

André Duffles Teixeira Aranega

# The Crime-Geopolitics Nexus and Transnational Environmental Crimes in the Amazon Forest

DISSERTAÇÃO DE MESTRADO

Dissertation presented to the Programa de Pós-Graduação em Relações Internacionais of PUC-Rio in partial fulfillment of the requirements for the degree of Mestre em Relações Internacionais.

Advisor: Prof. Dr. Kai Michael Kenkel

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To former, present, and future generations.

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### Abstract

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This study investigates the prospects for consolidating a promising research agenda: the "crime-geopolitics nexus" – here conceptualized as an eclectic space for producing scientific studies concerned with the interstice between international relations, organized crime, and geopolitics. It provides insights into the geopolitical rationale in which criminal non-state actors operate in the define international context to their strategies, promote their transnationalization, formulate alliances, and improve their control over the management of relevant territories, illicit markets, and institutions along illicit supply chains. Based on a four-chapter division, this research answers the following question: what is the geopolitical role of the Amazon Forest in illicit environmental supply chains? The first chapter presents the study's theoretical and methodological foundations. The second chapter promotes a dialogue between International Relations, Criminology, and Geography to evaluate the existing approaches toward crime and geopolitics. It also introduces its approach to dealing with the crime-geopolitics nexus. The third chapter focuses on relevant aspects of transnational environmental crimes. The final chapter examines the strategic hubs for transnational environmental crimes located in the Amazon Forest and the networked dynamics of illicit supply chains, from the local to the global level. It concludes that the Amazon Forest plays a significant geopolitical role in transnational environmental crimes globally.

### **Keywords**

Amazon Forest; Crime-Geopolitics Nexus; Environmental Crime; Geopolitics; Organized Crime.

### Resumo

Aranega, André Duffles Teixeira; Kenkel, Kai Michael (Orientador). **O Nexo Crime-Geopolítica e Crimes Ambientais Transnacionais na Floresta Amazônica**. Rio de Janeiro, 2023, 195p. Dissertação de Mestrado – Instituto de Relações Internacionais, Pontifícia Universidade Católica do Rio de Janeiro.

Esse estudo investiga os potenciais para consolidação de uma agenda de pesquisa promissora: o "nexo crime-geopolítica" - aqui conceituado como um espaço eclético para produção de estudos científicos preocupados com o interstício entre relações internacionais, crime organizado e geopolítica. Ele fornece insights sobre a lógica geopolítica na qual atores não-estatais criminosos operam no contexto internacional para definirem suas estratégias, promoverem sua transnacionalização, formularem alianças e aperfeiçoarem seu controle na gestão de territórios, mercados ilícitos e instituições relevantes ao longo de cadeias de suprimentos ilícitos. Em quatro capítulos, a pesquisa responde a seguinte pergunta: qual é o papel geopolítico da Floresta Amazônica em cadeias de suprimentos ambientais ilícitos? O primeiro capítulo apresenta as fundações teóricas e metodológicas do estudo. O segundo capítulo promove um diálogo entre as Relações Internacionais, Criminologia e Geografia para explorar as abordagens existentes sobre crime e geopolítica. Ele também introduz sua abordagem diante do nexo crime-geopolítica. O terceiro capítulo analisa em aspectos relevantes de crimes ambientais transnacionais. O último capítulo examina os hubs estratégicos do crime ambiental transnacional localizados na Floresta Amazônica e as dinâmicas em rede de cadeias de suprimentos ilícitos, do nível local ao global. A Floresta Amazônica possui um papel geopolítico significativo globalmente em crimes ambientais transnacionais.

### **Palavras-chave**

Crime Organizado; Crimes Ambientais; Floresta Amazônica; Geopolítica; Nexo Crime-Geopolítica.

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# List of Abbreviations

Center for Information and Research on Organized Crime	CIROC
Chico Mendes Institute for Biodiversity Conservation	ICMBio
Chlorofluorocarbons	CFCs
Crime Prevention Through Environmental Design	CPTED
Environmental Investigation Agency	EIA
European Union	EU
First Capital Command	PCC
Global Initiative Against Transnational Organized Crime	GI-TOC
Hydrochlorofluorocarbons	HCHCs
Illegal, Unregulated, and Unreported Fishing	IUU
Indigenous National Foundation	FUNAI
Institute for the Environment and Natural Renewable Resources	IBAMA
Institute of Geography and Statistics	IBGE
International Association for the Study of Organized Crime	IASOC
National Institute for Space Research	INPE
Red Command	CV
Revolutionary Armed Forces of Colombia	FARC
Southern Common Market	MERCOSUR
Standing Group on Organized Crime	ECPR-SGOC
Transnational Environmental Crime	TEC
Transnational Organized Crime	TOC
Union of South American Nations	UNASUR
United Nations Environment Programme	UNEP
United Nations Interregional Crime and Research Institute	UNICRI
United Nations Office on Drugs and Crimes	UNODC
United States of America	U.S
World Wildlife Fund	WWF

### Introduction

Throughout the world, different types of organized crime groups generate and provide feedback to multiple sources of insecurity, from the local to the global level. Illicit markets, which are their major source of revenue, such as drug trafficking, arms trafficking, human trafficking, counterfeiting, contraband in illicit antiques, piracy, extortion, fraud, money laundering, contract killings, theft in intellectual property, and cybercrime are also responsible for producing security threats to states and (non-)human communities. Despite their historical existence, evolving dynamics, national particularities, organizational structures, shifting alliances, and frequent involvement in legal markets, today there are different types of criminal organizations and illicit trade operating in a transnational manner – across states.<sup>1</sup> Whether we are referring to commonly notorious drug cartels and emerging prison gangs in Latin America and the Caribbean, infamous mafias and motorcycle gangs in North America, Europe, East Asia, and Oceania, criminal syndicates and pirates in Sub-Saharan Africa, or illicit networks in the Middle East and Southeast Asia, what was formally (and wrongfully) thought to be highly localized or regionalized manifestations of organized crime and illicit markets have become strongly globalized in its transnational terms, especially in the last decades.

