



Social-legal theory as an understanding tool of legal practice: an investigation on environmental crimes in the Amazon region

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Abstract:

The paper analyses the topic to understand how the legal and judicial practices in two Amazonian municipalities (Apuí and Lábrea) respond to the dynamics of environmental crimes in the region. The research project is based in a qualitative and quantitative methodology, introducing the recent developments of the research based on the semi structured interviews conducted with criminal justice professionals working with environmental crimes in the state of Amazonas. The interviews were gathered in the city of Manaus with a Judge from the Amazonas State, a Prosecutor from Public Ministry, a Federal Police Commissar, and a member of the Environmental Agency of Amazonas. Thus, it is possible to understand: a) the context of environmental crimes in the cities of Apuí and Lábrea, b) the responses of criminal justice institutions to the occurrence of environmental crimes in the region. understanding how the legal and judicial practices in Apuí and Lábrea respond to the dynamics of environmental crimes in the Amazonas.

Keywords:

Environmental crimes, Amazon, legal culture, criminal justice system.

The authors would like to thank the financial support from the National Council of Scientific and Technological Development (Brazil - Grant 407241/2021-3), the Gerda Henkel Stiftung (Germany - Grant AZ 13/KF/22) that allowed the data gathering, and the financial support from IESE - Center for Business in Society.

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Resumen:

El artículo analiza el tema para comprender cómo las prácticas legales y judiciales en dos municipios amazónicos (Apuí y Lábrea) responden a la dinámica de los delitos ambientales en la región. El proyecto de investigación se basa en una metodología cualitativa y cuantitativa. Las entrevistas fueron realizadas en la ciudad de Manaus con un juez del estado de Amazonas, un fiscal del Ministerio Público, un comisario de la Policía Federal y un miembro de la Agencia Ambiental de Amazonas. Así, es posible comprender: a) el contexto de los delitos ambientales en las ciudades de Apuí y Lábrea, b) las respuestas de las instituciones de justicia penal ante la ocurrencia de delitos ambientales en la región.

Palabras clave:

Crimen, Amazonas, cultura jurídica, decisión judicial.

1. INTRODUCTION

The aim of the paper is to introduce the recent developments of a socio-legal research project based on a qualitative and quantitative methodology. From a quantitative standpoint, the goal is to gather and analyze the criminal sentences issued at the end of environmental crime proceeds in the Brazilian cities of Apuí and Lábrea. Sentences constitute an important object of socio-legal analysis, given their significance as outcomes of a decision-making process regulated by law. Criminal sentences are tools of social regulation (although as an outcome of a trial), and are used as a “magnifying glass” to study mechanisms and contexts from which one can deduce the real balances of power and value hierarchies established by the institutional response to organized crime, that allows it to understand and describe in a scientifically-founded way, on one hand, the proper function of the modern jurisprudence; on the other hand, the empirically observable reality of the behavior of jurisprudence operators or subjects interacting with the juridical system. We hope to answer several research questions: the structure of legal proceedings concerning environmental crimes and in which way those facilitate responses to criminal events within the two Brazilian cities; what are the economic, social, and legal features of the environmental crimes observed from the gathered ruling; how long lasts a lawsuit for environmental crime originating from those cities?

This is an ongoing project, and the team is still collecting up the sentences. Concerning the qualitative methodology standpoints, we have conducted semi-structured interviews with criminal justice professionals working with environmental crimes in the State of Amazonas: The interviews, reported in the follow-up of this paper, were gathered in the city of Manaus with a Judge from the Amazonas State, a Prosecutor from the Public Ministry, a Federal Police Commissar, and a member of the Environmental Agency of Amazonas. The aforementioned interviewees gave a first answer of a) the context of environmental crimes in the cities of Apuí and Lábrea, and b) the responses of criminal justice institutions to the occurrence of environmental crimes in the region. For those reasons, the following pages summarize a first sketch of the research objectives.

To answer these questions, in Section I, the concept of legal culture is discussed in a deeper perspective, because it expresses the theoretical frame of the research. In Section II, the article sketches the research objective, considering the data and the most significant issues related to environmental crimes in the Amazon region and analyzing two inland municipalities within the state, notable for their high level of deforestation: Lábrea and Apuí.

