledge about environmental issues. For them, it was of great importance that at the head of these institutions there were qualified people who knew

the problems and the social structures in the Amazon, so that the deforestation rate in the Amazon decreased by 50% between 2005 and 2011.

However, respondents point out that environmental policies have also been deconstructed under the Lula government. According to them, some sectors such as mining, hydropower and agribusiness have received large investments and subsidies. They believe that these policies have been exacerbated in recent years, especially under Temer's presidency (2016-2018), and have eventually supported the actions of the current government. "The Temer government has given some signs of changing the legislation. For example, under the argument of promoting [economic development], of making the country grow, it has started to reduce bureaucracy in environmental licencing procedures. Respondents recalled that under previous governments, two huge infrastructure projects with high potential for environmental impact were approved. The Belo Monte dam, a controversial hydropower project, was approved under the Dilma government, and Santo Antônio do Giral, another large hydropower project, was approved under the Lula government, although IBAMA took a contrary view in both cases. For some of those interviewed, "the difference is that this one [Bolsonaro] has a bigger mouth, but the others have done the same thing".

Code group 4: Bolsonaro's discourses on the environment

According to the interviewees, there have always been crimes against the environment and conservationists in Brazil. Besides the recurring murders of indigenous people and environmentalists by loggers, miners or land grabbers, they mention two notable events in the country's history: the 1988 murder of Chico Mendes, a Brazilian rubber tapper, social activist and environmentalist and the assassination of Dorothy Stang, an American missionary, by loggers and cattle ranchers in 2005. However, the interviewees point out that there has never been an explicit incentive for this type of crime by the federal government. According to one of the interviewees, Bolsonaro encourages this type of crime by calling IBAMA inspectors "scoundrels", regularly using gun symbols and gestures, and communicating aggressively in his speeches. In one of the interviews, for example, it is mentioned that as soon as Bolsonaro publicly confronts environmental agencies, these organisations are attacked by environmental violators. They state that they often hear: 'The president said you cannot come here', 'The president said he will abolish the fine industry'.

With regard to the weakening enforcement of environmental laws in the country, respondents argued that this could trigger social reactions in the form of more environmental crimes. In this regard, one of the experts interviewed said, "I do not have scientific data to prove it, I have not done any analysis, I have not done any survey, but I feel that this decline [in enforcement] is giving an impetus to non-compliance with environmental laws." For them, the message from the current government is that environmental crime pays. In addition to reduced inspections, respondents said Bolsonaro's government discourses and actions on the environment include reducing the number of environmental fines, reducing sentences on those fines, and reducing staff in environmental enforcement organisations. "His discourse is causing damage that we will only see in the medium and long term". According to the interviewees, exploratory practises become common when the country's president considers that indigenous people have too much land and that it needs to be explored, that quilombola communities (settlements founded by escaped slaves in Brazil) do not need as much land as they have, and that we must allow the economic exploration of protected areas.

When asked about the possible reasons for the president's discourses, respondents indicated that they believe Bolsonaro is supported in some way by the economic groups he prioritises. Other reasons include pandering to the social groups that elected him and the fact that the president himself is a former ore prospector.

The interviewees nevertheless consider Bolsonaro to be consistent and honest to his words, because the president made it clear during the election campaign that his goal is not to protect the environment: "Since his election campaign he has said that he would focus on agriculture, that Brazil must grow, that we must occupy the Amazon". According to one interviewee, Bolsonaro has positioned himself politically with this behaviour. Acknowledging the environmental problem and acting in accordance with international protocols and international agreements would mean that he is behaving in the same way as left-wing and progressive political groups, the opposite of Bolsonaro.

Code group 5: Current environmental situation in Brazil

The main point raised by the interviewees in relation to the current Brazilian environmental situation was the decrease in law enforcement. One of the respondents exemplifies that in 2018 more than 20,000 fines were judged and resulted in the offender having to pay for the environmental crime. In 2020, however, there were just over 5,000 fines being judged. He adds that in the long term this can cause limitations on the practical definitions of environmental crimes, leading to crimes not being punished accordingly. The respondent recalls that Bolsonaro has already celebrated that he has reduced the number of fines from IBAMA. Moreover, according to another interviewee, the federal government also frequently paralyses IBAMA operations aimed to contain illegal mining within indigenous lands.

The respondents argue that the people who set the fires, who seize the land, know very well that they are operating outside the law, they know what they can and cannot do, they are clearly aware of it. However, when the government denies that there is an environmental problem in the country and passes laws legalising stolen protected land and amnestying environmental crimes, as it has already done, that is a very clear sign that the scenario has changed and such behaviour is now allowed. "They have always done that [exploring the Amazon], but the data shows that these illegal practises have greatly increased." In addition, interviewees note that the federal government is not the only entity that has influence over environmental problems. They say that we must also consider local and state governments, which may or may not be in collusion with criminals.

On the other hand, one interviewee explained that in Brazil, especially in the Amazon region, environmental crime is tolerated because people are concerned about their survival. For example, some of the ore miners in the Amazon are people who have no other choice. Coming from poor backgrounds, they see this activity as a way to improve their lives. In this sense, the interviewee defends that it is not possible to talk about sustainability without prioritising social justice: "It is difficult to talk about the environment, especially in Brazil, leaving aside economic and social issues. Perhaps this is the reason for the great difficulties we have in seeking more sustainable legislation and promoting convergence between economic, social and environmental actors".

Code group 6: Interviewee's opinions and characteristics

A procedural point worth highlighting in the interviews is the fear of two participants to reveal their names. One of them said: "I do not mind talking about my experience in this area, maybe we just leave my name out. Especially in Brazil, things are quite complicated". From such statements, one can see that they are not only afraid of social reprisals when doing their work as environmental inspectors, but also of reprisals from the government, which has the power to make changes in Brazilian environmental organisations, their employers. In 2020, when Ricardo Salles was still environment minister, a law was passed that prohibited IBAMA and ICMBio servers from speaking publicly on behalf of the institutions without permission from the ministry. The ban also included their personal accounts on social media. The ministry pointed out that posts from servers that contradict the government and current environmental policies can be punished (Menegassi, 2020). In addition, the respondents mentioned that "two IBAMA career officials were exonerated from leadership positions because they commanded operations that destroyed machines [used in environmental crimes, which is a common and legal way to stop the crime]".

When asked what solutions they would propose for the current environmental emergency in Brazil, all respondents mentioned the possibility of one of the more than one hundred impeachment motions passing Congress and removing the president from office. However, given the current power structure surrounding Bolsonaro, they have no hope that this will happen. Furthermore, respondents do not see any chance that the change of ministers in the Ministry of the Environment, which has already taken place, will lead to a positive change in the national environmental scenario, as the nominations for ministers come from Bolsonaro and he will always appoint someone who corresponds to his values. A possible positive change, according to one of the interviewees, refers to the 2022 elections in Brazil and the possibility of society electing a president who is committed to environmental issues. In addition, all interviewees mentioned the need for the civilian population to organise and demand change: "I think we need to mobilise. The population must organise itself, it must make demands and go to the press".

4.2 Discourse Analysis

The analysis of Bolsonaro's statements on the environment revealed five main features of his discourses. The context in which the speeches were made, as well as the audience, the place and the Brazilian scenario at that time were taken into account in the elaboration of the results. The presentation of the results follows the logic of the five code groups (Figure 3), which are explained individually below.

Code group 1: Linguistics characteristics

In analysing Bolsonaro's discourses on the environment, some features of the way he expresses his ideas could be identified. First, the president uses a populist rhetoric. According to Wehner (2022), populism is a discursive practice and political strategy in which the populist leader "exercises power with the support of mostly unorganised followers with whom they establish an unmediated and direct relationship" (p.3). Moreover, in a populist rhetoric, two opposing subjects appear: the people and the elite, an opponent that must be fought. Some examples of Bolsonaro's populist rhetoric are that he refers to the environmental authorities and workers as the forces that might be restricted in the country. By declaring that "there can be no Shiite environmentalism in Brazil. We will put an end to the indigenous land demarcation industry", or that "we will put an end to this

industry of fines in the countryside", or even that "rural people should no longer be afraid of environmental inspections", the president positions himself on the side of agribusiness (or the people) and suggests that environmentalists are the enemies of the country: "There are ICMBio and IBAMA inspectors who go onto the countryside to punish the people". In addition, Bolsonaro often mentions religious aspects in his speeches, such as "we wait and ask God to enlighten the minds of all" when referring to the environmental authorities actions.

An aggressive or authoritarian tone can also be frequently noted in the president's discourses in relation to IBAMA and environmental enforcement agents. In one of the speeches analysed, he states that "Those environmentalists, that's right... If only I could, I would restrict them to the Amazon. They are so fond of the environment!". He also often uses terms that demonstrate his power towards them. Citing the actions of Ricardo Salles at the Ministry of the Environment, Bolsonaro demanded, "Fire them all! I do not want Shiites to occupy these posts [in IBAMA]". On the other hand, when commenting on the actions of IBAMA inspectors to destroy machinery used in environmental crimes, he claimed, "It's not about burning anything, machinery, tractors, whatever. That is not the approach, that is not our orientation". Contrary to Bolsonaro's claim, the legislation allows for the destruction of equipment and vehicles seized during environmental inspections through Article 11 of Decree 6.514 of 2008 (Infrações, 2008). In another situation, when asked by a reporter about international obligations in relation to the Paris Agreement, he stated, again aggressively, "I will withdraw from the Paris Agreement if this remains an issue. If our part is to give up 136 million hectares of the Amazon, I am out".

Disrespectful, sarcastic and vacuous comments were also evident in Bolsonaro's discourses. When asked by a reporter to comment on the country's environmental problems and how the government is addressing them, the president replied, "You talk to me about environmental pollution. Just poop every other day, that will also improve our lives a lot". In another situation, Bolsonaro claimed, without any evidence or sources for his statements, that environmental NGOs are being funded by American actor Leonardo DiCaprio to set fires in the Amazon and blame the Brazilian president: "The NGO workers, what did they do? What is easier? They set the forest on fire. They take photos, film, the NGO makes a campaign against Brazil, gets in touch with Leonardo DiCaprio, and Leonardo DiCaprio donates 500 thousand dollars to this NGO. Part of that went to the people who set the fire, right? Leonardo DiCaprio collaborates with the fire in the Amazon".

Code group 2: Focusing on economic development

One of the main features of Bolsonaro's discourses is that he often tries to make his speeches as if he is about the people, but he tends to limit himself to the issue of economic development. The president often praises agribusiness and says that the current focus on environmental concerns should be directed towards agribusiness and its role in the economic development of the country. In some of the statements analysed, for example, he pointed out that "agriculture carries Brazil on its back" and that "agribusiness is largely the locomotive of our economy".

Referring to the participation of previous governments in international meetings dealing with issues of environmental protection and traditional communities, he criticised the practises of other governments, saying that they hindered the economic development of the country: "After such meetings, they demarcated dozens of indigenous territories, demarcated the land of the quilombolas, expanded protected areas, and this has hindered our progress.

In mentioning illegal mineral exploration on indigenous territories, Bolsonaro notes that environmental reserves and indigenous peoples' lands usually contain a wide range of minerals, and suggests that other countries are interested in these resources: "This is the case in the Yanomami and Raposa Serra do Sol reserves. In these reserves there are large quantities of gold, diamonds, uranium, niobium and rare minerals, among others. This shows that those who attack us are not concerned about indigenous peoples, but about the mineral resources and biodiversity that are present in these areas". At the same time, he defends that indigenous territories should be economically explored because "indigenous peoples do not want to be poor landowners on rich land. Especially not on the richest land in the world."

Code group 3: Criticising environmental enforcement

As already mentioned, another aspect of the Brazilian president's discourses is the constant criticism of environmental control in Brazil. Meaningful statements such as "they want to kill the country man" and "this is a whim of these inspectors, some inspectors from IBAMA, who cannot continue acting like this. The rural man can no longer be intimidated by the inspections" define Bolsonaro's opinion on the work of the environmental commissioners.

Bolsonaro often associates the protection of the environment with a lack of economic development. In one of the statements analysed, he defended that the designation of protected areas favours small groups, fills the pockets of a few people and prevents real development of these regions. The president also argues that environmental licenses should not stand in the way of large infrastructure projects. At various moments, Bolsonaro explains that there is an "environmental fine industry" and an "indigenous land demarcation industry" in the country and how it interferes with any attempt at economic progress.

Brazilian environmental legislation is also a target of Bolsonaro's criticism. "We have problems: environmental laws, problems that are brought to court" and "we cannot have an environmental policy like we had until recently" are some of his statements on the subject. Moreover, the president often uses the argument of national sovereignty to justify non-compliance with international agreements. Denying the global importance of protecting the Amazon, he also stated that "it is a fallacy to say that the Amazon is a heritage of humanity, and a fallacy, as scientists confirm, to say that the Amazon is the lungs of the world".