Among very distinguished cases, one specific form of criminality is unique from the rest: transnational environmental crimes. This is not because other types of crimes or criminal entities are less important than environmental crimes. On the contrary, not only do illicit environmental supply chains depend extensively on the aforementioned crimes (i.e., frequently labeled as "converging crimes" or "associated crimes") to keep operations running from source to consumer stages, but they are also responsible for considerable harm and negative effects in states and (non-)human communities on their own. However, what is at stake here is that transnational environmental crimes are

<sup>&</sup>lt;sup>1</sup> Nonetheless, as Friman & Andreas (1999, p.7) highlighted, "extreme variation in the levels of organization and degree of criminality", as well as the participation of "independent entrepreneurs to lose networks of transnational gangs, to highly developed and vertically integrated criminal networks" reveals the fictional character of the popular image of an "octopus-like global network of crime syndicates" operating at a global level.

illicit activities where criminal entrepreneurs enjoy opportunities to gain substantial profits by plundering and destroying the Earth's flora and fauna. They can destroy our planet's ecosystems and eliminate the necessary conditions for the survival of states and (non-)human communities.

"Environmental crime" is a term generally mobilized to refer to illegal acts that harm the environment or that breach national and international environmental laws. However, "transnational environmental crimes" is an "umbrella term" that refers to specific categories of cross-border illicit environmental activities that evolved throughout the centuries. The most famous categories are probably the following: illicit logging and timber trafficking; illicit mining and trafficking in precious metals; wildlife trafficking; illegal, unregulated, and unreported fishing; waste disposal and trafficking; and the illegal trade in ozone-depleting substances. While these are often underresearched offenses compared to other types of illicit activities, today some of these crimes are major enablers in what has been described by leading scientists as the "tipping point" for the Amazon Forest. The stage where deforestation and global warming would generate irreversible climatic consequences to global security.<sup>2</sup>

What might be surprising for some is that these environmental offenses (as well as their related converging and associated crimes) are frequently all part of highly profitable cross-border illicit markets controlled by different types of transnational criminal organizations, from "traditional organized crime groups" to "criminal networks".<sup>3</sup> Since these illicit markets frequently begin in very particular contexts inside Brazil or in its neighboring countries but end up "spilling over" to other locations in South America and beyond, there is a clear and deep transnational connection between the micro and macro levels that should not be ignored by scholars and practitioners – especially those involved with inquiries in International Relations and initiatives in international cooperation. When one considers only the effects of transnational environmental crime, a very clear picture emerges: while thousands of indigenous communities

<sup>&</sup>lt;sup>2</sup> For more information, see <<u>https://www.science.org/doi/10.1126/sciadv.aat2340</u>>.

<sup>&</sup>lt;sup>3</sup> For more information regarding the organizational and operational differences between "illicit/criminal networks" and "traditional organized crime groups", see Albanese (2011, p.6-7) and van Dijk & Spapens (2014, p.7-9).

are particularly vulnerable to the harms generated by these activities on the local level, billions of (non-)human communities from different parts of the world also suffer their deadly consequences. From an operational perspective, on the other hand, stages of illicit environmental supply chains connect particular strategic hubs, criminal organizations, and illicit activities to distinct parts of the globe due to very specific strategic reasons. This interrelatedness among the micro and macro levels of analysis is a crucial element of how criminal non-state actors perceive the geopolitical role of a particular territory (e.g., neighborhood, city, country, region, and so forth) in the international context for one or more types of illicit markets.

This is precisely what this study aimed to investigate. Initially, it argues that mainstream International Relations theories, such as (neo)realism, liberalism, and constructivism, lack the necessary theoretical grounds to address how certain transnational and interrelated phenomena connect relevant territories, entities, and activities from the micro to the macro level of analysis. As a consequence, it argues that International Relations will not be capable of improving its theories to understand the geopolitical rationale of criminal nonstate actors if its scholars do not promote efforts toward a more transdisciplinary dialogue with other academic fields, such as Criminology and Geography.

Conceptions based on (neo)realism exhibit shortcomings in elucidating the role of organized crime and illicit markets in generating various sources of insecurity in the international system. Some conceptions might not even recognize the existence of such phenomena in the international context. Secondly, (neo)realist concepts demonstrate an inability to acknowledge the significance of the intricate network of relationships and cross-border interactions amongst state and non-state actors that characterizes much of the contemporary international system, thus indicating their inadequacy for studying the geopolitical rationale of non-state actors. Thirdly, the non-unitary and nonhomogeneous nature of criminal non-state actors, driven frequently by motivations beyond power or security, reveals additional gaps in (neo)realist perspectives due to their tendency to interpret actors in the international system, specifically sovereign states, as a monolithic "black box" driven primarily by the desire to obtain more power and maintain its security against external threats (i.e., other states). Lastly, while these perspectives engage in discussions of power dynamics that might assist in explaining the complex environment in which criminal non-state actors emerge and operate, the fact that they might interpret organized crime and illicit markets as "marginal threats to international security" makes them unaware of the importance of offering coherent explanations for their geopolitical rationale.

Liberal perspectives may illuminate the significance and potential impact of international institutions and norms in combating transnational organized crime and illicit markets, suggest the possibility of approaching "criminals" from an individual perspective, or hint at some of the unequal economic conditions leading to crime. However, it falls short of explaining the strategic behavior of criminal non-state actors. Firstly, despite some (neo)liberal scholars focusing on transnational phenomena and non-state actors in the international system, liberalism cannot elucidate why individuals, supposedly inherently interested in mitigating conflict and immoral behavior due to their rationality, would choose to commit crimes, join a criminal organization, endanger international security, and exploit loopholes in the international system for private gains. Secondly, aspects that should, according to liberalism, contribute to the promotion of peace globally, such as economic globalization, increased commercial flows and trade, lower commercial tariffs, the creation of international legal frameworks, and the liberalization of trade and immigration, have been identified by many analysts as key drivers of transnational criminal organizations and cross-border illicit markets. Lastly, even though it considers cross-border phenomena and non-state actors in the international system, the role of non-state actors is frequently deemed marginal in comparison to the state.

Constructivism, although capable of recognizing the importance of criminal non-state actors in the international system and offering insights into the state's diffusion or incorporation of anti-crime norms, ideas, and beliefs into their legislation, it falls short in explaining some aspects of organized crime and illicit markets. It might creatively be applied to investigate how the social construction of reality determines the emergence and behavior of criminal organizations in an international context or how members of criminal organizations handle shared kinship ties, normative codes, and ritualistic practices. However, constructivism tends to prioritize ideational factors over material ones, which are the primary drivers of criminal organizations. Furthermore, constructivism assumes that actors are socialized into a particular normative framework, but organized criminals exist primarily to evade established norms and regulations or strategically utilize them to further their objectives. Consequently, constructivism may not be optimally suited to analyze the motivations and norms that drive criminal behavior in organized crime and illicit markets, especially considering that they significantly differ from those of state actors.