As the largest forest reserve on the planet and its biodiversity, the Amazon region is always an object of international interest, but many interests crop up when comparing the different actors playing on the ground. Between them, different shapes of criminal organizations are at stake. In Section 3, the research methodology is presented, which combines both qualitative and quantitative methods, alongside the main research questions and objectives. Section 4 provides the most significant segments of the gathered interviews. Section 5 describes the first results, whereas Section 6 illustrates the conclusion.

2. THE DEVELOPMENT OF SOCIO-LEGAL THEORY

As known in socio-legal literature, there are a plethora of usages of the term “legal culture”, preventing achieving theoretical precision in defining it (Ehrlich 1933/1976, Friedman 1975/1978, Nelken 1997, 2016, 2020, Cotterrell 2006, Teubner 2010, Pennisi 2018, 2023, Febbrajo 2019).¹ This brings to surface several issues concerning the law, culture, and the “law as culture” – albeit resulting in a lack of clear focus (Mezey 2003, Nelken 2020).

From a sociological perspective, this challenge is noticeably related to two theses by assuming that law and society move together – but can still adapt differently to an analytical approach (Banakar 2009).² The two theses support the idea of law as a mirror or as a spectrum, of social reality. In the first case, an external social influence is charted in the categories of law; in the second one, it is the law that gives the impulse to the definition of contingent rules, values, and the interests of society. This paper does not intend to trigger a circular discussion on this point and aims to enhance awareness regarding the dynamic evolution of the socio-legal perspective pertaining to a specific subject matter.³

From the second half of the 70s to the present day, a central point for scholars exploring the concept of legal culture as both an object of analysis and an explanatory tool has consistently focused on the dichotomy between internal and external legal culture in which Lawrence Friedman (1975/1978), considers legal norms. However, this now common distinction between internal and external legal culture in Friedman’s hypothesis is the

¹External v internal legal culture; legal culture for recipients v legal culture for legal practitioners; legal culture v all that is not legal; legal culture as consciousness v legal culture as action; legal culture values and norms v legal culture feelings, attitudes, or generalized expectations; legal culture as an empirical research tool v legal culture theory, etc.

² “The sociology of law, Law and Society, and sociological jurisprudence began somewhat differently, in different times and places and with different aims in mind. Yet, there is more that unites them than separates them. As a result, many of the individual studies couched within these three orientations are hardly distinguishable from each other” (Banakar 2009, p. 68).

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mirror of a partially obsolete scenario in which law was represented as a set of technical rules assisted by the neutrality of interpretative operations (Raiteri 2018). Many scholars have highlighted the limits of such clear-cut distinctions, that are enhanced by the growing awareness that law development also occurs while applying the rules in the decision-making procedure (Agodi *et al.* 2001, Nelken 2020, Tamanaha 2020).

As pointed out by Nelken, using the term Legal culture means giving culture a double role. Although it is already represented in the law, this is an expression of a concept that the latter has not entirely deliberated upon. Managing “law as culture” means, on the one hand, evaluating culture as relevant for investigation – since it can provide coherence with the law, norms, and customs shared by groups and organizations. On the other hand, it denotes an awareness of its pervasiveness, acknowledging the foundational consistencies needed for understanding and interpreting what, within the legal context, is identified as “relevant”. Even more important, perhaps, are considerations relating to the use of the concept of legal culture to highlight the discrepancies between different legal systems and to clarify why individuals (and companies) often diverge in their approach to leveraging the law. Nonetheless, this concept also finds a place in narratives depicting pluralistic interactions between different types of law and in efforts to understand how international or hybrid Courts reconcile. Conflicts between the heterogeneous cultures and knowledge base that Judges from various jurisdictions carry out (Nelken 2016).⁴

The concept of legal culture is not defined irrespective of the actors. For instance, the criteria adopted by Courts to decide, or the items of their attention (Febbrajo 2019, 29). Nor is the concept a perspective of analysis which can explain the patterns of social interaction. In accordance with the advice of Nelken and Cotterrell, notwithstanding their different perspectives (Nelken 1997, 2020, Nelken and Feest 2001, Cotterrell 2006), who point out the risk of theoretical incoherence when employing the concept of legal culture both as an explanatory factor and as an outcome of social processes, our approach underscores a methodologically controlled use of the legal culture concept (Pennisi 2018, 2023). In a nutshell, for the purposes of this paper, legal culture means a decision-making process with a structure defined by roles. Law is the result of this process. The ruling is the pre-condition, i.e., the structure that produces the law. Considering law as culture means affirming its objective character (law as a fact), as well as its subjective character (law as representation). “Legal culture, in short, is more than just an analytical tool and appears, in the contributions to which reference has been made, as a concept to be elaborated gradually in the context of the choices we make in a strategy aimed at controlling, clarifying, and analyzing the particular complexity with which the legal dimension emerges, penetrates, and returns to social relations (Pennisi 2023, 287).