Code group 4: Criticising someone

In the statements analysed, without any evidence or concrete information to support his arguments, Bolsonaro explicitly pointed out that indigenous leaders usually work in the service of international economic interests: "Often some of these leaders, like Cacique Raoni, are used by foreign governments in their information warfare to advance their interests in the Amazon". The Kayapó indigenous leader Raoni Metuktire is a worldwide symbol of resistance against the industrialisation and deforestation of the Amazon rainforest (Watts, 2020).

The heads of state of other countries are also frequent targets of Bolsonaro's criticism. After Emmanuel Macron convened the G7 countries to discuss the Amazon fires during the 2019 meeting, Bolsonaro responded that the French president "bought the lies of the media and behaved in a disrespectful and colonialist way", noting that other countries "have questioned what is most sacred to us: our sovereignty!".

The Brazilian president uses a conspiracy scenario to claim that NGOs in the Amazon are working for international interests: "Why are there so many NGOs in the Amazon, if they care so much about the environment and the people, and zero in the northeastern semi-arid region? Answer me this question: are they concerned about the people or about other future interests in the area?". Criticising possible international sanctions against Brazil over the Amazon fires in 2019, Bolsonaro said, "At the G7 meeting, one of them dared to propose sanctions against Brazil without even listening to us. I thank those who did not accept this absurd proposal".

Code group 5: Blaming someone else for the fires

When it comes to shifting blame, this strategy appears in different moments and contexts in Bolsonaro's statements. In various situations, Bolsonaro was asked by interviewers who was responsible for the fires in the Amazon and what the government was doing to contain them. As mentioned earlier, in one of the situations the president blamed alleged links between environmental NGOs and the actor Leonardo DiCaprio as the most likely culprits.

Previously mentioned statements also show that Bolsonaro has taken an aggressive and victimised position regarding the fires in the Amazon. The following statement shows another of his answers to a journalist's question about the responsibility for the fires: "It's the indigenous peoples! You want me to blame them? Are you going to write 'the indigenous communities' tomorrow? Do you want me to blame the Martians? In my opinion, this is a clear sign that these NGO people have lost their 'tit'. It is quite simple. It could be a pawn. Everyone is a suspect, but the biggest suspicion comes from the NGOs".

4.3 Literature and Documentary analysis

The results of the literature and document review provide additional information on the environmental scenario in Brazil during Bolsonaro's term as president of the country. The following paragraphs address issues that support answering the research questions. The main documentary review conducted refers to possible changes in environmental legislation since 2019.

After Bolsonaro's election in 2018, the expected scenarios for the Brazilian environment in the coming years foresaw a possible dismantling of regulatory environmental instruments in the country (Scantimburgo, 2018). Scantimburgo (2022) points out that the predictions are being confirmed today. The weakening of environmental regulators through massive budget cuts and political interference in their work are part of an approach to economic development that sees efforts to promote sustainability and protect indigenous communities as obstacles to economic growth. Moreover, the author argues that in addition to dismantling, there is also a manipulation of these environmental organisations with the aim of excluding public participation, as can be seen, for example, in the National Environmental Council (CONAMA). A presidential decree reduced the composition of CONAMA from 96 to 23 members. The government and the economic sector were given the majority of seats on the council and the participation of civil society and states was reduced. The government also dissolved the committees that managed the Amazon Fund, which led to a dispute with Germany and Norway, some of the funding countries, and the cancellation of the transfer of R\$2.9 billion that was to be used for measures to combat deforestation in the Amazon. Moreover, the aforementioned cut in the budget for environmental inspection, which in 2021 was the lowest in the last 20 years, is another manoeuvre by the government to achieve its

goal of prioritising economic activities over the environment. In the 2022 annual budget, funding for environmental inspection and forest fire control was cut by 27.4%.

According to Observatório do Clima (2021b), in his first year as president, Bolsonaro has fulfilled one of his campaign promises: to end the "environmental fine industry" in the country. Decree 9.760/2019 created an reconciliation board, another organisation to which violators can turn to avoid paying fines. Now the offender has another option: he can opt for mediation in case of a fine notice. It is important to point out that by creating additional bureaucracy in the federal administration to "reconcile" environmental fines, the Bolsonaro government has effectively ended any possibility of actually punishing the criminals, since anyone caught in an environmental violation has the option of appealing indefinitely and is never effectively convicted.

Several times in this study the issue of demarcation of indigenous land is addressed. At first glance, this may not seem to have much to do with the increase in fires in the Amazon, but securing the right to land for traditional Brazilian communities could be a crucial factor in preserving the world's largest tropical forest. A report in the newspaper El País explains the importance of considering this relationship and how the issue has evolved recently in Brazil.

According to the report, Jair Bolsonaro is the first Brazilian president in the last 35 years who has not established a single indigenous land or ecological reserve during his term. This is what he promised on his election campaign. However, it is a decision that directly harms indigenous peoples, promotes the invasion of their lands and, above all, hinders the fight against deforestation and global warming, because traditional and indigenous communities are strong allies in the fight against criminal fires and deforestation in the Amazon. In this sense, stopping the demarcations is part of the progressive dismantling of Brazilian environmental and indigenous policies. The consequences of such measures are manifold. First, land conflicts remain open or even intensify. In the words of indigenist André Villas-Boas, the report adds that the demarcation process puts an end to land conflicts. Without this official recognition, the lands in this limbo are an easier target for criminals or for people seeking a livelihood in the absence of alternatives. Invasions then proliferate to exploit the region economically, whether through mining, logging or simply clearing the area to create pasture - often using fire. Another common option is to settle illegally on the land, engage in an economic activity - such as cattle ranching - and hope that over the years a president will issue an amnesty legalising the occupation. According to the report, the expectation that Bolsonaro will act in this way has led to a sharp increase in invasions and criminal fires in the Amazon. Demarcating land is usually a years-long process that involves bureaucracy, litigation and expeditions to establish territorial boundaries. However, once indigenous lands are demarcated, their inhabitants and the nature that surrounds them can enjoy legal protection (Gortazar, 2021).

The literature and documentary analysis has also revealed one of the main characteristics of the Brazilian president and his supporters: they are known for spreading misinformation or "fake news" (Silva, 2020). For example, during the UN General Assembly in September 2021, Bolsonaro declared that the country's "modern and sustainable low-carbon agriculture feeds more than 1 billion people in the world and occupies only 8% of the national territory" and mentioned a 32% decrease in deforestation in the Amazon in August 2021 compared to the same month in 2020. However, a report by the Instituto Socioambiental, a Brazilian civil society organisation, analysed Bolsonaro's misinformation, distortions and lies at the conference and showed why he is a constant target of fact-checking organisations. The report argues that Bolsonaro made inaccurate statements about Brazilian agriculture on the occasion. The agricultural area mentioned does not

take into account livestock farming, which occupies about 22% of the country's land and can cause the highest level of environmental degradation among agricultural activities. Moreover, when analysing deforestation rates, the report argues that one needs to look at a more general context over a longer period of time. Moreover, between 2019 and 2020, Brazil set a new record in the Amazon with the highest deforestation rates of the decade. Furthermore, Bolsonaro stated that Brazil still retains 66% of its original vegetation, and that this is the same level it has had since the Portuguese arrived in 1500. According to the report, not only is it obvious that the country is not preserving the same native vegetation for over 500 years, but the president is also hiding the fact that Brazil is leading the world in the destruction of tropical forests. Citing data from Global Forest Watch, a web application that monitors the world's forests in near real time, the report states that the country is responsible for about one-third of the total loss of primary tropical forests. (Souza, 2021)

Complementing the discourse analysis conducted in this study, a survey led by the Brazilian newspaper Folha de São Paulo shows that Bolsonaro does not raise the issue of the environment very often on Twitter - one of the president's main platforms for reaching out to the electorate. The Environmental Policy Monitor, a tool that monitors the publication of regulations and laws related to the environment in the country, was used to analyse Bolsonaro's posts on the microblogging platform. According to (Climainfo, 2021), 344 tweets related to the environment were identified in the period analysed. However, the topic that received the most attention from the president was transport (103 posts). The Amazon was mentioned in 59 posts, of which 19 were related to economic development and 17 to national sovereignty. Together (36), they received more attention than generalist forest protection posts (28). The analysis also showed that during times of high deforestation rates, the president does not usually post about environmental protection. During these times, the president's tone on Twitter tends to be defensive and nationalistic in response to possible international criticism of the government. During the period of most fires in the Amazon in 2019, for example, Bolsonaro's posts sought to downplay the problem and attack critics such as French President Emmanuel Macron.

Chapter 5: CONCLUSION AND RECOMMENDATIONS

To conclude the thesis, the following section addresses the answers to the three sub-questions that have been explored throughout the research process to provide an informative background for the final answer to the main research question. Limitations, considerations and further recommendations then complete the study.

5.4 Research questions revisited

Brazil's current socio-environmental scenario reflects the results of the Bolsonaro government's dismantling of environmental regulation enforcement, constant attacks on control institutions and discourses against its servers and environmental standards. Since 2019, when the current government took office, the number and scale of forest fires have increased and deforestation in the Amazon has greatly expanded without the government identifying and punishing those responsible for the fires. In addition, the Bolsonaro government constantly tries to incriminate indigenous peoples, non-governmental organisations and environmentalists, and intimidates and represses environmental officials from acting.

Sub-question 1:

What are the President's dominant discourses concerning Amazon conservation and other environmental issues?

Interpreting the results of the discourse and interview analysis, it can be argued that Bolsonaro shares the same beliefs and concerns as Ricardo Salles and the discourse on economic development. By embracing far-right and conservative agendas that aim to drive large-scale exploitation of natural resources in the Amazon, the president uses populist rhetoric in his speeches. Bolsonaro positions himself 'on the side of the people' and often mentions conspiracy theories to support his ideas on the importance of fighting to preserve national sovereignty against the malicious greed of foreign countries over the Amazon. According to Wodak (2015), populist politicians often make false claims, insult their opponents and minorities, and create "smokescreens" to divert attention from scandals and crises in their government to other issues. As is common in Bolsonaro's discourses, such strategies are used to play the victim and deny his own culpability in a scenario of alleged sabotage of his government. This is an important feature of how the populist discourse in Brazil is geared towards destabilising the political and social scenario with scandals and lies.

In a demonstration of power, Bolsonaro employs an aggressive tone to convey his criticism of Brazil's environmental legislation and enforcement mechanisms. Using disrespectful and negative words when referring to environmentalists and environmental inspection agents (as 'xiite' and 'scoundrels'), he spreads a discourse that does not care about environmental issues or sustainability. Bolsonaro often criticises past government's actions, blaming them for the current problems present in Brazil today. A special target of his criticism is the former president and his principal opponent in the 2022 elections, Lula. Moreover, Bolsonaro's discourses and responses on the increased deforestation rates in the Amazon often contain critics to environmental NGOs, indigenous leaders and even random people, as Leonardo DiCaprio.

His focus on promoting agribusiness through the occupation of protected areas such as the Amazon and indigenous territories goes hand in hand with his discourse of denial. Bolsonaro denies global warming and many other current environmental problems as well as the notion of sustainable development. His discourses often convey the idea that deforestation of a region enables its development and that such development is only possible through the expansion of traditional agricultural activities.

Bolsonaro is an enthusiast of informal pronouncements, especially on social media, and uses them not only for communication but also for social mobilisation. When it comes to the Amazon, however, the president is rather reserved and rarely comments on the biome. Most of his content on social media does not even address the protection of the forest, but rather repeat catchphrases and typical jargons of his speeches, such as economic exploitation and the alleged threat to Brazilian sovereignty.

Sub-question 2:

What has changed in environmental governance in Brazil since the election of Bolsonaro?

In the last almost 4 years, the current Brazilian government has significantly cut the budget for environmental protection agencies, environmental policy and law enforcement. For example, the budget allocated to the National Policy on Climate Change (PNMC, in Portuguese) was cut by

95% in 2019 (Pereira et al., 2020). The PNMC was established in 2009 and promulgates the country's voluntary commitment to the United Nations Framework Convention on Climate Change.

Moreover, the R\$1.72 billion set by the government as the budget for the Ministry of Environment and other environmental protection agencies in 2021 is the lowest in two decades. Since 2000, the figures have never been lower than R\$2.9 bi. Despite increased deforestation rates in recent years, the 2021 figure represents a 27.4% reduction in the budget for environmental protection and forest fire control compared to 2020. Compared to 2019, it is a 34.5% reduction. In addition, part of the budget for 2021, which is specifically earmarked for the creation and management of nature reserves, has been reduced by 61.5% compared to 2018, the last year before Bolsonaro's term in office (Observatório do Clima, 2021a).

As the focus of environmental governance has shifted to the expansion of agriculture and mining, the enforcement of environmental laws in the country has declined drastically. Although the main environmental legislation has not changed since 2019, the reduction in inspections, in the number and collection of fines, in the penalties for criminals and, most importantly, in the environmental agency staff account for the sharp decline in law enforcement in Brazil. Moreover, amnesty for past environmental crimes is a common reality, especially when the perpetrator is the president himself (who was fined by IBAMA in 2012 for illegal fishing, which was revoked after he won the election).