In this sense, it is argued that a dialogue, transcending disciplinary boundaries among International Relations, Criminology, and Geography, is needed both to fill the gaps in mainstream International Relations theories and advance research about the interstice of international relations, organized crime, and geopolitics. This study achieved four promising considerations based on this dialogue. Firstly, grounded largely on criminological literature, it proposes viewing organized crime as a "criminal enterprise" always determined by the state and transnational organized crime as "illicit counterparts of multinationals". Secondly, still grounded in criminological thought, it underscores how organized crime and illicit markets are what states make of them, with transnational organized crime and cross-border illicit markets being what the asymmetries inherent in the international system make of them. Thirdly, rooted in very specific criminological and geographical debates, it emphasizes the importance of examining the spatial dynamics of transnational organized crime and cross-border illicit markets in the international context, taking into consideration the intricate relationship between crime and place. Lastly, considering that nation-states are no longer the sole form of geopolitical representation in the international system, it presents the potential of adopting theoretical constructs from Classic Geopolitics, Geoeconomics, and Critical Geopolitics to investigate organized crime as a pivotal "non-state geopolitical actor" capable of inducing insecurity in various forms and levels, and whose geopolitical rationale is influenced by a set of physical and non-physical attributes.

Based on these considerations, this study argues that *a transnationalist* and *relationalist perspective* in the study of the geopolitical practices of organized crime is needed in International Relations to understand how territories become interrelated with specific transnational criminal organizations

and cross-border illicit markets in the international system, from the micro to the macro level of analysis. Along with Transnationalism and Relationalism, International Practice Theory offers more promising insights into the geopolitical rationale of criminal non-state actors than mainstream International Relations theories. This, in turn, created the opportunity for the elaboration of a unique research methodology focused on the day-to-day geopolitical practices and routines of criminal non-state actors, as well as their motivations, strategies, adaptability, and capacity to exploit vulnerabilities in the international system.

Employing an inductive approach, this study employs a comprehensive set of interdependent and multi-level indicators to identify and analyze strategic hubs for illicit markets and the networked dynamics of illicit environmental supply chains in the international context. It also asserts that understanding *what makes these territories strategically attractive* to criminal non-state actors and *interconnected* to different types of criminal organizations and illicit markets is, therefore, of utmost relevance for scholars and practitioners, either because specific characteristics make them strategically attractive for criminal non-state actors or due to their ability to challenge conventional notions of the Westphalian system of states. By combining different disciplinary perspectives to analyze the relationship between "crime" and "geopolitics", scholars and practitioners can gain new insights into the complex and dynamic nature of organized crime and illicit markets, and develop more effective preventive strategies to address these issues in the international context.

Grounded on an extensive literature review of scientific material produced in the last two to three decades, this research focuses on the complex and multi-level connections between strategic hubs, criminal organizations, and illicit activities along illicit supply chains in the case of transnational environmental crime. To investigate what makes a territory strategically attractive to criminal non-state actors, it evaluates and compares the work of a particular group of scholars that reflected upon how organized criminals are used by states as statecraft instruments, how they distribute geographically, how they "move" across state boundaries, how they interact with local communities to control a certain territory and illicit market, how they form alliances with each other, how they infiltrate public and private institutions, how they manage strategic routes, and how their normative values regulate the everyday life of civil communities in certain geographical spaces. It is worth noting that these scholars created specific concepts to understand these issues. They speak of, for example, "gangster geopolitics", "geography of pipelines", "geopolitics of the mafia", "geopolitics of drugs", "geopolitics of narcotrafficking", "geopolitics of organized crime", "geography of the illicit global economy", "geopolitics of organized crime", "geography of badness", "geography of the illicit", and "geopolitics of the illicit". Surprisingly, with few exceptions, their work rarely dialogues with each other. Not to mention the lack of reference to one another. At the same time, most of the use the term "geography" and "geopolitics" interchangeably or without even mentioning the theoretical premises at play when each one of them is mobilized. Nonetheless, it is impossible to deny the existence of a transdisciplinary bond between them.

This study is potentially one of the first attempts to characterize them into what can be best described as different contributions of the same research agenda, yet never properly acknowledged as such: the "crime-geopolitics nexus". In this sense, this research cross-references evidence-based information about transnational environmental crimes with specific theoretical assumptions to generate plausible inferences around the following issue: the geopolitical role of the Amazon Forest in illicit environmental supply chains. By building bridges between distinct pieces of literature and scientific evidence, it investigates how criminal non-state actors involved in transnational environmental crime in the Amazon Forest elaborate their strategies and perceive the strategic relevance of this territory based on two interrelated variables: the physical and non-physical attributes of strategic hubs for an illicit market and the networked dynamics of illicit supply chains, from the local to the global level. As we will be examining throughout this study, factors contributing to its geopolitical importance for transnational criminal organizations range from natural and geographical advantages (i.e., physical particularities) to economic and financial incentives (i.e., socioeconomic conditions), weak governance and state capacity (i.e., political practices), weak to limited legal frameworks (i.e., legislation), and existing associations among different types of criminal non-state actors with state agents, legitimate corporations, and even local communities (i.e., relationships among legal and illegal actors).

The Amazonian case is considered to be indicative of the theoretical and empirical discussions promoted throughout this study. Accordingly, mainstream International Relations theories (i.e., (neo)realism, liberalism, and constructivism) are characterized as inadequate to properly address how criminal non-state actors perceive the geopolitical role of the rainforest in the international system for one or more types of illicit markets. Among different reasons, this inadequacy is highlighted by their insufficient capacity to address how specific strategic hubs, transnational criminal organizations, and illicit markets become intertwined in the international context, from the micro to the macro level of analysis. Considering how global disparities between the Global North and Global South produce effects in the context of transnational criminality in South America, Brazil, and the Amazon Forest, this study also identified relevant organized crime groups as state-determined "criminal enterprises" and transnational criminal organizations as "illicit multinationals" shaped by the asymmetries of the international system. Similarly, by stressing the need to study the spatial dynamics of significant non-state geopolitical actors such as organized crime groups in the Amazon Forest, it examined the day-today geopolitical practices and routines of those criminal non-state actors toward very particular "strategic hubs" for transnational environmental crimes and their interconnectedness to other territories, criminal organizations, and illicit activities in different stages of illicit environmental supply chains.