The dimension of change pertains to the evolving perspectives of law sociologists regarding the concept of legal culture and its interconnections with the dynamics of legal systems. With the consolidation of the “normative technique” transformation, the “legal rule” becomes a procedural statement which, on the one hand, expands the span attributed to the interpretation of the text and its actors and, on the other, the relevance of social facts (Raiteri 2018). Analyzing this process is useful for the sociologist of law to understand the

⁴ This shows how far the legal culture concept is from what is defined as “legal consciousness”. This notion is useful: “(...) to identify the manner particular individuals understand what the law is, experience it and respond to it” (Jaremba 2013, p. 194) because it looks exclusively at the decision, and not at the possible scope of where decisions are taken – the interaction framework where different legal orders interface.

legal mechanisms' functioning. Hence, the concept of legal culture references the outcome derived from an analysis of a sequence of decision nodes. In terms of methodology, an observable path begins from the opportunity to reconstruct the passages, rather than merely deducing them. Examining decisions made by decision-makers on legal culture and reconstructing their paths provides a pathway to a more thorough understanding of these decisions. We employ the word "culture" as an adjective to describe a cultural dimension within the social organization and its domains and layers. The "cultural" aspect refers to the "cultural dimension" of the economic, religious, political, and legal aspects under consideration. Therefore, culture can refer to the knowledge, meanings, and values inscribed into interrelated social phenomena at different social organization layers (Von Benda-Beckmann and Von Benda-Beckmann 2010).

3. ENVIRONMENTAL CRIMES IN THE AMAZON: ADDRESSING CHALLENGES AND ANALYZING DATA

The Amazon region has been an object of international interest for a long time. Holder of the largest forest reserve on the planet and its biodiversity, the region also holds great natural resources patrimony, such as the largest reserve of fresh water in the world and essential minerals. Such a feature draws global attention to the preservation of the region. Thus, the protection of the Amazon rainforest and its biodiversity is ensured by the Brazilian Federal Constitution of 1988 (art. 225). Here, the environment is recognized as a fundamental human right accessible to individuals within the limits established by the legal system (Sarlet and Fensterseifer 2019). Moreover, the Constitution protects the rights of traditional peoples established in the region (art. 129, p. V); but this is just one of the challenges that Federal State and Amazon States deal with. There are many issues concerning the Amazon, namely poverty, low levels of economic development, the misuse of natural resources (Castro and Castro 2022), illegal logging (Capanema *et al.* 2022), fires, deforestation, and other environmental and social risks (Farias and Szlafsztein 2023).

More recently, the Brazilian Amazon has suffered from an increase in violence related to organized crime (Castro *et al.* 2020, Dolo and Racouchot 2021) The issues observed in the region are related to the occupation and development strategies established there. The persistent presence of large economic and infrastructure projects imposed from the hierarchical levels above is a recurring factor in the region. These projects reflect important changes observed in the region since the second half of the 20th century. The Amazon, especially the Brazilian one, is not an inert and untouched region (Le Tourneau 2019, 207-265). On the contrary, it undergoes constant changes, pressured by internal and external issues. Such processes directly affect the institutions responsible for enforcing the law in the region. Therefore, a deficit in the application of the rule of law prevails in the Amazon (Zolo 2002). The context of violence observed in the region is characterized by great complexity and significant challenges for the Nation-State in regulating and enforcing the law (Castells 1996, Faria 1997, Arnaud 1998, Ip 2010).

The rise and consolidation of criminal networks represent another facet of globalization (Varese 2010, 2020), a phenomenon notably observed within the Amazon context. The role of criminal organizations is a great challenge for contemporary States, as their articulation occurs through hierarchical structures of command, mobilization of large amounts of financial resources, use of violence, corruption of public agents, and transnational organization. The mode of action of organized crime holds significance in

this context, as it aims to control the production of commodities or goods (Campana and Varese 2018, 1383). Conflicts with state institutions and civil society arise at this time and can take different forms “Organized crime in various of its nontrivial senses is, by contrast, a response to a specific kind of governmental failure—in- the ability to prevent ongoing coordinated actions to earn money from predation or illegal markets” (Reuter and Tonry 2020, 5). From the corruption of public and private agents to the use of violence to ensure dominance over a specific territory or even confrontation with state forces (Abadinsky 2010).