Past presidents may not have been closely aligned with environmentalist fronts, as some damaging projects aimed at economic and social development were still approved, but Brazil's last presidents never denied the importance of environmental issues and put environmentalists in charge of environmental governance in the country. The Ministry of Environment used to be someone who championed environmental concerns and had great ambitions for environmental protection in Brazil. In addition, there has always been a risk of environmental crime in the country, but recently it may have increased. During past governments, more and more strategies were developed to fight these crimes, even if they were not always successful. Today, these strategies no longer exist. Once an admired profession, environmental workers now often fear for their jobs or even their lives. Retaliation in the form of words or political interference from the government or in the form of violent actions from society have made doing their job more difficult than ever.

However, the federal government is not the only instance that influences these issues. We must also look at local and state governments, which may or may not conform to Bolsonaro's ideas and actions. Moreover, the dismantling of Brazil's environmental controls is not just a characteristic of the Bolsonaro government. The Lula and Dilma governments also flirted with cutting the environmental budget and prioritising large damaging infrastructure projects. However, the implementation of these projects followed public consultations and a series of measures related to the concepts of sustainable development and the green economy. Similarly, developed during the Lula administration, the strategic Action Plan for the Prevention and Control of Deforestation in the Legal Amazon (PPCDAM) was responsible for the largest reduction in greenhouse gas emissions ever undertaken by any country and has shown that preventing and combating environmental crimes, curbing deforestation, is a possible reality if the political will is there.

Sub-question 3:

To what extent has deforestation of the Amazon increased since Bolsonaro was elected?

During the presidencies of Lula (2003-2010) and Dilma Rousseff (2011-2016), environmental issues were addressed along with neo-developmental goals by turning to the paradigm of 'ecological modernisation' and promoting 'green capitalism' (see Hopwood et al. 2005). After the impeachment of Dilma Rousseff in 2016, Michel Temer (2016-2018) became the country's new president. During his term, Temer took some measures to boost the economic development of natural areas and indigenous lands (Menezes & Barbosa, 2021), such as reducing the legal territory of protected natural areas to include existing deforested regions, building new roads and expanding large-scale agricultural operations on indigenous lands (Tollefson, 2016). After Bolsonaro's election, these measures have been further advanced through legal and institutional changes, limiting participatory decision-making that goes beyond Temer's approach and "openly targeting environmental defenders themselves" (Menezes & Barbosa, 2021, p. 231)

According to Menezes and Barbosa (2021), the current Brazilian government's changes in environmental policies and practices have led to a 34% increase in the rate of deforestation over an area of more than 10,000 square kilometres in a 12-month period between 2019 and 2020, the highest level in a decade. Data released by INPE shows that deforestation in the Brazilian Amazon reached 13,000 square kilometres in 2021, a 22% increase from the previous year. Since measurements of deforestation began in 1988, this is the first time there has been an increase for four consecutive years. This is also the third consecutive increase in deforestation during Bolsonaro's term in office (Observatório do Clima, 2021d).

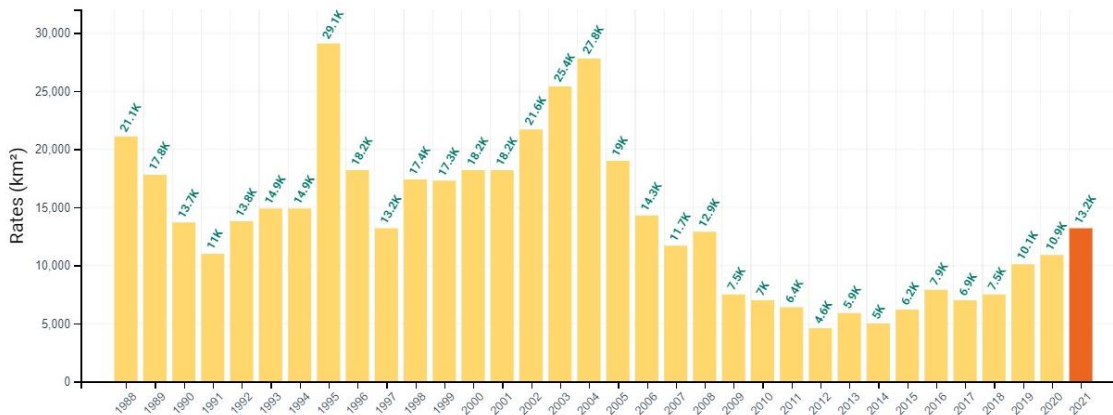


Figure 5: Deforestation rates in the legal Amazon from 1988 to 2021. Source: TerraBrasilis (2022).

The INPE Real-time Deforestation Detection System (DETER) identifies new deforestation in the Brazilian Amazon and sends a real-time alert to environmental control authorities to investigate possible illegal logging. DETER does not identify the causes or perpetrators of deforestation, but studies show that in most cases loggers, ranchers, miners and land grabbers carry out the illegal activities (Escobar, 2020).

Main research question:

Do Bolsonaro's discourse practices promote deforestation and economic exploitation in the Brazilian Amazon?

Given the qualitative nature of this research, it is not possible to positively affirm that there is a specific causal link between the President's discourses and the increase in deforestation rates and economic exploitation in the Amazon since 2019. However, taking into account all aspects raised in answering the sub-questions, it can be argued that Bolsonaro's words and actions have explicitly incentivised environmental and social crimes related to environmental protection.

Despite all the changes that the current government has pushed for in the country's environmental governance, its negative impact on the Amazon cannot be seen only in the form of decrees and budget cuts. Bolsonaro's destructive power is also evident in his discourses. As Foucault suggests, particular discourses can determine the way we think, speak or act in society. Since discourse in this sense is an act of power that can control people's actions and compel certain behaviours (Inglis & Thorpe, 2019), it can be argued that Foucault's symbolic structures or 'formative rules' explored by Reckwitz (2002) are represented in the discourses of the Brazilian president when he claims, for example, that the preservation of the Amazon is holding back the economic development of the region or that the enforcement of environmental protection should not be carried out in the country. Moreover, as Foucault (1970) mentions, the influence that a particular actor can have in shaping norms and rules depends on his or her power in society. Thus, since Bolsonaro is the president of Brazil, we can argue that such discourses have a direct influence on societal (re)actions regarding environmental issues in the country. These reactions bring together people with converging interests and opinions and form discourse coalitions that aim to validate their way of thinking (Hajer, 1995). In practise, a strong polarisation of ideas and values divides the country. One part of the population is concerned about the social and environmental problems caused by the president and therefore wants Bolsonaro to leave the government as soon as possible. The other part follows his discourses and principles and believes that society should be able to explore the Amazon economically.

As mentioned above, Bolsonaro very often spreads misinformation and negative words about environmental protection in his statements (or posts on social media). Some of these speeches may be local, at small events with a specific group of listeners, but through the internet and the diversity of today's media, they are widely disseminated and amplified, leading to social reactions both for and against his statements. Hajer (1995) adds to Foucault's ideas by noting that discourses are often transformed into particular practises or a set of practises. In this sense, the features, scope and power embedded in Bolsonaro's discourses on the Amazon can be seen as drivers of the recent increase in deforestation rates.

Two concrete examples of this probable relationship happened in the Amazonian state of Rondônia in 2019. After Bolsonaro said in a conversation with supporters that IBAMA inspectors could not destroy machines used in environmental crimes, the region saw a 455% increase in deforestation reports compared to the previous month. In July, Ricardo Salles met with loggers to hear their demands, days after an IBAMA truck was set on fire during operations carried out in the region. More than 70 illegal logging companies were shut down in the operation. During the visit, the minister acknowledged the importance of timber production in the state and said he would look into the demands of the category. Once again, there was a 332% increase in deforestation alerts compared to the previous month (Werneck, 2020). In addition, a BBC News Brasil article with Angela Mendes, daughter of Chico Mendes, recalls the motivations behind the 'Day of Fire', where

farmers organised fires in forest areas on the same day to make it harder for environmental authorities to control and punish them. According to Angela, the group was encouraged by the president's discourses criticising these control bodies: "This kind of attitude encourages and trivialises violence" (Fellet, 2022).

Although discourse analysis cannot provide sufficient evidence of how ideas are interpreted by the audience, when the president of a country speaks out against compliance with existing laws, it can be interpreted as a 'green light' for unlawful action. The presumed societal reactions to Bolsonaro's discourses are doing long-term damage not only in Brazil. Global warming, one of the world's biggest issues, is barely mentioned by the president, nor is the proven impact of Amazon deforestation on the increased effects of climate change. When he does mention the climate problem, he underlines his vacuous argument that climate change is an excuse for other countries to take over the forest.

During the interviews, respondents mentioned that they perceive a sense of permissiveness towards environmental crimes in their social groups. This permissiveness refers to the fact that people feel free to explore the Amazon and that there is no punishment for violating environmental laws. Noting that "a word has power", one interviewee argues that Bolsonaro's discourse is the main cause of this feeling. As defined by Giddens (1984), social meanings and rules shape human activities that reproduce "structural features of wider social systems" (p.24). In this sense, as much as a discourse affects people differently depending on the situation they are in, as the dominant discourse in Brazilian society relates to the economic exploitation of the Amazon, the corresponding discursive practises could not be different from what they are today.

Nevertheless, it is important to note that some of those involved in the land grabbing and economic exploitation of the Amazon do so because they see no other way to earn a living. The changes in development models that began in the 1970s led to a diversification of production models and social relations in the Amazon. The large-scale monetisation of natural resources such as fishing, agriculture and extraction products by large capitalist companies affected important livelihoods and led to the exploitation of labour, increasing social inequality in local communities.

More than demanding society to take action to ensure the sustainability of the forest, it is important that governments promote long-term livelihood opportunities for the Amazon's inhabitants. In a dimensionally continental and economically unequal country, it is only possible to achieve environmental justice if social justice has already taken place.

5.5 Limitations and Reflections

5.5.1 Limitations

One possible drawback in investigating the influence of Bolsonaro's discourses on the increasing fires in the Amazon is the difficulty in finding truthful information about the real motives of the perpetrators. Were they aligned with the president's discourses? Or was it just a coincidence? In a qualitative study, the result will never be something exact and affirmative. Nevertheless, this study examines the social and political events that took place in the country and tries to get as much information as possible about the connection between the discourses and the actions practised by the criminals. The subject has been analysed in order to represent the social and environmental reality of Brazil today.

In addition, due to the Covid-19 pandemic, an important phase of the research could not be conducted. In order to collect data on the ground, an observation was to take place in the Amazon region, analysing the proponents of the current government and their practices. To minimise the impact of this limitation, the interviews' respondents were asked if they had information on the current level of support for the Brazilian president among their colleagues, relatives and acquaintances. They were also asked whether they had the impression that Bolsonaro's discourses were influencing these actors in their thoughts and actions.

5.5.2 Reflection on the role of the researcher and the research process

As this study is interpretative in nature, it was very important to apply a structured, precise and unbiased methodology. Therefore, several theories were used to support the practical considerations. Due to a limited time and scope, this study only analyses a certain selection of data. For example, it only analysed Bolsonaro's statements specifically related to the environment or the Amazon. The analysis of statements on other topics in which the Amazon or the environment are less mentioned may lead to different results, as it looks at the topics from a different perspective. Therefore, caution should be taken when interpreting the results. In addition, personal beliefs and political preferences were excluded as much as possible when conducting the interviews, so that respondents could express their own point of view on the issues raised. However, since conducting a discourse analysis involves social and political motivations of the researcher (Wodak & Meyer, 2009), a researcher with a different background could have made different decisions during data processing that would have led to a different interpretation of the results. The discourse analysis and the interpretation of the results were therefore conducted as neutrally as possible to limit personal influence and bias on the study.

5.5.3 Recommendations

The main theoretical contribution that this study aims to make relates to discourses and framing theories. In order to better understand the characteristics of certain political discourses and the connection they might have with specific social reactions, it is recommended that further research on this topic analyse the influence of external events in the social context. As the results show, when the Brazilian president talks about the Amazon, framing it as crucial for the country's economic development and national sovereignty is a constant. As Benford & Snow (2000, p. 628) mention, framing does not take place in a "structural or cultural vacuum" but is influenced by events from the socio-cultural context. These so-called dislocation events (Hajer, 1995) can draw attention to certain problems and lead to a changed perception of the problem. According to Hajer & Versteeg (2006), dislocation events can create the possibility for new discourses to emerge, as they can break the legitimacy of the dominant discourse. Therefore, future research on dislocation events, such as possible changes in the social definition of economic development or national sovereignty over time, may reveal how such events may produce changes in the discourse on the Amazon - and what impact this shift may have on deforestation rates.