Ultimately, it concluded that Amazon Forest plays a key geopolitical role in illicit environmental supply chains as a global hotspot for multiple modalities of transnational environmental crimes, reflecting its rich biodiversity, abundant natural resources. geographic, territorial, and ecological characteristics, global consumption patterns, political, socioeconomic and legal contexts, intricate relationships between legal and illegal actors, and structural asymmetries between states from the Global North and Global South. As a global hotspot for transnational environmental crimes, its role is at the intersection of local, regional, and global dynamics, illustrating the transnational and interrelated nature of organized crime and illicit markets. It is a complex and multifaceted role influenced by many interconnected factors within a complex web of relationships linking specific territories, criminal organizations, and illicit activities along different stages of illicit environmental supply chains, from the local to the global level. It is a unique territory whereby conventional Westphalian notions that dictate the foundations of the contemporary international system seem to be constantly challenged, located in a regional context where the "line" separating states and organized crime is often blurred, capable of satisfying the global demand for natural resources in many parts of the world (at least as long as the rainforest keeps existing), marked by advantageous logistical standards for criminal non-state actors, and constrained by the strategic logics of the so-called "crime curse".

#### Structure and Scope of this Research

This research was divided into four chapters to achieve this goal. **Chapter 1** presents the theoretical and methodological foundations of the study. Firstly, it introduces and adopts certain ontological and epistemological commitments grounded in notions of Transnationalism and Relationalism. Secondly, it proceeds in discussing methodological orientations based on the Transnationalism premises of Methodological and Methodological Relationalism in contrast to Methodological Nationalism. Thirdly, it explores how certain aspects of International Practice Theory can be used to provide the basis for a particular research methodology oriented toward the theory of practice of organized crime in geopolitical terms. Lastly, after summarizing the existing controversies, levels of analysis, methodological paths, and methods in research on organized crime, the advantages and disadvantages of the research design adopted to develop this study are properly presented.

**Chapter 2** promotes a transdisciplinary dialogue between specific debates on the literature of International Relations, Criminology, and Geography. It demonstrates how mainstream International Relations theories leave the study of the geopolitical rationale of criminal non-state actors at the margins of its literature – if not completely outside. In this sense, it then moves to highlight how a transdisciplinary dialogue between International Relations and other academic fields, such as Criminology and Geography, can provide a more comprehensive framework to evaluate existing approaches concerned with the connections between "crime" and "geopolitics". Afterward, based on the work of twenty authors, it presents some of the existing approaches dealing with

the relationship between crime and geopolitics, demonstrating how each one of them is more or less state-centric in their premises, levels of analysis, or focus toward the geopolitical agency of state and non-state actors. At last, it presents its approach toward this issue, describing how *both physical and non-physical features* of territories (i.e., physical particularities, political practices, socioeconomic conditions, regulatory policies, and the relationship between legal and illegal actors) *turn* it into a "strategic hub" for organized crime and illicit markets, *influences* the geopolitical rationale of criminal non-state actors, and *determines* the networked dynamics of illicit supply chains connecting different territories, criminal organizations, and illicit markets in the international context.

**Chapter 3** redirects its attention toward the issue of transnational environmental crimes. Firstly, since this form of criminality is often considered an "under-researched" affair and less important (or urgent) to policymakers and security agencies, it focuses on explaining its key modalities and major characteristics. Secondly, it provides a brief perspective on its operational dynamics by highlighting relevant similarities and differences in global patterns of cross-border illicit environmental flows among various countries in the Global North and Global South. Thirdly, considering its ability to produce damaging, frequently definitive, long-lasting, or permanent effects on entire ecosystems or habitats, it discusses the deadly security implications of transnational environmental crimes both in states and (non-)human communities at the local level and around the globe.

**Chapter 4** concludes this work's analysis by exploring the geopolitical role of the Amazon Forest in illicit supply chains. Considering the transdisciplinary dialogue mobilized previously, it begins with a brief overview of the primary reasons that make the Amazonian territory a case study worthy of being analyzed and a particular space in South America rich in opportunities for organized crime groups involved in environmental offenses and their converging/associated crimes. Secondly, to demonstrate how very specific territories, criminal organizations, and illicit activities are all linked into a complex web of interrelationships, it examines the physical and non-physical features of the strategic hubs for transnational environmental crimes in the Amazon Forest and analyzes the networked dynamics of illicit environmental

supply chains at play.

Whether due to its methodological limitations or intense focus on the perspective of criminal non-state actors, the research design adopted to develop this study is only a small contribution toward the building of an eclectic space around what the crime-geopolitics nexus could address as a research agenda. Furthermore, while this study focuses primarily on the case of transnational environmental crimes in the Amazon Forest, other case studies and forms of criminality ought to be explored based on the discussions and approaches presented here. In any case, by providing a comprehensive assessment of an often-underestimated feature of our world, I hope the reflections gathered within this work contribute to advancing discussions interested in enhancing our knowledge of the strategic logic influencing the illicit activities certainly being planned and conducted at this very moment.

Since the manifestation of transnational criminality is strongly associated with the major contemporary security challenges in South America (Herz, 2010, p.603), scholars and practitioners located both inside and outside the region should dedicate their time, efforts, and resources to the immersive investigation of the interstice between international relations, organized crime, and geopolitics. They will benefit extensively from the reflections and findings presented throughout this research. As our common future might depend on this type of initiative, we need to further develop evidence-based research dedicated to understanding how those engaged in cross-border illicit markets see the international system in geopolitical terms.