Thus, the reality of criminal organizations is characterized by the imperative to establish territorial control, ensure gains, and reduce risks. These objectives are pursued through threats and the use of force, as well as corruption. In this structure, there are beneficiaries and an informal command organization (Campana and Varese 2018). Therefore, their action impacts the State’s ability to impose order. In the case of Brazil, several criminal organizations daily challenge the state and its monopoly on the legitimate use of force (Ricchio and Skogan 2018, Magaloni *et al.* 2020). In the Amazon region, this issue is aggravated due to its geographical characteristics and the criminal justice system’s infrastructure requirements (Ricchio *et al.* 2016). Issues such as shortage of personnel or equipment impact law enforcement in the region. Thus, the rule of law (Zolo 2002, Clavero 2002) remains fragile in the Amazon.

In this sense, the development model traditionally applied in the region is related to the pressure imposed by illegal economic activities on the environment. The most obvious case is deforestation, operated by criminal organizations. For this reason, illegal logging relies on resources to extract, transport, and trade wood both internally and abroad (Sundström 2016). The operation of this system requires well-structured organizations. The growth of violence in Brazil began in the 1980s of the last century. From that moment on, homicides moved from ranking fourth as a cause of death in the country to second place. The increase in homicide rates persisted in the 21st century, placing Brazil among the countries with the highest rates in the world. At the end of the 20th century, the highest homicide rates were registered in the main urban centers of the country, with an emphasis on the Southeast. In 2017, more than 56,000 homicides were registered in the country (Fórum Brasileiro de Segurança Pública - FBSP - 2019, 40).

The latest report by Instituto de Pesquisa Econômica Aplicada (IPEA) in partnership with the Brazilian Public Security Forum (FBSP), points to the reduction of homicides to approximately 45,503, equivalent to 21.7 per 100,000 inhabitants. The only state that registered an increase in the last report was Amazonas with a rise of 1.6%, confirming a trend that sees an increase of 22.6% in homicide between 2010 and 2020 (Coelho *et al.* 2023). In relation to the Amazon, in 2020, 8729 homicides were registered, with an average of 30 per 100,000 deaths. Therefore, above the national average. However, there is a caveat regarding the change in the method of collecting federal data on homicides, which would make it possible to artificially reduce these numbers. Additionally, there has been an increase in deaths attributed to undetermined causes. That is, those in which the State was not able to identify the real motivation and nature (FBSP 2022).

In short, the issue persists at a high level in the country. Violence currently impacts the poorest regions of Brazil. The states in the Northern region that are home to the Amazon rainforest, where the Amazonas state represents the highest rate of homicide with 42.5

deaths per 100,000 inhabitants, exhibited a homicide rate average of 35 deaths per 100,000 inhabitants in 2021, surpassing the average of 22 deaths per 100,000 inhabitants in Brazil (IPEA 2022). This increase is related to the growing presence of organized crime in the region. Environmental crimes in the region involve several activities such as “illegal mining”, “deforestation”, “fires”, “wildlife trafficking”, “biopiracy”, “invasion of indigenous lands”, “appropriation of public lands”, as well as assassinations of civil society leaders and state authorities. Such activities do not occur exclusively individually but rather involve criminal organizations responsible for managing and laundering proceeds derived from criminal activities. Still, these organizations abuse their economic power by corrupting public agents in different spheres.

Thus, the coercive power of these organizations interferes in various spheres of Amazonian life. More specifically, illegal deforestation in the Amazon stands as the most critical issue on Brazil’s environmental agenda and the lack of data concerning these kinds of crimes make difficult to develop a fitting public policies (Ferreira and Watanabe 2020). The escalating issue of illegal deforestation has drawn both domestic and international criticism towards Brazil’s environmental policies, which worsened from 2018 onward with the election of the Bolsonaro government. Monitoring deforestation in Brazil falls under the responsibility of the Institute for Space Research (Instituto Nacional de Pesquisa Espaciais - INPE) through the PRODES program established in 1988.⁵ Satellite images allow the establishment of annual deforestation rates in the country. Based on these data, an estimated 762,000 square kilometers have been deforested since monitoring began. It is important to note that the Brazilian Legal Amazon covers 9 states in the country: Acre, Amapá, Amazonas, Mato Grosso, Maranhão, Pará, Rondônia, Roraima, Tocantins, spanning 5,015,068 square kilometers, constituting 59% of the national territory. Between 1998 and 2002, the average deforestation rate stood at 17,353 sq2 per year. During this period there was the highest record reaching 29,059 sq2. The second peak occurred in 2004 recording 27,772 sq2 deforested. From 2005 onward, there was a decline in deforestation rates, stabilizing around 7000 sq2 between 2009 and 2018. The lowest level verified occurred in 2012 with 4,571 sq2. However, this declining trend was interrupted in 2019 when deforestation surged to 10,129 square kilometers. Another increase occurred in 2020 reaching 11,088 sq2.