Moreover, as mentioned, this study used only formal and informal Bolsonaro's speeches that were specifically focused on environmental issues and the Amazon. However, it is very likely that the topic was also introduced on formal discussions related to economic development and national sovereignty strategies. Therefore, analysing a greater scope of discourses can provide a more precise indication on the influence of such discourses on the deforestation of the forest.

Practical recommendations that emerge from this study concern Brazilian society and politics. Although it may be difficult for a society to focus on solving environmental problems addressing nature conservation while a portion of its people lives in food insecurity or lacks adequate housing, various economic and governmental actors could take action to invest in creative and innovative solutions that address the environmental problem while promoting the country's economic and sustainable development. For example, instead of handing over the Amazon and other globally important biomes to land grabbers, predatory cattle ranchers and illegal miners and loggers under the pretext of promoting the economic development of these regions, governments, industries and other social actors could invest in other resources that are abundant in Brazil. Implementing massive sustainable development projects based on renewable resources such as wind, solar and biofuel can boost the country's economy while preserving its greatest treasure, the Amazon forest.

Moreover, civil society must be active in the 2022 elections and vote for candidates who support the social and environmental agenda and do not legislate for predatory industries. Several studies and, perhaps more importantly, the knowledge of indigenous and riverine communities show that the Amazon is perfectly capable of generating income and livelihoods for its inhabitants without cutting down its trees or digging up its soils. A sustainable use of the forest in an organised and planned way that ensures equal distribution of natural resources can promote genuine economic development in the region. The prevailing system today harms many, including the global environment, and leaves only a few to produce wealth. Acai, cocoa, latex, cashew nuts are just a few examples of products that have been extracted for a long time without harming the environment or jeopardising the future of the forest. The focus on conversion to agribusiness only contributes to income concentration, inequality and all the crimes that are prevalent in the region as a result, including land grabbing and the invasion of indigenous territories. The policies currently being pursued by several international actors show that there is no possible development path for countries if it is not within the global environmental parameters agreed in the recent climate conventions.

"While they kill, we live and raise more voices. Those who shot at Chico missed the shot. They thought they had killed him, but they did not, because his ideas are there, we continue to talk about him. And if we continue to talk about him, it is because he is still alive."

Angela Mendes, Chico's daughter

Chico Mendes was murdered in his home in 1988 because he was a defender of the preservation of the Amazon and its indigenous peoples. 19 years later, he named one of the largest environmental organisations in the country - the Chico Mendes Institute of Biodiversity Conservation. Despite massive budget cuts and constant disruptions to its monitoring activities over the last four years, ICMBio continues fighting to save the world's largest tropical forest.

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APPENDIXES

Appendix 1: Interview Guide

Research topic: Influence of the Bolsonaro government's discourses and practices on the recent increase in deforestation and degradation rates in the Amazon.

Interviewer: Thaina Lima - Forestry Engineer, Master's Student in Environment and Society - Radboud University

Interviewee: _____

(English)

Introductory questions:

1. About recording the interview and disclosing name/function.
2. Tell a little about your profession and experience.
3. Are you currently a member of a political party or social movement or have you been in the last 2 years?

The environmental scenario since Bolsonaro's election:

1. How would you assess the current environmental situation, especially since 2018/2019?
2. How would you define the discourses and practices of the current government, especially in relation to environmental issues?
3. When you compare the tenure of the current government with the previous ones, do you notice any changes in the discourse, especially in relation to environmental issues?
 - a. (If yes) To what do you attribute this change or what factors are responsible for the government's adoption of an anti-environmental discourse?
4. In general, are you aware that there is a relationship of influence or cause and effect between the discourses of a particular government and society's response to those discourses?
 - a. Do you think this relationship exists in Brazil today?
 - b. Can you give examples of situations where this has been the case (especially in the context of your work)?
5. Do you think that the discourses and practices of Bolsonaro and his government have had an impact on the recent increase in the economic exploitation of the Amazon?
6. Do you think that the government's speeches had an impact on the "Day of Fire"?
7. What do you think different sectors of society and individuals could do to curb the advance and social influence of this type of discourse?

Appendix 2: Bolsonaro's statements examined through Critical Discourse Analysis

Transcripts translated from Portuguese	Date	Means of communication	Audience	Context
"The future of the Ministry of Agriculture, which is very important. Agriculture is carrying Brazil on its back. And look at the problems that the rural population has, in addition to the MST, in addition to the problem of the rural fund, the problem of the Kandin law. The fines they impose are absurd. The fines they impose on producers, especially in Rio Grande do Sul, Mato Grosso do Sul, also in Pará, in the entire country, but in these states with much more force. They want to kill the country man. We have even thought of merging the Ministry of Agriculture with the Ministry of Environment. Then the game will be over, the game of this battle between ministries will be over. And who will nominate are the farmers, it is the agribusiness organisations that will nominate"	14/05/2018	Own Youtube channel	National audience	The then member of parliament defended that, if elected for presidency, nominations for the Ministry of Agriculture, which would inherit the functions of the Ministry of Environment, would be made by farmers
"I will withdraw from the Paris Agreement if this remains a topic. If our part is to give up 136 million hectares of the Amazon, I am out. What is at stake is national sovereignty, because it is 136 million hectares over which we have lost control"	03/09/2018	Interview to reporters	Global audience	During the presidential campaign
"I want to merge the ministries of agriculture and environment. There can be no Shiite environmentalism in Brazil. We will put an end to the indigenous land demarcation industry. Then the farmer will know that they will not demarcate his farm as indigenous land overnight. There are ICMBio and IBAMA inspectors who go to the land to punish people"	09/10/2018	Interview to TV Bandeirantes	National audience	During the presidential campaign
"Tourism linked to the environment is a great, proven formula for conservation. Claiming it untouchable works in favour of small groups, blows the minds of innocent people, fills the pockets of a few and dominates the vast majority who are involved, and stops true development!"	10/11/2018	Social media	Global audience	During the presidential campaign
"For example, you went fishing and were near an environmental protection area. You are being punished for an administrative offence. Because when you pass through that area, the inspector assumes that you would be fishing in that area and fines you. This is common. I have seen many fines along these lines for poor fishermen in Angras dos Reis Bay. (...) Unbelievable that something like this happens in Brazil. A whim of these inspectors, some inspectors of IBAMA, who in my view cannot continue to act like this. Then we will regulate the matter through an appropriate law. When you talk about an environmental licence, you are obliged to cut down a tree that is in danger of falling. And it is difficult to get this licence. And you will be fined if you cut the tree without having the proper licence and permission to do so. So this problem of environmental licencing gets in the way when a mayor, governor or president wants to do an infrastructure project, like building up a road or doubling it. These are problems without end. This happens a lot in the Amazon."	13/12/2018	Speech on social media	National audience	After the election victory, in criticising the 'environmental fine industry'
"Yesterday the Minister of the Environment, Ricardo Salles, came to me with this information. He has already ordered that an administrative procedure be initiated to find out who is responsible. It's not about burning anything, machines, tractors, whatever, that's not the procedure, that's not our orientation"	13/04/2019	Speech in Macapá	Local audience	When mentioning the destruction of machines used in environmental crimes by IBAMA and ICMBio agents
"In the first two months of this year we had a lower percentage of fines in the countryside and they will continue to decrease, we will end this 'industry of fines' in the countryside. He [Ricardo Salles] is the man who is in the right place; he is the man who is managing to combine the environment with production. Fire everyone! I do not want Shiites to occupy these posts [in IBAMA]. Are there good people there? There are, but the rural man can no longer be frightened by inspection. Agribusiness is largely the locomotive of our economy. We can not have an environmental policy like we had until recently, from the industry of demarcating indigenous lands, from the quilombola industry, from the industry of ecological reserves."	11/06/2019	Speech for business representatives	National audience	On the comment that rural producers are less and less afraid of IBAMA
"Why are there so many NGOs in the Amazon, when they care so much about the environment and the people, and zero in the northeastern semi-arid region? Answer me this, is their interest in the people or is it some other future interest in the area?"	01/07/2019	Meeting with Dom Phillips, Reporter for the British newspaper The Guardian in Brazil	International journalists	When asked about preserving the world's largest rainforest

Transcripts translated from Portuguese	Date	Means of communication	Audience	Context
"These two [Macron and Merkel], in particular, thought they were dealing with previous governments that came here after meetings like this and demarcated dozens of indigenous territories, demarcated quilombolas, expanded protected areas, that is, made any of our progress here in Brazil more difficult."	04/07/2019	Speech for 'ruralist' senators and deputies	National audience	When he commented on the meetings with French President Emmanuel Macron and German Chancellor Angela Merkel during the G20 summit in Osaka, Japan.
"You talk to me about environmental pollution. Just poop every other day, that will also improve our lives a lot."	09/08/2019	Interview to local reporters	National audience	When asked by the press how to reconcile economic growth and nature conservation
"It is the indigenous people! You want me to blame them? Are you going to write 'the native communities' tomorrow? You want me to blame the Martians? In my opinion, this is a very clear sign that these NGO people have lost their 'tit'. It's very simple. It could be a pawn. Everyone is a suspect, but the biggest suspicion comes from the NGOs"	22/08/2019	Interview to journalists	National audience	When asked who is to blame for the increasing deforestation in the Amazon region
"At this time of year the dry climate and winds favour spontaneous and criminal fires. It is worth noting that there are also fires practised by indigenous peoples and local populations as part of their respective cultures and ways of survival. Every country has problems. However, the sensationalist attacks that much of the international media has been subjected to over the fires in the Amazon have awakened our patriotic sentiments. It is a fallacy to say that the Amazon is a heritage of humanity, and a fallacy, as scientists attest, to say that the Amazon is the lungs of the world. Instead of helping, one country or another has bought into the lies of the media and behaved in a disrespectful and colonialist manner. They have questioned what is most sacred to us: our sovereignty! At the G7 meeting, one of them dared to propose imposing sanctions on Brazil without even listening to us. I thank those who did not accept this absurd proposal. (...) Often some of these leaders, like Cacique Raoni, are used by foreign governments in their information warfare to advance their interests in the Amazon. (...) The indigenous people do not want to be poor landowners on rich lands. Especially not on the richest land in the world. This is the case in the Yanomami and Raposa Serra do Sol reserves. In these reserves there are large quantities of gold, diamonds, uranium, niobium and rare minerals among other things. And these territories are huge. The Yanomami reserve alone covers about 95,000 km ² , which is the size of Portugal or Hungary, although only 15,000 indigenous people live in this area. This shows that those who attack us are not concerned about the indigenous people, but about the mineral resources and biodiversity that exist in these areas."	21/09/2019	UN General Assembly	Global audience	Bolsonaro's first speech to the General Assembly of the United Nations (UN)
"The NGO workers, what have they done? What is easier? Set the bush on fire. They take photos, film, the NGO makes a campaign against Brazil, gets in touch with Leonardo DiCaprio, and Leonardo DiCaprio donates 500 thousand dollars to this NGO. Part of it went to the people who set the fire, right? Leonardo DiCaprio is collaborating with the fire in the Amazon."	29/11/2019	Social media	Global audience	When saying that WWF, funded by DiCaprio, paid firefighters to take pictures of the wildfires in the Amazon
"Even this project by our Minister of Mines and Energy to regulate Article 231 of the Constitution is a big step. It depends on Parliament. It will be pressured by the environmentalists. Those environmentalists, that's right... If only I could, I would restrict them to the Amazon. They are so fond of the environment."	05/02/2020	Interview to local reporters	National audience	By advocating for the regulation of mining and resource exploitation on indigenous lands
"Our modern and sustainable low-carbon agriculture feeds more than 1 billion people in the world and takes up only 8% of our national territory"	21/09/2021	UN General Assembly	Global audience	Data on the environment cited by Bolsonaro during his speech at the UN
"You have to protect the environment, that's fine, but licences must not drag on for years or even make it impossible to do work that brings well-being to everyone there (...) We have problems. Environmental laws, problems that are being brought to court, but we wait and ask God to enlighten the minds of all."	29/04/2022	Interview to Radio Metrópole - Cuiabá	City of Cuiabá and later the rest of Brazil through media reproduction	In claiming that Brazilian environmental legislation is an issue in the country

Appendix 3: Interview transcripts

Interview transcript 1

Objective: Identify and understand the past and current developments in the Brazilian political and social scenarios

Interviewee: Robert Bonifácio da Silva, Political Science Professor at Federal University of Goiás, Brazil.

Date: 31.05.2021

T: interviewer

R: interviewee

T: Could you start by talking a little bit about who you are, about your background and your role in the Brazilian political and social scene?

R: My name is Robert Bonifácio, I have an undergraduate degree in Social Sciences and a master's degree in Political Science from the State University of Campinas, Unicamp. I have a doctorate in political science from UFMG and a post-doctoral internship also in politics at UFMG. Professionally, I'm a teacher. Today I am a professor at the Federal University of Goiás but I had two experiences outside the university. I was a UNESCO consultant at the São Paulo City Hall between November 2015 and February 2016 and I was Executive Secretary of the strategic priorities office at the Goiânia City Hall between January and April 2021. Here at UFG I am a permanent member of the postgraduate programs in Political Science and in Law and Public Policy and I am a Counselor, representing the humanities at the Fundação de Apoio à Pesquisa and I am the leader of the research group on political behavior, quality and democracy. That's me.