### **1** Theoretical and Methodological Foundations

In the field of International Relations, there is an imperative need for a transnationalist and relationalist perspective in the study of the geopolitical rationale of criminal non-state actors. Taken together, these perspectives provide the necessary theoretical and methodological foundations to achieve a nuanced understanding of how territories interrelate with specific transnational criminal organizations and cross-border illicit markets within the international system, spanning micro to macro levels of analysis. By gathering insights coming from the literature on Transnationalism, Relationalism, and International Practice Theory, this chapter paves the way for the development of a distinct research methodology particularly focused on the geopolitical practices of organized crime, considering everyday practices and routines of criminal non-state actors, their motivations, strategies, adaptability, and the ways they exploit vulnerabilities in the international system. Furthermore, based on the inductive method, this chapter presents the study's hypothesis and emphasizes the importance of employing an interdependent and multi-level set of indicators in the identification and analysis of strategic hubs for illicit markets, as well as the networked dynamics of illicit environmental supply chains. Thus, this chapter presents an approach that might enhance our understanding of what makes these territories strategically attractive to criminal non-state actors and interconnected with various types of criminal organizations and illicit markets in the international system.

In this context, it is important to always remember that "theory is always for someone and some purpose", every effort to promote theorizations of social reality is embedded within a particular perspective that derives from a social and political position in space-time (Cox, 1981, p.128). Despite its attempt to achieve plausible scientific considerations by combining information extracted from scientific evidence and academic knowledge of organized crime and illicit markets into a sophisticated framework, this research is by no means an exception. Its own theoretical and methodological foundations are undeniably present in every written page and in every bibliography that was (or was not) mobilized in its development.

This chapter presents the theoretical and methodological foundations guiding this research and how they are crucial to understanding this study's conceptualization of the crime-geopolitics nexus. It is a particular contribution that combines very specific ontological, epistemological, and methodological commitments related to Transnationalism, Relationalism, and International Practice Theory in an attempt to build its framework for analysis. On one side, they exert a direct influence on the meaning attributed to the reviewed material used to develop this research. On the other side, they determine how knowledge of the interstice between international relations, organized crime, and geopolitics is considered to be possible and (re)produced. Indeed, unlike the more conventional approaches within International Relations traditionally focused on the development of research based on supposedly "instrumental forms of analysis" (i.e., mainly focused on operationalizing research) and "apolitical" designs (i.e., negligent to the sociopolitical impact of their research design) (Siqueira & Magalhães, 2018), this study recognizes (and expects) that its approach generates some kind of sociopolitical impact on reality.

#### 1.1 Transnationalism and Relationalism

Concerns over the linkages among territories, entities, and activities centralized the theoretical premises of Transnationalism and Relationalism at the core of every particular ontological and epistemological discussion within social sciences. While both terms are usually used to refer to different phenomena, they have much in common when one considers how transnational phenomena are interrelated in our globalized world. In this section, this study demonstrates how transnationalist and relationalist positions are intrinsically guiding this study's understanding of the geopolitical rationale of criminal non-state actors.

Considering how our world has become more globalized in the last decades, transnational forces are now capable of strongly influencing both state and non-state actors in their interactions, interdependencies, institutions, values, policies, and especially economic transactions (Nye & Keohane, 1971). Therefore, it should come as no surprise that the term "Transnationalism" began occupying a very specific realm in the existing debates in International Relations. The emergence of the term "Transnationalism" in the 1960s and 1970s (i.e., the particular moment when scholars began recognizing the growing importance of non-state actors and transnational processes in the international system) as well as during the 1990s (i.e., due to the proliferation of globalization and technological advances) is directly associated with the "transformative character" and "power of transnationalism" in triggering modifications in our world (Tedeschi et al., 2020). This is because Transnationalism "consists of relevant dynamic cross-border relationships and activities, regardless of the type (cultural, social, political, economic, etc.) of relationships involved" in our current globalized world (Tedeschi et al., 2020, p.605-606).

Nevertheless, today the literature on Transnationalism is currently quite rich in its "takes" and focus, whereby some examine the phenomena as a form of "social morphology" and others as a "type of consciousness", "mode of cultural reproduction", "avenue of capital", "site of political engagement", or "(re)construction of 'place' or locality" (Vertovec, 2009). Similarly, others focus on its "inherently multi- and trans-disciplinary [nature]" and the role of Transnationalism in issues involving "cosmopolitanism", "multiculturalism", "diaspora", "internationalism", "discourses on sociocultural activities", "crossborder entrepreneurialism", "everyday practices", "post-migration", "political parties", "the right to vote", "dual identity and citizenship", "connectedness across borders", "formality/informality of frequent cross-border activities and practices", and "high intensity and degree of cross-border exchanges" (Tedeschi et al., 2020, p.603-605). The term also refers to a "people-led process that exploits the economic and political opportunities presented by globalization and challenges the centralizing tendencies of nationalism" (Tedeschi et al., 2020, p.605-606).<sup>4</sup> In this sense, far from simply adding new meanings to the word "nationalism" with the adoption of the Latin prefix "trans-", one of the things that make Transnationalism relevant is the fact that the term makes refers to connected actors, networks, and processes that exist within the tensions between globalization and state boundaries.

This study considers these tensions to be worth analyzing for research and policy purposes. Interestingly, adopting a transnationalist perspective

<sup>&</sup>lt;sup>4</sup> They also explore the notion of "transnationalism from below" (i.e., involving individuals and civil society) and "transnationalism from above" (i.e., corporate and inter-governmental sectors).

toward these issues implies questioning state-centrism assumptions and moving beyond the belief that nation-states are the only organizing principle of societies (Robinson, 1998). Thus, a transnationalist perspective creates the possibility of widening our often state-centric perspectives to consider the agency of non-state actors, especially criminal ones, as relevant units of analysis in International Relations or social science as a whole. On the other hand, this also implies the acceptance that Transnationalism cannot exist without the international context. As Krasner (1995, p.257-258) stated:

> By definition, transnational relations could not occur in an empire; that is, a political system in which there is only one supreme political authority. All interactions in such a system must be domestic. Transnational actors can only exist in a system in which there are mutually exclusive multiple centers of political authority. If there is anarchy, if there is no supreme political authority, then transnational phenomena will almost certainly be present. Only if states were completely autarkic, or if all interactions across borders were conducted by official state functionaries, would there be no transnational actors.

According to these notions, one can promote an important reflection on the interconnections between international relations, organized crime, and geopolitics. The fact that transnationalization of organized crime and illicit markets is only possible due to the existence of an international system.