Concerning the year 2023, the data show a deforested area of 13,235 square kilometers,⁶ representing a 22% increase compared to the previous year (INPE 2021). The latest PRODES analysis points to the state of Pará (the second largest in Brazil) as the main responsible for deforestation in the country (39.9%), while Amazonas (the largest state in the country) ranks second on the list with 17.73%. Amazonas is relevant due to its territorial extension (1,500,000 sq2) and its central location within the Brazilian Amazon. Furthermore, it is the state with the greatest economic relevance in the region due to the industrial hub of Manaus and the largest forest cover in the country.

Considering the presented data and the most significant issues related to environmental crimes in the Amazon region, the research analysis will focus on two inland municipalities within the state, notable for their high level of deforestation: Lábrea and Apuí. Both municipalities ranked among the top 10 cities with the highest level of deforestation and are crossed by the trans-Amazon highway (BR - 230), with Lábrea accounted for 540.25

⁵ Instituto Nacional de Pesquisa Espaciais available at: <http://www3.inpe.br/50anos/english/presentation.php>

⁶ Terrabrasil: <http://terrabrasilis.dpi.inpe.br/app/dashboard/deforestation/biomes/amazon/increments>

sq2 (4th place) and Apuí for 329.88 sq2 (7th place). Both of them belong to south of Amazonas State, insert into the area called “deforestation arch”, extended from south west of Maranhão, the north Tocantins, south of Pará, north of Mato Grosso, Rondônia and south of Acre” (Souza Ferreira and Veludo Watanabe 2020, 322).

Apuí, located in the southern region of the state of Amazonas, was colonized by farmers from the southern and southeastern regions of Brazil from the 70s of the last century and became an independent municipality in 1988. Spanning an area of 54,240,545 sq2, Apuí sustains a dense population of 0.33 inhabitants per sq2. The municipality has a precarious land tenure situation, witnessing instances of violence and murders associated with land ownership disputes. Its economy is based on agriculture and the infusion of federal resources. Apuí demonstrates a Gini index of 0.46 and an HDI (Human Development Index) of 0.537. Notably, there are no registered indigenous reserves within this region.

Lábrea, in turn, has the first record of occupation in 1854 by a Catholic mission. By 1874, it attained the status of a district and later ascended to municipal status in 1894. The city spans an area of 68,2662.68 sq2 and houses an estimated population of 47,645 inhabitants, equating to a demographic density of 0.55 inhabitants per sq2. With a Gini index of 0.42 and a HDI of 0.46, Lábrea sustains its economic activity primarily through extractive practices and the inflow of federal resources which accounts for 95% of its sustenance. Notably, the region hosts the Catitu indigenous reserve. Additionally, Lábrea serves as the terminal point of the trans-Amazon highway (BR-230), one of the most polemic infrastructure works of Amazonas (Neto 2021, 71-89).

The above-mentioned social indicators regarding Lábrea and Apuí lie beneath the average of the State of Amazonas, where the Gini index is equal to 0,49, and the average HDI is equal to 0,56, one of the poorest States of Brazil, characterized by strong inequality (Le Tourneau 2019, 433-437).⁷ In this context, because of the weakness of public institutions, many different actors play an important role in the increase of violence, like local communities and people who would like to exploit forests and/or expand territories of cattle livestock represents one of the most significant issues until to become so violent to create as a “Far West” (Le Tourneau 2019, 439). On one hand, the blank state of public security left by the Constitution of 1988, filled out during the years with several confused statutes (Dolo and Racouchot 2021, 45), from the other hand, the scarcity of financial resources and personnel, but also of means (e.g. vehicles) that left the room to a terrible increase of crime. That “recipe” created the conditions for the development of Primeiro Comando da Capital (PCC), into the penitentiaries, the right place where to recruit new members (Biondi 2016, 2018, Lessing and Willis 2019, Reuter and Paoli 2020, Jański 2022). Almost all important criminal organizations are involved in the trafficking of drugs coming, above all, from Colombia and Perú (Dolo and Racouchot 2021, 48).