T: Cool. You've already talked about the next question, if you were part of any government organization at this time or in the last two years, but you've already addressed this subject.

R: I'm a professor at the Federal University of Goiás, I'm a political scientist, I'm a scientist, right?! I have no party affiliation. My activity is to teach classes and do scientific research.

T: So we can start now more specific on the subject. Could you explain a bit of the conjuncture of the recent political situation in Brazil, especially since Bolsonaro's election in 2018?

R: Okay. When I read the conjuncture, I think that what we are experiencing today, the beginning of what we are experiencing today, took place in 2013, June 2013, in a context in which we had a very popular president, a President who throughout the history, since the popularity of presidents began to be measured, is the most popular in the entire history of Brazil, Dilma Rousseff. And the June journeys were a phenomenon, well, that no one could have predicted, right? It started with dissatisfaction with the police action in protests about Passe Livre, right, about the price of bus tickets in São Paulo that, contrary to the usual, won a commotion in society, the usual repressive action of the Military Police of all states. Brazilian society generally approves of the police's actions repressing protesters, but not this time. And this took a very large proportion that overflowed the city of São Paulo, went to the state of São Paulo and overflowed the state of São

Paulo, conquering the whole of Brazil. Hundreds of cities had protests and these protests brought about an inflation of demands and this served as a springboard for groups, once small, or that were created at the time. Several political movements, the most important of which was the Free Brazil movement (MBL), gained media attention and brought right-wing issues into mainstream politics. This, let's put it this way, this pluralized the political environment a little. Another episode that is important to understand the current situation we are experiencing was the result of the 2014 elections. The result was contested by the candidate and runner-up, Aécio Neves. This election was contested and this contestation, together with the political inability of the re-elected president, Dilma Rousseff, contributed to creating a climate that culminated in her impeachment, the second impediment since the redemocratization, in 2016. When in 2016 she was prevented from continuing in office as president, Michel Temer became the new president. In terms of popularity, he was the most unpopular in history. Brazil has never had a president as unpopular as Michel Temer, so much so that his party's candidate, Henrique Meireles, had 1% of the vote in the 2018 election. I think this is a good illustration of how negative the population viewed this government. In 2018, in my reading, you had the impediment of until then the main political actor in this country from running, Lula. He was arrested and, in my reading and that of several jurists, unfairly. So much that the Federal Supreme Court recently overturned his convictions, because the way in which he was conducted violates the national legal system. With him out of the running, there was a scenario in which the workers' party was once again the protagonist, but it was the protagonist under a negative view, of a very high *anti-petismo*, greatly favored by the recent impediment of Dilma Rousseff and the most recent arrest of Lula. Lula spent the 2018 elections in jail. So that favored the candidate who was elected, Jair Bolsonaro. His life story and his momentary political situation gave him the most anti-PT position of all, because he has a far-right political trajectory, he has always been what he is, nothing has changed, unlike some political actors. Contrary to Lula, who knew how to adapt over time to win votes, to try to be elected, Bolsonaro has always been what he is. He was not immersed in the Car Wash operation because he was a federal deputy with a long career, but he was not one of the most influential, so he had no governments, no city hall, he acted in a political niche. So he wasn't part of the Lava-jato schemes and he was always an anti-left. This helped him a lot to place the PT as the only alternative to the left, linking the party to the idea of communism. He carried out this political reading very well. So in 2018 he knew how to raise the discontent of a good part of the population with the PT. Until then, the main party that confronted the workers' party, the PSDB (Brazilian Social Democracy Party) participated in the very unpopular Temer government. And the PSDB also had its big name, Aécio Neves, immersed in Lava-jato. Very clear telephone recordings with the owner of JBS, which is one of the largest companies in Brazil, dealing with bribery, corruption schemes. So the role of being the biggest antagonist in relation to the current power structure fell into Bolsonaro's lap. For these and other reasons he was elected president of the republic. So today we live in a government that I classify as extreme right, under President Jair Bolsonaro. He supports conservative agendas, agendas that don't care about sustainable economic development, that don't care about human rights, and don't care much about social inequality. This is a far-right government, based on traditional values and support for archaic political structures, in short. It's a bit of reading I do at the moment, but you'll ask more questions and I'll be able to specify more throughout the interview.

T: You spoke a little about this issue of the values of this government. How would you define the current government in relation to the discourses they practice, in relation to what is passed on to the population, in the form of words or practices.

R: Their narrative, the way of expressing themselves is an aggressive way, in the following sense: they are very explicit, very clear and with an aggressive language, even using machine gun symbols, knife in the skull, those things. Their language is very clear, they are not afraid to convey the ideas they have. The means by which they do this: the internet. On social media Bolsonaro is a champion in terms of followers: Twitter, Instagram, any social media he engages in is a success. Although recently he now has a measure of digital popularity made by the company Quest of Belo Horizonte, in which he lost, for the first time, the position of first place in the index of digital popularity to Lula. Considering the political characters, for the first time he lost the “throne” of digital popularity. I think it is important to have some reservations about this index of digital popularity because it depends on the internet and 25% of Brazilians do not have access to the internet and of those who do, a considerable part has precarious access. So I consider that in terms of reach, the internet is not the main means of communication in Brazil, it is still television. I think television is the main means of communication, which influences people's behavior. So Bolsonaro uses a lot of internet to communicate, right? And these are aggressive communications. He is very consistent with what he stands for. In my reading, Bolsonaro was unable to govern, he could not have the control of government. For two years he was able to set issues, but the way issues were voted on in Parliament, he had no control over the direction of things. An example is the pension reform. The reform approved is not the reform he wanted, but he guided it because legally a president has that power. But he started to govern with the support of the “Centrão”, which was something that in his campaign he used a very interesting term that was “co-optation presidentialism”, making an analogy with coalition presidentialism, which is a political science concept that deals with how governance takes place in the federal government. He used the term cooptation presidentialism and anyone interested in seeing the Bolsonaro 2018 government plan, he says that the use of this pejorative term is given by the Centrão, by the parties in the center that always orbit in power, the MDB, the PP, the PSD, those parties that have little ideology and a lot of pragmatism, he saw this as the bad thing about the country and he then allied with Centrão, there are several ministers who are from Centrão and from then on he manages to have some success in governance. But it's Centrão's agenda, it's not his agenda. So the Bolsonaro government is largely consistent with what it preaches, the language is aggressive and the point of inconsistency is this alliance with Centrão.

T: You mentioned the television media. Do you believe that the media had influence in this context? On everything that happened in the country since 2013?

R: Always. Television, to some extent, has an influence on people's political positions. It's hard for you to describe in which direction the press is going. I'm not an expert on the subject, but I read a few things and as an observer, I believe that the press goes a lot in the direction of what most people think. It is clear that the press is not hostage to public opinion but how much public opinion is shaped by the press is a more complex mechanism. But I highlight some issues to think about about the press: back in June 2013, when the protests started, there was a relevant TV show, the best-selling TV show in Brazil, *Brasil Urgente*, presented by journalist José Luiz Datena. It's a police show. He is in the city of São Paulo showing images of floods, traffic, crimes, he gives greater weight to the issue of criminality. So, he makes a negative reading about it and it's an anti-human rights reading. At the beginning of the 2013 protests he took a poll on his show, asking what people thought about these protests, whether they were for or against it. And he was very surprised by the result because the majority were in favor of the protests, and his audience is usually an audience against these things, right? He shaped his speech after that to be in favor of the protests, according to public opinion. On the other hand, we have a country that is mostly

conservative in terms of values, and we have the largest television network, Rede Globo, which brings both traditional content in its soap operas, such as always having a protagonist couple who are a man and a woman, family formation, in the final stretch of the soap opera you have to show a happy ending: a marriage. But at the same time, it is a TV that for many years has played on super liberal themes in terms of Brazil, such as gay kissing, there have been gay couples, adoption of children by these couples, so the Globo network mixes topics and in terms of television it is the most liberal in these guidelines. So it is difficult to understand the mechanism, but I believe that to some extent television has an influence on individual positioning and it is difficult to know in which direction this is going. I think it's very conjunctural. They have an eye on your interests, of course. These big television companies always have considerable debt and they are concessionaires, they always have to have a close relationship with governments and with the National Congress. At the same time they need to satisfy public opinion. Regarding the Bolsonaro government, since he ascended to power, he has been totally opposed to the largest TV network, which is Rede Globo. He even uses several pejorative terms against Globo, such as Globo-trash, among others. And he uses a lot of what we call a playpen, which is a mobile structure that he uses to communicate and speak with the press and with supporters. Such was Bolsonaro's aggressive way of communicating that the press agreed among themselves that they would no longer cover his pronouncements in this playpen. Today these announcements are broadcast only by Bolsonaro channels on YouTube, which are ideologically aligned, which exist because of Bolsonaro. So it is a very conflicting relationship between Folha de São Paulo, Rede Globo, and the major newspapers with the Bolsonaro government. On the other hand, some television channels are privileged with his presence and contracts with the government, such as SBT and RedeTV, and he has already been present in these channels. And in these channels he does not have an aggressive speech, these channels are not part of his opponents.

T: Understood. I know it's not your specialty, but as an observer, comparing the periods of this current administration with the previous ones, do you notice any changes in the discourse, in the way the government positions itself? Do you notice any changes in the discourse practiced, especially in relation to environmental issues, when comparing previous and current administrations?

R: Yes, I see quite a difference. In speech and in practice. In previous presidencies, it was never denied that the environmental issue was a relevant problem in the country. It was never denied. It is obvious that every government official tries to show, in relation to any problem – the environmental one is just one of them, that they have evolved in the treatment of the issue. Sometimes it's a realistic reading, sometimes a fantasy reading. But every government wants to show that it is bringing positive results. But the environmental problem was never denied, nor the governmental structures, and in the environmental case, of great excellence, they were tackled, right?! INPE, for example, at the beginning of the government had a classic case of the government denying, doubting, trying to falsify the data that INPE brought about deforestation, devastation, etc. And also sabotage the actions of an important environmental conservation agency, which is Ibama, even going against it, overruling actions that Ibama took and that are within its legal prerogatives, such as the destruction of materials belonging to people or companies that use clandestinely. or illegal use of natural resources. The Minister of the Environment, Ricardo Sales, perfectly captains Bolsonaro's speech, he does very well the role that Bolsonaro expects of him. This government even denies that there is an environmental problem in the country. “We do not have relevant environmental problems in the country, we have sporadic episodes”. This is the reading that the President of the Republic makes. So it's a change, it's a change. In my view,

Bolsonaro's speech favors clandestine and illegal practices in the use of natural resources. Based on excesses in relation to Ibama's actions, in opposition to Ibama's actions, and also to maintain that there is no major environmental problem, that we need to think about the rural producer, that every producer and every entrepreneur acts correctly, seeking the development of the country and its own sustenance. He makes no distinction between producers who are outside the law and those who are bound by the law. So, in my view, both Bolsonaro's and Salles' actions and speeches encourage clandestine and illegal actions to use natural resources.

T: And do you believe there's something behind it? What motivation, in your view, would justify this action of denying the existence of environmental problems?

R: I believe they have a reading that these producers are ideologically aligned with the government, so they strengthen an audience that is loyal to them. I think there is this issue. Another issue is political positioning. Recognizing the environmental problem and acting in accordance with international protocols and international agreements means having the same behavior as leftist and progressive political groups. And this is a worldwide trend. Trump also had an anti-environmental stance similar to that of Bolsonaro. In fact, Trump is a world reference, which guides Bolsonaro's actions. So he needs to set a political position. On the left there is the most progressive parties, or even on the right, but right-wing environmentalists - which does not exist in Brazil, but it does exist in the world - that preach a sustainable vision of economic development, so he puts himself in the other extreme, he needs to demarcate position. I believe these are the two main questions of why he has to have this kind of positioning.

T: Ok. Still within this topic, you said that you do believe that the discourses and actions of this government encourage illegal actions. When we bring these actions to the Amazon, specifically, I don't know if you remember that in 2019 there was D-Day, or the "Day of Fire", when farmers got together to set fire to some regions on the frontier of the Amazon. Do you believe that this government position also influenced these most striking facts, these most important facts of the environmental issue in Brazil?