When issues involving Transnationalism are combined with geography and geopolitics, relevant opportunities arise for us to underline "the mutual constitution of transnationalism and space", and to question "how lives and relations are lived, negotiated, and transformed across spaces, beyond the confines of leaky walls of containment and fixities", (Katigbak, 2020, p.399). Of course, maybe some would think that geography and geopolitics would lose their relevance in our globalized world due to the role of transnational forces in contemporary times. However, it is precisely the intellectual movement of bringing back geography and geopolitics to inquiries dealing with transnational forces that allows us to explore the "relationality of spaces" (Katigbak, 2020, p.396). In this sense, Transnationalism can highlight the cross-border and interconnected nature of different territories operating as strategic hubs for illicit markets and criminal organizations.

It is here that it becomes clear how notions of Relationalism can be used to complement those of Transnationalism. After all, relationality can also be a useful theoretical orientation to investigate issues involving the spatial dynamics of organized crime and illicit markets. In addition, similar to the case of Transnationalism, the term "Relationalism" started to occupy another particular realm within the debates in International Relations. For example, discussions centering "relationships" not only among states but also with and among non-state actors and other elements of the international system. While specific notions such as "interdependence" and issues involving the interplay between "agency" and "structure" are also important in this sense, it is important to highlight that, considering its roots in other academic fields (e.g., Sociology and Anthropology), Relationalism at its core "denotes the theory that reality is relational and for anything to exist and to be known is to exist and to be known in its relatedness" (Kaipavil, 2008, p.59). In other words, to consider anything in terms of relationality is, therefore, to see the world as a "unity of inter-related things, and each thing is an intra-related unity of constituent elements and stands further qualified by its relation to other things" (Kaipavil, 2008, p.61).<sup>5</sup>

Of course, as Kaipavil (2008, p.62) stated, it is worth mentioning that the appeal for a relationalist position toward everything in our world "in no way reduces individual entities to some undifferentiated whole" but to a "reality at once irreducibly plural and inescapably unitary" with existing entities "maintaining its own autonomy" while "transcends itself to the other in reciprocity". In this sense, it is important to consider that Relationalism can be considered a sharp alternative to substantialism or essentialism (Schneider, 2015, p.197-198).

As in the case of Transnationalism, these notions can also be borrowed to the study of the interrelatedness among different aspects of the geopolitical rationale of criminal non-state actors, whereby relationality can be considered as an intrinsic feature of those transnational interactions involving illicit entrepreneurship. As White (2011, p.1) correctly argued:

One of the characteristics of the contemporary world is the interconnectedness of people, systems and networks, a concept that is captured in the notion of the 'butterfly effect'. What happens in one part

<sup>&</sup>lt;sup>5</sup> It is worth mentioning, however, that the appeal for a relationalist position toward everything in our world "in no way reduces individual entities to some undifferentiated whole" but to a "reality at once irreducibly plural and inescapably unitary" with existing entities "maintaining its own autonomy" while "transcends itself to the other in reciprocity" (Kaipavil, 2008, p.62). This means that Relationalism can be considered a sharp alternative to substantialism or essentialism (Schneider, 2015, p.197-198).

of the world, no matter how small or seemingly trivial, will have an impact – and sometimes a very large impact – in another part of the world. Thus, so the story goes, the fluttering of butterfly wings in the southern hemisphere can translate into hurricane force winds in the northern. We are all interconnected, in complex ways, for better and for worse. The local is indeed global in this worldwide system of networks and flows.

In this sense, from the influence of organized crime and illicit markets on the everyday dynamics of local communities to their global ramifications, relationality can also be considered here as, indeed, a hallmark feature of the illicit global economy – just as transnationality.

In summary, this study argues that the geopolitical rationale of criminal non-state actors can (and should) be understood in terms of transnationality and relationality among territories, criminal organizations, and illicit activities. Adopting insights from Transnationalism and Relationalism to investigate the prospects of the crime-geopolitics nexus is important due to their capacity to challenge state-centric approaches by focusing on transnational non-state actors and cross-border processes, expand the scope of analysis by investigating different interrelated phenomena occurring across national boundaries, redefine our understanding of many dynamics taking place in the international context, and even question power relationships by confronting state's authority. To enhance our analysis, first, we need to discuss the prospects of grounding this study in the premises of Methodological Transnationalism and Methodological Relationalism in the following section.

# 1.2 Methodological Transnationalism and Methodological Relationalism

Before discussing the premises of Methodological Transnationalism and Methodological Relationalism, one needs to understand what is "Methodological Nationalism" and what are its implications for research designs within social science. This is relevant not only because of its dilemmas in social inquiries but precisely because Methodological Nationalism is considered in this study as a strong obstacle to the advance of research on organized crime and illicit markets in our globalized world. Especially if one wishes to investigate the geopolitical rationale of criminal non-state actors or even the geopolitical use of organized crime by states.

According to Wimmer & Schiller (2002, p.302), which are major exponents in critical analysis of the issue, Methodological Nationalism characterizes mainstream social science and can be defined as "the assumption that the nation/state/society is the natural social and political form of the modern world". Wimmer & Schiller (2002, p.303) indicates the existence of three modes of Methodological Nationalism. The first mode includes the ignoring of the national framing of modernity, whereby "epistemic structures and programmes of mainstream social sciences have been closely attached to, and shaped by, the experience of modern nation-state formation" (Wimmer & Schiller, 2002, p.303). The second mode involves the belief that nation-states are considered to be naturally given entities to study, resulting in "the compartmentalization of the social science project into different 'national' academic fields" due to "nationalist thinking" and "institutions of the nation-state organizing and channelling social science thinking in universities, research institutions and government think-tanks" (Wimmer & Schiller, 2002, p.306).<sup>6</sup> The third mode includes the territorialization of "social science imaginary" and the reduction of the analytical focus on the boundaries of the nation-state, whereby relevant processes for analysis are considered to be only those phenomena occurring within them and not outside or across its boundaries (Wimmer & Schiller, 2002, p.307). These three modes of Methodological Nationalism, as they argued, "intersect and mutually reinforce each other, forming a coherent epistemic structure, a self-reinforcing way of looking at and describing the social world" (Wimmer & Schiller, 2002, p.308).

Based on their arguments, one can start identifying how Methodological Nationalism is a clear and accurate contrast to all of the transnationalist and relationalist notions presented in the previous section.<sup>7</sup> If an

<sup>&</sup>lt;sup>6</sup> See Wimmer & Schiller (2002, p.304-306) for remarkable examples of how this feature of Methodological Nationalism influenced different "disciplinary traditions" and "intellectual variations", such as International Relations, Economics, World History, and Anthropology.