As observed before, the cities suffer from serious issues such as high poverty rate, limited integration with the state capital (Manaus) and the rest of the country, and a decreased presence of state agents tasked with law enforcement. Consequently, organized crime

⁷The Gini index measures the income distribution, including between 1 -total inequality - and 0 – perfect equality (the GINI index average in Brazil is equal to 0,53 (World Bank 2021). Concerning the HDI, it “is a composite index measuring average achievement in three Basic dimensions of human development - a long and healthy life, knowledge and decent standard of living” (UNDP 2022, 276). The average of HDI in Brazil is 0,75 (*ibid.* 278).

actions permeate different stages of the deforestation process. At this point, it becomes imperative to explore the judiciary's response to these challenges and issues, a topic that will be addressed in the subsequent paragraphs.

4. RESEARCH METHODOLOGY

Focusing on municipalities of Lábrea and Apuí is a deliberate choice, driven by an analytical approach that combines both qualitative and quantitative methodologies. The aim of quantitative approach is to analyze judicial decisions related to environmental crimes falling under both federal and state jurisdiction.

Sentences constitute an important object of socio-legal analysis, given their significance as outcomes of a decision-making process regulated by law. The sentence can be defined sociologically as a document consisting of an ordered set of elements that inform about the characteristics of the situation and the subjects who interact under the legal context in question. Whose institutionalized character resides in the particular combination of procedural and material norms they perform with the facts dealt with in the process and with the acts that lead to the decision (De Felice and Giura 2016).⁸ Therefore, the court decision is a relevant instrument for understanding how the judicial system addresses the challenges presented before it (Giura 2015).

The second-degree sentences will be analyzed to observe the unfolding of the processes in higher courts. The analysis to be carried out will essentially relate to four specific dimensions, namely: temporal dimension; procedural dimension; dimension of the author (offense and penalty); and scenario (reconstruction of the political-economic context of decisions). In the quantitative stage of the work, the statistical analysis will be established to compare the performance of the federal and state judiciary in the treatment of environmental crimes in the cities of Apuí and Lábrea.

Furthermore, sentences constitute a crucial element for the analysis of environmental crime features, registered, investigated, and judged in the Amazon. From its analysis and categorization, it is possible to observe the structure of committed crimes, the economic resources mobilized in carrying out the criminal activity, the nature of the violated legal asset, the use of violence, the relationship with public agents, and civil society. Through this categorization it is possible to answer the proposed research questions.

⁸In the mid-80s, a special issue of the journal *Archives de philosophie du droit* gave a significant contribution to the overall picture of the different research perspectives on jurisprudence. Even if there was limited direct attention to decisions, the sentence constituted the focus of the investigation of the several contributions and different perspectives. The first intervention concerns criminal jurisprudence and deals with the question of a criminal judge's power exercise, namely whether he can exercise or in fact exercises a type of normative power, almost "substituting" himself for the legislator (Puech 1985, 141-156); the other two papers, instead, are characterized by a sociological approach. The first (Petev 1985, 181-190), maintains that the rationality of the judicial decision is not found in the innate character of things but, rather, is inherent in its institutional being, in its institutional character; the other one (Saluden 1985, 191-206), emphasizes a vision of jurisprudence as a social as well as legal phenomenon. In recent work, the "Trial" has been the subject of research from a multidisciplinary perspective starting from the possibility of providing a definition up to being able to problematize its political, social, and cultural implications, as well as as a place of production of devices for the production of truth (Rude-Antoine 2007).

4.1. QUESTIONS

Thus, the purpose of the research is to answer the following questions:

1. How does the structure of legal proceedings concerning environmental crimes facilitate responses to criminal events within the cities of Apuí and Lábrea?
2. What are the economic, social, and legal characteristics of the environmental crimes observed from the sentences related to Apuí and Lábrea?
3. What is the average time to resolve a lawsuit for environmental crime originating from those cities?
4. To what extent do the sentences describe the actions of criminal organizations in the region?
5. What perceptions do criminal justice system actors operating in Apuí and Lábrea hold regarding the dynamics of environmental crimes within their local context?
6. How do strategic managers within the criminal justice system institutions based in Manaus and Brasília perceive the issues of environmental crimes occurring within the interior of the Amazon?