R: I believe so, because I imagine that these people read that the political scenario is favorable to them. We came from a tradition, at least since the Fernando Henrique administration, in which it was very common to have a minister of the environment very attached to the sustainable agenda, and a minister of agriculture who had a more aggressive reading of production, right?! And there, in the federal government, these forces confronted each other, and we can say that we reached a political balance of issues. Not in the Bolsonaro government. The Ministry of Agriculture and the Ministry of the Environment have a unison reading of things, a reading that is not used to sustainable development. So the message that this government sends is that it is worth it. The people who commit these fires, who seize land, they know very well that they are outside the law, they know what they can and cannot do, they are clearly aware. So it's a project, they plan it. And they have always done that, but the data even show that these illegal practices have increased a lot, especially in the Amazon region, in the Cerrado... And I believe that the political scenario is favorable to these actions when the minister and the president condemn actions of repression by Ibama, when they say they are going to "pass the cattle", when they have a whole pro-development discourse, where sustainability is not on the agenda. They're giving people the password to do what they did. They give the password for us to observe records of deforestation and advance of agricultural production in places that should be preserved.

T: It would have been better to have done a little bit before we got into this specific topic, but considering this context that you have just detailed, looking over it and considering the Brazilian political and social history, you realize that there is some relationship of influence or of causality between the discourses and practices of a given government and the social response to these discourses?

R: This is a difficult question to answer scientifically. The approach has to be perceptive. I think that the environmental issue has always been a problem and the federal government is not the only instance that influences these issues. We need to look at municipal and state governments too, which may or may not be colluding. The environmental issue has always been a problem. If you analyze agrarian conflicts, commotion murders like that of Dorothy Stang, of Chico Mendes, this is an indicator that this has always been a problem. The difference now is that before there wasn't an anti-environmental speech like there is now. There were always political disputes between a more permissive agricultural production and a more sustainable reading of production. It has always been there. There has always been this political clash within the federal government. Always. But now there is only one discourse within the federal government, which is the anti-environmentalist, which is not concerned with sustainability. And what is interesting, in addition to the political parties and political leadership that confront this issue, is that perhaps a stronger point of confrontation has been some of the big business. Why? Because with this environmental situation in Brazil, Brazil in environmental terms is the world player, at least it is the showcase. The reading of what is happening here has reached all over the world. It is very easy to Google several episodes of retaliation from abroad for unsustainable production in Brazil. There are episodes of political conflicts in which big businesses pressure the government to act according to the law, because this hinders their sale, especially abroad, their exports. So we arrived at a scenario in which the defense of sustainable development, of compliance with the law, comes from big businesses, who are not usually the defenders of this agenda.

T: And do you see any solution to this scenario? What could other social sectors such as NGOs and individuals themselves do to contain the advance of this type of discourse? Do you see any solution, any action that people could take to minimize this scenario?

R: At the present time, I think there is nothing else to do other than maintaining activism in relation to this. Some people have been very courageous in this action, such as Ricardo Galvão, the former president of Inpe, who had a scientific position on the issue, maintained this position and became famous all over Brazil in relation to it, right?

T: This was also discussed here at the time.

R: And the usual actions of NGOs, the most famous: Greenpeace, WWF, etc., to open up environmental issues. I think this is very important. These groups need to remain active, although I know that this can cost lives in the interior of Brazil, but there is no way to work on it and this is not a political clash. And in the medium term, obviously, the electoral defeat of the current president of the republic. I'm not saying that another president will be very responsible with the environmental issue, with sustainable development. I am saying that, since our redemocratization in 1985, we have never had a president so irresponsible with the environment and so averse to the logic of sustainable development. Overcoming the situation we live in involves the defeat of Jair Bolsonaro in 2022.

T: Well, that was it. I believe that we managed to cover a lot of the topics I imagined and also to not understand much. I wanted to thank you very much for everything, for the insights, for all the content you brought to the thesis. It's gonna be pretty cool.

R: I appreciate the invitation to talk about this. I'm flattered that you invited me and I wish you the best of luck in your research.

Interview transcript 2

Objective: Identify a possible relationship between the president's discourses practices and increase in the environmental degradation in Brazil, under the interpretation of an expert in environmental issues.

Interviewee: M. (anonymous), Biologist, Association of Servers of IBAMA and ICMBio of Goiás.

Date: 24.06.2021

T: interviewer

M: interviewee

T: M., thank you very much for your availability for the interview. As we speak, I would like to know if it is ok to record the interview and if I can disclose your name or would you prefer to remain anonymous?

M: I need to be anonymous.

T: So I just put that you speak on behalf of the Association of Servers of IBAMA and ICMBio of Goiás, right?

M: Yes.

T: Okay, right. M., could you talk a little about what you do today as an IBAMA server?

M: I am a biologist and I work in the area of wild animals, I have been at IBAMA since 2005.

T: Have you been part of any political movement in the last two years, or are you?

M: Yes, I am affiliated with PSOL today.

T: Ok. So now we go more to the questions concerning the thesis itself. Could you tell me a little bit about what the scenario is like today, in Brazil, especially since 2019, when the Bolsonaro government began. Could you explain a little about the environmental situation in the country?

M: My perception is that the president, before, in the campaign itself, made it clear that his objective was not environmental preservation. So, my perception is that his speech encourages people who illegally deforest, or illegally mine, to act, thinking that they will not be punished,

since Bolsonaro's speech is often pro this type of activity. So, my perception is that the environmental situation in Brazil has been getting worse since he entered the government.

T: And do you realize that this influenced the daily activities of your work in some way?

M: Not specifically in my work. The resources for my activity were not cut, or if they were, this cut did not reach us. The activity that we carry out, which is to receive the seized animals and dispose of them, is working normally. But my activity doesn't have as much impact on Bolsonaro's support base.

T: I watched an interview with ICMBio staff, if I'm not mistaken, talking about the impact on their work, in terms of threats and things like that they're getting. In your case, did that happen?

M: Not in my activity. I know that this exists in other activities, activities that are being greatly impacted: inspection, judgment of records... all these are being greatly impacted.

T: Environmental inspection, in the case of exploration, deforestation, etc., right?

M: Yes. They are being impacted because rules have been created that make inspection work difficult, rules that reduce the time the inspector has, for example, to make the report. So, if they are on the field, sometimes they stay 20, 30 days. Now, within that period, they already have to deliver the reports of the infraction notices. Therefore, they will have less time to actually fight the environmental crimes, because he will have to go to the office, or take a computer. And we have just a few computers, and sometimes technicians have to use their own internet to comply with this rule that has been placed. In addition, in the trial part of the case, a new trial court was created, but it is not really a judgment one, called "environmental conciliation", and this conciliation slightly delayed the process of judgment of the fines.

T: Can you explain a little more what would this environmental conciliation be?

M: Conciliation is a meeting in where the assessed person can ask to take place, and in this meeting there can be a conversion of the fine. It is as if it was a negotiation between the defendant and the acting body, to know whether or not to proceed with the fine. So the conciliator can, if they find that the notice was poorly made, they can already cancel the notice of infraction there, or a fine can be converted, in which the assessed person has a discount of up to 60% of the fine. Basically, they have to deliver some product that serves for environmental conservation, it can be a conservation project, for example... The conversion of a fine is not money, they will not deliver money, they will deliver an environmental service. And this conversion, as it was created recently in the Bolsonaro government, took a long time to be regulated and to start working. So that stopped many processes and greatly reduced the number of trials. In 2018, for example, we judged more than 20,000 cases a year. Last year there were just over 5,000. And reducing the trial process is reducing the collection of fines, right? The fewer cases judged, the fewer fines are effectively charged. This in the long term can cause the statute of limitations on crimes and crimes will not be punished administratively. This can happen.

T: You said a little at the beginning that you realize that the government's speeches have influenced the increase in environmental crimes, deforestation, mining. How would you define these

speeches? Do you have any that you remember that you can cite? Or in general, how would you define these discourses?

M: In the campaign, Bolsonaro called IBAMA's inspectors scoundrels, so it started from there. If I'm not mistaken the word was scoundrel. Also, he said he didn't want the inspectors to destroy machines. When an inspector sees a machine being used in environmental crime, for example a tractor being used for deforestation, in the middle of the Amazon. You can't stop and take that tractor out, load it, take it to the city, and then dispose of it... So the legislation allows the inspectors to destroy that machinery. And we do it. Destroy, set fire to everything and destroy the machinery. And this is also a way of harming the owner, he loses that machine, so he suffers an immediate consequence. As the fine takes a long time to be judged, then this is one of the ways the criminal would have an immediate problem. But Bolsonaro has always been against the destruction of these machines, even though they are used for environmental crimes. He was always against it. Of course, if an inspector burns a machine that is not committing an environmental crime, if the inspector makes a mistake, of course the inspector will be punished, but most of the time we don't have this problem. So he always stood against this destruction. Two IBAMA career servants were exonerated from leadership positions because they commanded operations that destroyed machines – obviously it was not said that they were exonerated because they destroyed machines, right? But if you have an operation, you destroy machines and soon after people are dismissed from management positions, we tend to think that these two facts are related. In addition, Bolsonaro has already celebrated that he has reduced the number of fines from IBAMA – because the number of fines drops every year. And he has already said this as a victory for his government, that IBAMA inspectors are not fining anymore. In addition, the coordination of operations in the Amazon was removed, they were removed from IBAMA and were transferred to the Army. So, all these actions... not Bolsonaro, but the federal government has already paralyzed operations within indigenous lands that had illegal mining. The Ministry of the Environment paralyzed IBAMA's operation inside indigenous land with illegal mining, caught the illegal miners and took an FAB plane to the ministry for a meeting... So, all the signs... The former environment minister met with loggers, facilitated the rules for export, removing the need for inspection by IBAMA for wood to be exported, it has already been seized by the federal police in a wood yard to say that the wood was correct, regular and that it should not be seized without make a more robust skill. So, all the signs... The government has meetings with a lot of loggers, a lot of prospectors, and normally it doesn't receive environmentalists for a meeting, it doesn't receive people who are concerned about the climate issue, you don't see news of this type of agreement with environmentalists, you only see him talking and arguing with who is committing crime. For me, it's the same thing as the federal police calling the drug dealer to the meeting. How does the minister of the environment receive the illegal prospector from within the indigenous land to talk to the ministry, transported by an FAB plane?

T: And what do you think is behind this, why does the government have this anti-environment speech and in favor of loggers and mining companies?

M: It's the popular support base, right? It's his support. He has people who support him. In some way they are supporting him, I don't know if financially, that I cannot say, but somehow they are supporting him. Recently there was a speech by a guy from Novo Progresso, if I'm not mistaken,

along with Bolsonaro on a platform, and he was saying that Bolsonaro has to “use his pen” to prohibit the destruction of machinery. And he is being applauded. This speech is on the internet too. So, it's the people who are supporting him. Besides, Bolsonaro was once a prospector, right? So it has to do with that. And it also has to do with not caring about people's future, he doesn't care about the future. Denialist, huh?! It is a denialist government. He denies global warming and the consequences of global warming for society as a whole, because if it is a government that understands the problems and consequences of global warming for Brazilian society, it would not be acting that way. So, it's a very immediate thought, it's not thinking about the future. That's basically it. And another... wood, mining, that's money. Money for someone, who I don't know, but someone is making money from it.

T: It's been in the news all the time that rates of deforestation and fires, particularly in the Amazon, have skyrocketed in recent years. We know that deforestation has always existed, but now it is greater. But, in previous governments, did you perceive any kind of discourse in this sense? Discourses against the environment, in this sense? Because there is a study that shows that in the early 2000s, when Marina Silva was minister of the environment, there was a very pro-environment discourse, and deforestation rates in the Amazon dropped a lot in that period. Did you notice any kind of discourse in this sense in previous governments? Not necessarily just in the last 13 or 16 years, but earlier as well. Did you notice any kind of speech or is this something totally new?

M: I'm a bit young to know about the governments before 2003, right?! In 2002, when Lula was elected for the first time, I was 21 years old, so I don't know what the situation was like before. I know that deforestation was very high in the FHC administration, before the PT, in the 80's, 90's. The data show that deforestation was very high. The PT government took over with one of the highest deforestation rates, if I'm not mistaken. It was 2003 and 2004, right?! And Marina Silva really changed a lot. Not only in the speech, despite Lula having made some speeches against the environment, which were not very happy. Dilma also has some lines, Dilma mainly had a speech. For example, Belo Monte passed the Dilma administration, even with the contrary opinion of IBAMA. Santo Antônio do Giral passed the Lula government, despite the contrary opinion of IBAMA. So they weren't an environmentalist party, let's put it that way, but they put people concerned with environmental issues in the ministry of the environment. So, you see that having a figure concerned with the environmental issue in the ministry of the environment helped a lot. But not only that, right?! We had several things from 2003 onwards that helped a lot. First thing: hiring. We had a public hiring in 2002, then 2005, 2008 and 2011. The last public hiring process was in 2011/2012. So, having people to act... I don't remember when the last public hiring was before 2002. But the FHC government didn't do a public contest, it did in 2002, at the end of the government, to enter in 2003. The people entered the Lula government. So he spent at least 8 years without a contest. So the team gets older, they retire, and that diminishes the strength of the organ. With these hiring processes, we increased the strength of the organisations. And in this case, Marina created ICMBio, which did not exist. So having people working is very important. There was also an increase of the tasks, which calls for qualified people. So if you have a salary of, at the time, in 2002, the initial salary was 2000 reais. Today the initial is 8000. But you have an increase that is important. The last salary increase was given was in the Dilma government. So we have an important appreciation of the starting salary that attracts well-trained people to the agency.