<sup>&</sup>lt;sup>7</sup> Not by chance, Wimmer & Schiller (2002, p.306-307) repeatedly make the case for a reorientation of this mainstream analytical focus toward a perspective that studies the "transborder connections and processes", as well as "the connections between such nationally defined territories". In fact, they suggest that the modern world has always been transnational, "even in the high days when the nation-state bounded and bundled most social processes" and argue that "rather than a recent offspring of globalization, transnationalism appears as a constant of modern life, hidden from a view that was captured by methodological nationalism" (Wimmer & Schiller, 2002, p.302).

analyst or practitioner chooses to ignore the national framing of modernity, then it will probably fail to move away from the epistemic structures and programs of mainstream social sciences that make it impossible for us to study transnational phenomena and their respective linkages among strategic hubs for illicit markets, criminal organizations, and illicit activities. Similarly, the belief that nation-states are the natural entity to be studied within social science diminishes the role of criminal non-state actors in the international system and creates obstacles in the proper investigation of how they formulate their strategies in the social world. At last, to reduce our analytical focus solely on the boundaries of the nation-state is to willingly ignore not only those social phenomena taking place outside its territorial limits but all of the cross-border interactions and connections existing across states throughout world history.

In other terms, we can interpret Methodological Nationalism as a statecentric biased approach that prioritizes nation-states as primary units of analysis in social science, positioning several types of non-state actors at the margins of research inquiries or policy issues, ignoring the influence of transnational phenomena in the international system, and underestimating the many ways in which state boundaries and state sovereignty are constantly being redefined and challenged – especially in contemporary times. Therefore, to turn our focus to transnational phenomena and how they are interrelated to specific territories, entities, and activities, such as in the case of transnational organized crime and cross-border illicit markets, one needs to go beyond Methodological Nationalism. While this is not an appeal for the complete removal of the state as a unit for analysis in inquiries dealing with these issues or as a relevant figure in our social world,<sup>8</sup> what is at stake here is the fact that one must fill the gaps created by Methodological Nationalism and embrace the premises of Methodological Transnationalism and Methodological Relationalism.

Applying Nieswand's (2006, p.4) statement toward the study of migration to the research of criminal organizations and illicit markets, Methodological Transnationalism can be seen as an analytical framework that

<sup>&</sup>lt;sup>8</sup> Indeed, while this research has a prominent focus on cross-border and interrelated phenomena, states or the international system as a whole still occupy a very important role in this study's analysis. This, however, does not compromise this study's attempt to move beyond Methodological Nationalism.

allows for the description and analysis of multiple and simultaneous forms of (non-)incorporation of (non-)criminals/(non-)illicit activities into distinct sociospatial contexts and institutions without prejudging the primacy of one of them. In this sense, to develop research grounded in Methodological Transnationalism, "the observation and analysis require the reference to different socio spatial units and their specific forms of interaction in regard to the social phenomenon under examination" (Nieswand, 2006, p.8). On the grounds of Methodological Nationalism, this would simply be impossible.

Here, just like we discussed in the previous section, a combination between Methodological Transnationalism and Methodological Relationalism is crucial to understand the linkages and relationships involved with transnational organized crime and cross-border illicit markets. As Schmitz (2020, p.1) describes, Methodological Relationalism is:

> (...) a scientific approach to the social that places relations, rather than entities, individual or collective, at the beginning of its conceptions and analyses. Methodological relationalism does not begin its theoretical conceptualization or empirical analysis with individuals (methodological individualism) or collectives (methodological holism). The general epistemic principle of the relational perspective is to start any research with the relations and think from there toward the related elements.

In this sense, considering the importance of highlighting how the "idea of relation" is being theoretically conceptualized and transferred into a methodology that addresses them in empirical terms (Schmitz, 2020), this research attempts to deal with the combination of the premises of Methodological Transnationalism and Methodological Relationalism in a very particular way. They are combined into one specific methodological orientation: the focus and close attention to the interrelationships among the strategic hubs, criminal organizations, and illicit activities that, together, contribute to the existence and functioning of distinct illicit supply chains in the international system.

In this sense, to analyze the geopolitical rationale of criminal non-state actors, we focus on **the interrelationship between strategic hubs for illicit markets and the networked dynamics of illicit supply chains**. Nevertheless, this study can still be complemented by the methodological insights provided by the so-called International Practice Theory.

#### **1.3 International Practice Theory**

This section describes how relevant notions of International Practice Theory can be combined with those of Methodological Transnationalism and Methodological Relationalism. Taken together, their notions may contribute to the elaboration of a particular research methodology oriented towards the theory of practice of organized crime in geopolitical terms.

First and foremost, it is worth noting that this study adopts International Practice Theory as a "methodological guidance" according to Bueger & Gadinger's (2018) arguments about the multiple academic debates and versions of the so-called "Practice Theory". Considering how Practice Theory bridges the gap between "theory" and "practice", overcomes state-centric biases by focusing on the everyday practices and routines of various (non-)state actors frequently overlooked by traditional approaches in International Relations, and addresses the role of context, micro-macro connections, and disciplinary dialogues, five notions discussed by the authors can be translated to our study on the crime-geopolitics nexus.

Firstly, we should not underestimate the insights that can be obtained when one chooses to centralize theory in practice (Bueger & Gadinger, 2018, p.ix). To develop this research, I will centralize the geopolitical practices of criminal organizations in this study's framework. Secondly, since "practices" are to be placed as the "central unit of analysis" in inquiries involving practice theory, scholars usually do not want to start with fixed assumptions about how people are, how they behave, what logic they follow, or what is the nature of the international system or global politics. On the contrary, these scholars are interested in what actors do and say, and how these activities are involved in broader contexts (Bueger & Gadinger, 2018, p.2). Accordingly, it is important to pay attention to what members of criminal organizations do and say, and how their illicit operations are embedded in broader contexts associated with the illicit global economy and its illicit supply chains.

Thirdly, traditional premises of levels of analysis entrenched in International Relations studies are normally rejected by scholars dealing with practice theory, especially considering how practices cross these levels virtually at every moment. Nevertheless, this research makes use of the language of the levels of analysis only to facilitate the visualization of the cross-border nature of the multiple transnational illicit flows that connect different geographical spaces throughout the international context. Especially when focusing on the connections between the local and the global levels. Fourthly, practice theorists defend the idea that practice theory "breaks" the separation between "theory" and "practice", with each one of them constituting the other (Bueger & Gadinger, 2018, p.4). In this sense, this study assumes that the geopolitical practices of organized crime and the existing theoretical frameworks dealing with these practices are deeply interconnected from a constitutive perspective.