But this paper, at the moment, addresses just points 2, 5 and 6. As said at the beginning, this is a first step of our investigation project.

4.2. OBJECTIVES

The general objective is to understand how the legal and judicial practices in the municipalities of Apuí and Lábrea respond to the dynamics of environmental crimes in the region, whereas the specific objectives can be summarized as follows: a) analyzing the criminal justice system's response concerning environmental violations observed in the region; b) building an analytical database on court rulings related to environmental crimes in the municipalities of Apuí and Lábrea; c) understanding the perceptions of the main actors linked to the criminal justice system, constituted powers and civil society regarding environmental crimes issues and the effectiveness of combating its incidence.

5. THE INTERVIEWS

Qualitative research seeks to exploit different research "tems to "discover" new faces of investigated objectives. A classical item are interviews. As already said in the introduction, this first research step has been conducted through semi-structured interviews with criminal justice professionals working with environmental crimes in the state of Amazonas (Denzin and Lincoln 1998, Denzin, Lofland *et al.* 2005, Denzin 2009), facing classical issues of that kind of empirical research (Banakar 2000, Banakar and Travers 2005, Halliday and Schmidt 2009, Roach Anleu and Mack). Namely, one state judge who has worked in the city of Labrea, one prosecutor who has worked in the Southern part of Amazonas State covering Labrea, one Federal Police officer, and one technical agent of the State of

Amazonas Environmental Agency (IPAAM). The data gathered from the interviews have been treated with Ligre Qualitative Software.⁹

These interviews allow us to grasp the first impressions of the context in which environmental crimes occur in the region and the response of the criminal justice system to its occurrence. The interviews were conducted in the city of Manaus from January 22nd to January 27th by one of the authors. The real identity of the interviewees has been hidden and for research purposes, they were given pseudonyms. The next section will present some results from the data gathered in the field.

6. RESEARCH RESULTS

These first results we are going to present allow a deeper understanding of the context in which environmental crimes occur in the Brazilian Amazon shedding light on the limited capacity of the criminal justice institutions to give an appropriate response to its occurrence. Considering the insights gleaned from the interviews, it is possible to initiate a debate on this issue.

The most quoted issue by all interviewees is related to the geography and the inherent logistical challenges in the Amazon region. The lack of transportation modes such as boats, airplanes, helicopters, or specialized vehicles poses a real problem for law enforcement (Souza Ferreira and Watanabe 2018). Furthermore, there is a lack of human personnel to support those tasks. Thus, the actions to combat and curb environmental crimes are generally limited and based on resource availability. Some common samples from the interviewees include:

When you talk about the protection of a legal asset, and we are dealing with a legal asset that is the environment, I think that time is very important, the state's response, both in terms of inspection and the performance of the Public Prosecutor's Office and finally the filing of a public civil action, whatever it is and the judicial body decides. As we are facing a very large state, inspections cannot cover the entire area quickly and effectively, so time is a hindrance, so when they go to inspect, perhaps the reality will already be different. (Flávio, Judge, Amazonas State)

A Federal Police Commissar in a management position describes the same problem. The distances and the lack of resources do not allow an effective response to the occurrence of environmental crimes.

Lábrea does not even belong to the superintendency of the Federal Police of Amazonas, right? The crimes committed in the municipality of Lábrea are investigated by Rondônia, taking into account the land proximity, right, to get to Porto Velho and here it is much further away. Apuí, despite being in our district, is very distant. So, this is the difficulty, you know, normally we already have a limit of federal police officers here. (Ernesto, Federal Police Commissar, Manaus)

⁹ Link to Ligre software: <https://ligresoftware.com/>

The impact of geography is so high that the crimes that occurred in Lábrea - a municipality of 62,000 square kilometers are investigated by the Federal Police branch located in the city of Porto Velho, the capital of the state of Rondônia, far from Lábrea more than seven hours by cars. This problem has been also emphasized by a Public Prosecutor who has operated in the city of Humaitá, close to Lábrea:

In Humaitá(...) in terms of structure for Ipaam, there was only an administrative servant, just an example to illustrate how (...) is this difficulty in terms of personnel and structure. The infrastructure (...) we have to implement this environmental protection policy. (Renan, Public Prosecutor. Amazonas State)