In addition, we have improved the technology, since then, which facilitates inspection. And it was created during the Lula government, with Marina, a system for the rapid detection of deforestation, called Deter. This Deter is very important because every 15 days it gives a list of the deforestation that took place in the last 15 days. Of course there are large deforestations, it's a satellite that doesn't have much resolution, but it's important information.

T: And does it cover the whole country?

M: No, the Amazon, especially the Amazon. This system was being created for the cerrado as well, I don't know how it is going. And this whole system helps a lot. So a strategy was created that was to select the 30 municipalities with the highest deforestation and put a supervisor there directly. Then one team leaves and another enters. This was a good and quick strategy, because you saw the deforestation by satellite and you arrived there with the team quickly, so sometimes you took the machine there, not depending on the complaint, on the transport of the team. It's called PPCDAm, I won't remember, but it's Plan Against Deforestation in the Amazon, something like that. This PPCDAm involved not only deforestation, but also sustainable development, improving the chain of use of the forest as resource, so it had something to do with the use of açaí, for example. I think that inspection was an important arm. So this PPCDAm was a strategy that was used. As we were able to work on the most important municipalities, we soon stopped deforestation in that municipality, and then we could go to another one. And that's what we did for several years and that's why the deforestation rate went from 20 thousand square kilometers and dropped to 5, right? In the Marina government, it reached 8 and then with Dilma we reached 5 thousand square kilometers of deforestation. 4900, 5000. To improve this, we started using it as a strategy, starting in 2011, 2012 – remembering, we had a house servant as director. And having servants as directors... who know the problems, know the structure... also helps a lot, right? So, until the Temer government, we had public servants such as inspection directors, for example. In the Bolsonaro government, they are not servers. And all this improved the inspection structure and made it easier to catch environmental crime, especially in the Amazon. The PPCerrado was also created in the cerrado, but it did not do as well as in the Amazon because of international concern, the resource that came to the Amazon Fund... The Amazon Fund was created under the PT government, right?! So all this, all this speech, made us manage to reduce deforestation in Brazil in this period. Of course, it reaches a limit where the small deforestations spread out, the sum is also large, right? And that's where the inspection begins. We also started to focus on limiting financial services for these people. We created the register of embargoed areas, which even went offline, I don't know if it's back yet. The registration of embargoed areas meant that banks could no longer finance embargoed areas, and could no longer lend money to those people. We even apprehended cattle in an embargoed area. So it started to “hurt” people financially and it started to work. Because what happened, what is the story? I deforest, I am fined, but the land is available. Then I could still borrow money from *Banco do Brasil* to buy cattle and put them on land that was illegally deforested, you know? So this registration of embargoed areas was important for that. A law was made, a norm, and it was an important tool. And simply, now in the Bolsonaro government, this record has disappeared.

T: Did it just disappeared?

M: They made an excuse that they were changing the system.

T: So, M., in 2019 we had that episode of the Day of Fire, in which farmers and people got together in a WhatsApp group to agree to set fire to some regions of the Amazon. Do you believe that these anti-environment and anti-preservation government speeches have influenced people to have the courage to do this, to set fire and film, publicize and everything else?

M: My perception is yes. My perception is yes. The speech against the environment seems to be being encouraged. That's what it seems to me.

T: Have you ever witnessed a situation where someone said something in the sense of “now I can do it”, or have you seen a situation happening, personally?

M: No. It's just perception, based on people's behavior and the behavior of the president and the former minister of the environment.

T: Even now, the minister left, right? Are you even following this? Do you know anything about the new minister, do you believe that something will change?

M: I hope so, I hope it changes, but I don't think so. He is representative of the rural people, right? Two ruralists. He worked in rural society. I hope he understands that, to plant and to harvest, you need water. And water is the environment that brings it, it's the forest. So deforesting, destroying, reducing inspections, reducing fines, reducing judgments, reducing workforce, because without competition we are also decreasing... A long time without a salary increase, soon no one will want to be an IBAMA inspector anymore. So, adding all this together, we are contributing to deforestation. And it is helping to reduce the water supply for ruralists, who will no longer have good water to plant. But honestly, considering that it was the Bolsonaro government that indicated the new environmental minister, I don't expect it to change much.

T: One last question. Do you see any way out? Something that people, individuals, organizations, could do to reverse this situation? To contain the advance of deforestation and to contain the advance of this type of anti-environment discourse?

M: I think we have to mobilize. The population has to organize itself, has to demand, has to go to the press... And I believe that, based on the various impeachment requests that exist, it seems to me that many of them are correct. So impeachment would be a good solution. So the solution would be for society to organize itself to overthrow the president, based on the crimes he has already committed. These impeachment proceedings should be tried, but we already know that he stopped buying vaccines for the population. We already know that he released funds for deputies without being by parliamentary amendment. This amount is used to buy several products with values above the market value. We already know many issues that could be deepened to overthrow the president, right?! So I think that taking him down, not that Mourão is the best thing in the world, but it seems to me that he is more reasonable. We need to finish this government and be able to elect another president.

T: My questions end here, M. If you want to add anything else, feel free.

M: No, that's all.

T: So thank you very much for your help and willingness. It helped a lot, a lot.

Interview transcript 3

Objective: Identify a possible relationship between the president's discourses practices and increase in the environmental degradation in Brazil, under the interpretation of an expert in environmental issues.

Interviewee: H. (anonymous), Biologist; MSc. PhD Environmental Sciences.

Date: 29.06.2021

T: interviewer

H: interviewee

T: Hi H. Thanks for accepting the invite for this interview. My thesis is about the influence of the discourses and practices that the Bolsonaro government has had in these last two years and the influence of this on deforestation, on the increase in fires in the Amazon, on the increase in the degradation of the Amazon in these last 2 years. So first I have three basic questions: the first was about recording the interview, the second about whether I can disclose your name and role or should make it anonymous. It's you who defines it, for me it makes no difference. If you prefer, I can leave it as anonymous, no problem.

H: I don't know scientifically which would be more appropriate. Because it can convey an idea of the need to take partisanship. Sometimes I'll put some things that may not sound very good, I think it's more prudent... I don't mind talking about my experience in the area, maybe we just omit the name. Especially in Brazil, things are quite complicated here.

T: No problem. I also spoke to M., he also asked not to be named.

H: He's also on the front lines.

T: Exactly. So H., can you talk a little bit about your background, what do you do today, where do you work? A context to understand your position.

H: My name is H., I am a biologist, I have a master's and doctorate degree in environmental sciences at Federal University of Goiás. I have worked with environmental licensing, with environmental monitoring, in the construction of public policies focused on this theme: both licensing and monitoring, and I have been in the strategic priorities office of Goiânia, but working on the environmental theme. The idea is to work on structuring projects in terms of the environment and sanitation in general. And also as a technician, I always contribute to the construction of legislation, both in the municipality and the state, more effectively. And every now and then we send some proposals to Brasília, together with the deputies that we have some proximity to. There is a group of deputies that I always send either to analyze a bill on the environmental issue, or to make a technical justification for the approval of an environmental proposal.

T: And are you part of any political party or social movement at that moment or in the last two years?

H: No, I never did. I have always been an activist, but I have never been part of any political party. Today, maybe I am part of a movement, which is the movement I believe here in Goiás, but still in a very superficial way. I understand myself as a political actor, working on public policies, but I never allowed myself to join a party. I don't know if this will change in the future, but not yet.

T: Ok. Here we close these three initial questions. Let's start now with the questions most related to the subject, to the topic itself. You said that you worked for 11 years at the environmental agency. Could you give a more general picture of the environmental situation in Brazil, or in Goiás, in these last eleven years and especially in the last two years, 2019 and 2020?

H: I think that people who are technical, and the councils: Municipal Council for the Environment, State Council for the Environment, CONAMA, National Council, we fought so much with each other that we missed opportunities to build technical legislation, especially in recent years. It is logical that we have the National Environmental Policy, the 6938 Act of 1981, which was an advance for our country and is still an active legislation. Brazil is at the forefront of environmental legislation in the world, but once we have a legislation, we have to implement it. And as we didn't create smaller legislation to implement it, we ended up doing it through resolutions of the National Council for the Environment. These resolutions don't have the power of law, therefore it always generated jealousy, disputes, it was said that they were technical issues, etc. And the question of the technicality of the construction is raised a lot. Unfortunately, the environmental issue has been politicized, and it's not just now, I think maybe since the Lula government. But at that time you had a more structured base of convergence for the preservation and conservation of the environment, right?! And this has deteriorated in recent years, especially under the Temer government. The Temer government gave some indications of legislation change. For example, it was at the time of Temer that, under the tutelage of facilitating, of making the country grow, we began to reduce bureaucracy in the environmental licensing process. The idea was to make the process easier for small and medium-sized companies. And then Bolsonaro came, who simply put everything that was being built into effect. The group that elected him had these conditions. So today you have a policy, which I am partly in favor of, which is the process of reducing the bureaucracy of licensing, however I am in favor of this reduction of bureaucracy for low-impact and medium-impact activities. An activity of great impact and exceptional impact, it is surreal for you to make a licensing, for example, in a declaratory way. And then what happens is the following: when you see a breach and you start to work on a breach, in this law of economic freedom that has been put in place, and the legislation itself that was recently approved in the camera, bringing a debureaucratization, taking away the rights of the *Quilombolas*, of the indigenous people, allowing land tenure regularization in quilombola and indigenous areas, bringing a perspective of: "if you deforested before we can bring regularization", then you give a very clear indication that committing a crime pays off. I usually say a lot that society, even in the wrong way, understands the environment far from its reality. This leads to what will happen in more than half of Brazil, that we will have water and energy shortages, because we are in an intense crisis – maybe you're following along. So maybe within this context, I think this was a contextualization of what you see happening, all this change in legislation, this politicization, where you take it from the technical and... all the legislation that was proposed in this recent period, they are within the principle of legality. That's the cruelest thing. Why? Because when you go to build legislation, you look at it starkly. You often take away the differences that the environment has. So making a law not to break traffic lights is a great, because it's a fact. Now you have to understand the specifics of each biome, of each region of Brazil, especially in a continental country like ours. So when you make a general law, you undermine this process. And then the

word has power, right? When you give an indication that you, as the manager of the country, that you believe that the indigenous people have a lot of land, that we need to explore it, that the quilombolas do not need the amount of land they have, that I need to regularize some farms and allow exploration, because all this – and nobody takes it out of my head, Thaina – but this is an assumption, that all this is not very focused on the issue of agriculture, because agriculture already has its niche. It is much more linked to this occupation of indigenous and quilombola areas for mining, because all the regions that are mentioned are rich regions, or at least they have a rich indication of minerals. So maybe that's the thread. Everyone criticizes agriculture a lot, because it's more exponent, but forgets what's behind it. And I think this is on purpose. I think maybe that's it, I don't know if I understood your question.

T: Yes, yes. That was it. It was excellent. And since you addressed this subject a little bit in these speeches by the current government, can you bring a little more? How would you define these discourses and practices that the current government has been doing, especially in relation to environmental issues?

H: He's being consistent. Being honest, he said that he would... Since the time of the campaign – even though he didn't have many proposals, he just talked, because he practically didn't participate in any debate – but he said that he would focus on agriculture, that Brazil had to grow, that it has to occupy the Amazon. He is being consistent with what he said, right? This does not mean that I agree, under any circumstances. As he says: “we need to occupy the Amazon”. I am also in favor of occupying the Amazon. The Amazon is, strategically for the next 100 years of Brazil, it is fundamental for the scenario of the country 100 years from now, in terms of land use and occupation and of climate change. I can understand this. Now, this occupation cannot take place in a short term perspective. Today this occupation for the deforestation focus on the short term. And this short term, sometimes, interferes a lot in decisions. So Bolsonaro is being consistent. He didn't lie. Everything he is saying that he was going to do with the agricultural sector, since before he criticized IBAMA and ICMBio. There is the case that he was fined for illegal fishing by these organisations, he already said that these groups did not have to have that power. So I think it's the following: his speech is consistent with what he proposed, but his speech is causing damage that we will only observe in the medium and long term. Why? The Brazilian products – and you are out there, you see – the Brazilian products have a really high quality, because a large part of its production is *in natura*. It does not have an industrialization process. So meat is of good quality because it is produced in extensive fields, right? Soybeans is of good quality because, for the most part, they are not cultivated in preserved areas, they are not in deforestation areas. So you have a quality “Green Seal” on virtually every product. So in the short term it may be beneficial for some groups. And then there are the mining companies behind, but in the medium and long term, for exports, it can be terrible. You are in Europe, right?

T: I am, I am in Holland.

H: Both in the United States and in Europe, which are the two places I visited, you have the purchasing power, you have the decision-making power. And there, especially in Europe, this purchasing power makes you decide if you want to buy a more sustainable product or not. In Brazil, unfortunately, with the financial crisis we have, the guy buys the lowest price, he doesn't look at quality. But this is what maintains the Brazilian trade balance. This in the medium and long term can be very bad for our country. Apart from investment funds and a series of things that move the economy. So I think that with these actions, these fallacies, he is being consistent with what he believes. I think that the National Manager does not have to think only with what he believes, he

needs to think about what Brazil is, what the country is. So in the medium and long term, to summarize, I think it will be bad for our country, it is already happening, because apart from these commercial issues, we are having a series of national problems.

T: And in addition to this influence, this economic impact in the medium and long term, do you think these practices also have a social impact today? For example, in relation to society, do you think that somehow these discourses and practices have an impact on society?

H: A lot, right? Because what happens is this: you start promoting an informal economy. When he talks about the miners, those who are there, they are people who have no choice, who had no choice. If you take the history of these people, you will see that. And I usually say the following, that environmental decisions directly affect the social issue, even as a matter of water quality, air quality, environmental quality, that this directly affects the quality of life. I usually make a parallel with urban areas, no one will live in a region on the edge of a stream full of sewage, garbage, because they had a choice. They live there because they had no choice. And this environment is contaminated as a result of use and occupation that we did not have control over. I always say, Thaina, Brazil is great for building legislation. If you make a comparison, you will notice that Brazilian environmental legislation is at the forefront. Everywhere you go our environmental legislation is mentioned. So, it had its base, its roots based on the APA model, an American model, at the end of the 70s, and on the European Community model, basically the French model. So the technicians, in the late 70's, went to the United States and went to Europe, in this case to France, and they brought it. When they got here, they didn't do "control+c control+v". The national Environmental policy is this good precisely because when the technicians arrived here, they made this adaptability to the reality of Brazil. So our problem is not legislation. Anything you ask, the legislation number 9605, the environmental crimes law, and decree 6514 will say: you can't, you can't because of that. Our problem is not legislation. Our problem is impunity. Why? With the exception of the crime of trafficking in animals and trafficking in vegetables, which is framed in the trafficking law, all environmental crimes are punishable by up to four years. Most six months to a year. Here in Brazil there is a regulation that any crime, any crime for which you are sentenced for up to 4 years, you go to the open regime, you will do community work. So what happens? The companies do the measurement, the big contractors and the big mining companies do this calculation. And here comes a problem: these legislations come with a lifetime. Why? Someone makes a law and it is passed. Then someone files a lawsuit for unconstitutionality. But until it's being judged, that law is in effect. Then I have a business and I started a licensing process during this period. The law cannot retroact to harm. So what happens? As much as the Supreme Court says that it is really unconstitutional, in that period when I sought my legislation, my licensing, whatever it may be, it will be allowed. The 2012 Forest Code had at least 62 articles with ADIN, with unconstitutionality action. This new law, the PL, which was passed in the chamber, has at least six or seven points of unconstitutionality action. So you bring a lot of legal uncertainty. The system is really cruel. I know it's going to be revoked, I know it's going to be unconstitutional, but 5 years from now, 6 years from now. Perhaps a large enterprise is a little worried about this, but the enterprise that does the measured calculation, this situation is the best for it. I've heard parliamentarian saying this: let's do it and approve it later, then we'll see how it goes. So this is a problem that we have.

T: And you talked about the lack of supervision, impunity. Do you notice any changes in relation to this impunity in recent years, compared to previous years? I don't know how old you are or how

long have you been following this environmental issue, but do you notice any changes in inspection and impunity in the country?

H: Of course they are interconnected, but I want to tell you about them a little bit first. When I tell you that it's not new, just so you have an idea, the last public hiring process for environmental agents we had at the municipal level were in 2007, at the state level, if I'm not mistaken, it was in 2010/2011. From IBAMA there was still another one in 2013/14. So what am I talking about? At best I'm talking about 7 years with no state hiring. The first problem we have, and that's why I'm telling you that this policy change doesn't come from today, what happens today is the cherry of the cake. Everything's wrecked, without technical structure, without human capacity. You go to an average city, with up to 100 thousand inhabitants, you will have 10 environmental agents. And surveillance works 24 hours a day. When you scale this, you will have 1 fiscal per period. Goiânia has 64 active agents. These 64 agents, when you put them on a work schedule of 30 hours, you will have teams of 5, 6 people at most, for a city of 1.5 million inhabitants. In the state, then, you have a very small number for the 246 municipalities. So, back there, there was a process of wrecking the environmental agencies. And then what happens is the following: despite having a good service group that continues to work to be more effective, with this wrecking process, inspection has to be more accurate. So what happened in that government? The inspection by Ibama, ICMBio, and others, began to be more accurate. Instead of getting a guy who takes 2, 3 or 5 pieces of wood, they started to focus. If you look at it, the biggest wood apprehensions we've had were in the last two years. This whole process of deconstruction, cutting of resources, people had to adapt. And then the inspectors and the environmental agencies thought: OK, so I'll have less money to carry out operations, so I'll focus on making the biggest apprehensions in history. And then there was the whole problem that you are following, the minister of the environment fell. So what happens: you have this technical intervention in the inspection due to lack of resources and what happened in the Union, happens in the state and municipality. And the state is also reducing its budget for enforcement. The municipality sometimes has a different reality, right? Because the agent is on the field every day. In the city, maybe we don't have that much problem with fines, we have a problem with making this fine, because it doesn't seem like it, but there are a number of benefits, resources, everything. And if the notice was not done very well, most likely any lawyer can overturn the notice of infraction. That's more or less it.

T: And from your experience, do you believe that this decrease in inspection influenced people, or made people feel freer to commit these crimes?

H: I think there are two factors: it is the speech of the federal government and this reduction. Because then what happens? You see the head of state "beating" all day long on his own supervisory bodies, reducing their performance. And then a guy goes there and opens an extraction area, for logging or cattle for example. And it starts to expand, expand. When the state goes there to inspect, the area is already taken over by the activity. So, the discourse and this reduction in inspection, yes, absolutely. This potentiated this increase in non-compliance with environmental regulations. I can certainly see that. Of course, it's difficult, I don't have scientific data to prove it, I didn't do an analysis, I didn't do a survey, but it's a feeling, within the understanding of what is happening, of knowledge, of understanding the guts of environmental agencies, this reduction is encouraging an advance towards non-compliance with environmental legislation.

T: Can you think of any example, any situation you have experienced or someone you know has experienced? Anything that exemplifies this assumption?

H: I'll give you an example from the state. I have several friends from the state of Goiás and even with reduced inspection, they are going to the field, now they are using Drones and a series of technologies. And then it's like a colleague of mine said: in some areas, we knew that the owner didn't do that before, but he's starting to deforest now, because he's in that understanding that he can solve the issues later, right? So he made a big apprehension of wood from illegal deforestation in a *cerrado* area and he said: the guy knew he couldn't do it, but the guy said "I need this area", and he went there and did it. Why? Because there is a feeling that later he can resolve any problem it may cause. Because when you have legislation that is as hard as we do, and it is enforced, you say: oh, I'm not going to do that. For example, today, for you to drive drunk here in Brazil, you have to be very brave, because the sentence has been extended to 8 years. So if you kill someone in traffic, you know that the sentence will start from eight years, and eight years in closed regime. So there is this fear. In environmental issues, the law brings you this perspective. They consult lawyers before doing something. There is a condominium here in Goiânia that the owner paid an environmental fine of 4.5 million. Nobody gets it out of my head that he did it with everything thought out, everything calculated. The condominium is located in a noble area of Goiânia, with a great infrastructure, and then he went there and paid the fine. The part that he deforested he had to replant elsewhere, so he did everything right. 4.5 million for him was an investment, you know? And there are several articles in the world saying that for the big polluters, it is worth paying the risk. Vale did this. She measured the risk. I think maybe she just hadn't measured the possibility of dying that many people, but that way, the risk of the accident was measured, right? So maybe lowering the penalties – they still haven't lowered the penalties, but it has made the process easier – brings that feeling.

T: Well, finally, one last question a little more utopian: do you think there is a solution? What do you think could be done to improve this situation, to reverse this situation that we see today in Brazil, especially in the Amazon? What do you think could be done?

H: I think that, taking away that feeling that we have about the current government and making an analysis, I think that in the last governments, from Lula to here, environmental policies have been deconstructed. The bills, for example, licensing and land tenure regularization, are not new. They are being voted on now because this government has a majority. So, I think we have to face environmental issues seriously, not in a utopian way, not in a partisan way. The environmental discourse is very beautiful, it attracts, it gives media. So we have to be very careful not to get soaked in it. We manage to establish sustainability, we have equipment, geotechnologies, which manage to establish a usual control. Now, we have to understand that when it is defined that an area cannot be used, it cannot be used. This area of sustainable use can be used as long as it meets a series of parameters. And this other area, if it is not a permanent preservation area, it is not an area of sustainable use, then it is allowed, in a less bureaucratic way, the occupation. We have to negotiate. And within this negotiation, we also have to add value. What is being done in Brazil lately is to establish a compensation value, to add value to the environmental good. I think that, in this government, it is very difficult for us to reverse something. But I also think that, regardless of who wins the next government, he or she might also make changes in the environment, but not in a clear way, as this one is doing. That's my fear. We are heading towards first reaching the bottom of the well, and then starting to rethink this model of use and occupation. The master plans of cities are there, doing this. We are in the 21st century, and instead of working on the issue of densification, we are still working on the issue of expansion, occupation of the top of the hill, the bottom of the valley. And the consequences are flooding, for example. Thinking on a general analysis, I see that, absolutely, I point out this government, but I think we also have to listen to

other governments, which, slowly, were implementing policies in these same sectors, like mining, hydroelectricity, agriculture, which are supporting this government now. The difference here is that this one is more mouthy, but the others did the same thing. So we have to break this paradigm of thinking it's only happening in this government, and we have to start changing. And then, specifically on the topic of the Amazon, we need to generate wealth. Wealth there is not allowing deforestation, but making sustainable use of the region and providing living conditions for those populations, so that they do not get involved in the issue of money, because if it gets into the issue of money, and the world is moved by money, they will think: if I gather *açaí* seeds here, will I earn more than if I raise cattle? If it has good extractive conditions, good housing conditions, sanitation and quality of life, if it improves the living conditions of the people, these people will not be interested in changing the system. And why today these same people change the system? Because if you go there, you'll see that even in the settlement areas, in regions close to the Amazon, people are raising cattle, because that's what makes the most money. We have a case here, in a settlement area, where the first thing that more than 400 families did was deforest and graze, because it is the most profitable. It's just that the soil there is bad, it's sandy soil, and then they became desertification fields in the process and no one else is there. There are only a few hundred of the more than 400 families that have been settled. Because you can't plant anything. So we need to work on this, you know, in a sustainable way. Because if we don't improve people's living conditions, they won't have a choice. And having no choice, they will do what they think is best. And that's where the money comes in. When I told you at the beginning, who do you think is there at the end of the mine? Not the guy who had a choice. It's the guy from the region nearby, who has no choice and is looking for a better life. He goes there and he works due to the lack of options. So those are the conflicts. And we see that in our country more and more landowners are dominated, and you don't have a policy from INCRA, you know, family farming, to work on this issue of extractivism, to improve the living conditions. I saw an interview these days that showed some riverine people in the Amazon region. People there are worried with eating. How are you going to talk about preserving the environment if people don't have any sanitation? People don't go hungry because they learn to fish, they learn to do a series of things, but these people, what option do they have? None. So to talk about sustainability in Brazil without having social equity is to rain on the wet. This is a very serious problem that we have to face. A Deputy said on the *Roda Viva* TV show that in Brazil there is connivance with environmental crime. But why? Because people are very concerned about surviving. It is different, for example, in Europe. People don't have the problem of hunger, they had the opportunity to build something, so they can have a bigger dimension. So when you come to Brazil, you go to the poorest regions of the world, people are worried about eating. It is difficult for you to talk about the environment, especially in Brazil, and not take into account economic and social issues. Perhaps this is the cause of the great difficulty that we have in order to advance in more sustainable legislation, in promoting a convergence between the actors, right, the economic, the social and the environmental.

T: This analysis is very good, especially this relationship with social and economic issues in Brazil, it brought a lot of cool stuff to the thesis. Thank you so much for your time, because everything you sent too. I'm seeing everything, I'm watching things, getting a lot of interesting information.

H: I thank you and hope that you can succeed in your Master's thesis. I think that, when you are out there and you talk about Brazil, about environmental problems, maybe you have a greater scope, so I think your work, I believe it will be well structured, if you manage to publish in an impact magazine, you can bring greater attractiveness to these topics that we talked about. Because

the main theme may be the environmental one, but we have a “pressure cooker” here that is all mixed up, in the medium and long term we may still have a lot to learn to improve.