Finally, there are some remarks from member of the Amazonas Environmental Agency (IPAAM) about the same problem, specifically addressing the lack of resources to deal with the geographic characteristics of the region:

We are left naked, especially regarding the organs of control, when the collection starts. I'm seeing deforestation, but I have a vehicle that can't reach the place, I don't have a helicopter, I don't have an ideal prompt response team to get there. (Antonio, IPAAM)

In this context, another challenge emerges: the presence of criminal organizations. The illegal exploitation of natural resources in the Amazon is not a simple task. Many assets are required to do so. Illegal logging is a classic example because those operations require expensive assets that can be operated mainly by large organizations. Another problem is the differences in environmental crimes legislation compared to other crimes such as Drug dealing. the former is comparatively less stringent.

For the majority of environmental crimes, you have no grounds based on articles 312 and 313 to decree preventive detention, so they will respond to the process in freedom. Then (...) to subpoena these people is a very big difficulty and you have to do it under penalty of nullity of the process. (Flavio, Judge, Amazonas State)

Those issues are related to the difficulty of producing evidence in environmental cases. Additionally, access to forensic evidence is very hard, which poses a significant obstacle to conducting thorough investigations.

It is very difficult to produce testimonial evidence. The evidence is basically the documentary evidence of the infraction notice. So it is not even necessary to listen to the inspector, because basically they have public faith in what he says, but I often do question of also listening to the inspector, to give his impression. According to the principle of the judge's physical identity, you can extract more things than he declined in the document, in the infraction notice or whatever. The proof is basically this, because the others are defendants? Who were they? The owners, the businessmen behind it, we never succeed, they are never denounced.

So, I don't know how 't works, I don't know how they make a network in such a way that they manage to protect themselves, but the fact is that of all the hearings I've don' to date, they've all been with people who worked for someone, and that someone was never declined. (Flavio, Judge, Amazonas)

The same problem is reported by the prosecutor:

For example, I need an environmental forensic report so I can ask for compensation for moral and environmental damages in a public civil action, and to revert for a fund to promote environmental protection, and in many times I can't get the expert report. Sometimes I need a forensic environmental report to assign criminal liability to someone, to prove the materiality of the crime, and I can't get a report. So, sometimes I see this type of problem that we have, and often due to the lack of infrastructure and organization of these public bodies in the locality. So, I think that would be why we would have this problem. (Renan, Prosecutor, Amazonas)

Finally, the interviewees assert that there is minimal presence of political will in the different branches of government to tackle the issue of environmental crimes in the region. This deficiency is identifiable in all levels of government. The policies are scarce, and the actions are mainly structured on an ad hoc basis. The following excerpts from the State prosecutor and the Federal Police Commissar shed light on the issue:

If you have the political will to do this structuring, you have to, but you have to have the political will to structure the public security and environmental inspection bodies in the place; not only the state ones, the federal ones too, that then you can have an effective action. (Renan, Prosecutor)

Look, to be real, there is a lack of political will, you know, because the government has a lot of resources to be allocated and there is no prioritization of combating these crimes, so I see that it is effectively a lack of political will to allocate resources, personnel for fighting these crimes. (Ernesto, Police Commissar)

7. OPEN CONCLUSIONS

As already said in the introduction, the early pages have summarized just a first sketch of the research objectives: understanding how the legal and judicial practices in Apuí and Lábrea respond to the dynamics of environmental crimes in the Amazonas. The next research steps will address the commitment to gather and analyze the criminal sentences issued at the end of environmental crime proceeds. From a sociology of law standpoint, judicial outcomes are still the perfect place to measure the distance between law in the book and law in action. Otherwise, another crucial aspect that must be considered is the geographical position of Amazonas (Becker 2005, Le Tourneau 2019, 15-65).

That consideration entails the effective application of law. What we emphasize is the primary role geography plays in the implementation of the law, showing the distance between what the rhetoric of power may deny when drawing an official map and the actual reality (Harley 1989). How the values and rights expressed by the constitutional chart may be formally supported or hidden by the performative power of (geographic) charts. Amazonas is a place where physical distance means also a sense of "loneliness" that is both physical and emotional as observed among the involved actors' perceptions. This condition doesn't seem to leave room for a common shared legal culture, but an autonomous local legal culture. This aspect will be examined further in the follow-up of the research.

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