Fifthly, among the seven approaches studied by Bueger & Gadinger (2018), the one dealing with "communities of practices" is of particular interest to this research.<sup>9</sup> This is the approach used to analyze how different people form communities, share practices, and knowledge, and conduct learning processes among themselves about relevant issues. Considering the idea of "communities of practices", one can easily think of a "community of illicit practices" or "community of criminal practices", whereby criminals establish communities in the form of criminal organizations, share practices and knowledge with each other, and conduct learning processes among themselves on how to conduct criminal operations. The combined use of these notions with premises of Methodological Transnationalism and Methodological Relationalism provides an interesting path to investigate the interstice between international relations, organized crime, and geopolitics. Indeed, the combination of the insights of International Practice Theory with the interrelated dynamics of cross-border phenomena discussed by Transnationalism and Relationalism can be considered a good match for the analysis of the geopolitical rationale of criminal non-state actors.

The next section summarizes the existing controversies, levels of analysis, methodological paths, and methods in research on organized crime.

<sup>&</sup>lt;sup>9</sup> This approach to studying organizations has already been used to think about various forms of transnational communities in the field of security, whereby a "social collective shares a repertoire of practices and knowledge and puts learning processes of practical knowledge in the foreground" (Bueger & Gadinger, 2018, p.8). See, for example, discussions on "security communities" in Deutsch et al. (1957) and Adler & Barnett (1998).

Then, it proceeds to discuss the advantages and disadvantages of the research design adopted to develop this study.

#### 1.4 Method and Research Design

While developing research on organized crime is not impossible, many controversies and methodological obstacles persist in a seemingly paradoxical context whereby, on one side, the study of organized crime grew exponentially in the last decades but, on the other side, "the field appears somewhat lackadaisical about scientific rigour" (Windle & Silke, 2019, p.411). In any case, it is important not to underestimate the breadth of the existing research on organized crime. After all, today there is a well-established research field dedicated to studying organized crime despite contested and varying notions of the phenomena. Works ranging from several edited books and handbooks to institutional reports, journals with peer-reviewed processes, projects, annual working groups, and (under)graduate disciplines in different fields dedicated to analyzing organized crime within the background of social sciences are some examples. Not to mention the work being done by some institutions to provide evidence-based studies, high-quality academic education, and professional training to scholars, practitioners, and civil community leaders in issues involving organized crime and illicit markets, such as the Center for Information and Research on Organized Crime (CIROC), the Standing Group on Organized Crime (ECPR-SGOC), the International Association for the Study of Organized Crime (IASOC), the Global Initiative Against Transnational Organized Crime (GI-TOC), and the United Nations Interregional Crime and Research Institute (UNICRI).

Reflecting upon the controversies and methodological dilemmas associated with research on organized crime, this subsection delves deeper into five considerations about the very particular method and research design adopted to develop this study. Firstly, this study does not ignore the several limitations associated with inference-based approaches in social inquiry (Chalmers, 1993, p.36; Jackson, 2011, p.50; King et al., 1994, p.3; Ladyman, 2002, p.36-40; Smith et al., 1996, p.14-18), nor neglect the existing political and power struggles or effects involved in the production of scientific knowledge historically (Sherrat, 2006, p.151), this research develops its analysis of the geopolitical rationale of criminal non-state actors in the Amazon Forest based on the inductive method.

In this sense, this study started by familiarizing itself with the existing literature in International Relations, Criminology, and Geography, as well as its common themes, trends, and findings. Each academic field brings unique strengths to analyzing the geopolitical rationale of criminal non-state actors but also has limitations that could hinder a full understanding of the issue. A transdisciplinary movement combining insights from these fields was shown to provide a more comprehensive understanding, compensating for individual field limitations, and shedding light on the complex interplay of spatial, sociopolitical, and criminological factors that influence criminal non-state actors' strategic behavior. For example, while International Relations may overlook the role of non-state actors or micro-level analysis due to its state-centric bias, Criminology's focus on domestic crime and individual behavior may limit its applicability to international phenomena, and Geography's focus on physical factors may underestimate non-spatial dynamics in criminal operations. Thus, relying solely on one academic field could present an incomplete understanding of the geopolitical rationale of criminal non-state actors.

The research question and objectives guiding this study were properly generated after it identified potential gaps or inconsistencies in (under-)researched areas or research inquiries that might be inadequately addressed if conventional frameworks were used. Based on this study's analysis, new hypotheses, and theoretical frameworks were presented to fill the identified gaps in the literature and to promote specific observations that could generate broader generalizations and theories about the phenomenon under analysis. Finally, this study's hypothesis and framework were later tested to verify their robustness.

After collecting and examining relevant information related to these issues, this study was grounded on the following hypothesis: *the Amazon Forest has a significant geopolitical role in illicit environmental supply chains and mainstream International Relations theories are inadequate to investigate the factors influencing the geopolitical rationale of criminal non-state actors.* Grounded on an extensive literature review of scientific material produced in the last two to three decades about the current state of knowledge on the dynamics of organized crime and illicit markets regionally and globally (particularly to the issue of transnational environmental crimes and some of its associated crimes), as well as the gaps identified in the literature of International Relations, Criminology, and Geography, plausible inferences were raised toward this hypothesis. Furthermore, considering the patterns and themes identified in this exercise, a conceptual framework toward the crime-geopolitics nexus was developed to answer this study's research question.

While further studies are necessary to demonstrate if the findings achieved by this research can be applied to different evaluations, contexts, or conditions, this study identified that geographic and geopolitical factors are underemphasized in the general literature. Thus, this study indicated, in the Amazonian context, a higher prevalence of criminal geopolitical practices involving transnational environmental crimes in very particular locations that are largely characterized by the logistical advantages given by physical particularities, political practices, socioeconomic conditions, legal frameworks, and relationships among legal and illegal actors. This includes natural, geographical, and territorial advantages (i.e., physical particularities); socioeconomic circumstances and financial incentives (i.e., socioeconomic conditions); corruption, lack of political will, political priorities, weak governance, law enforcement, and state capacity (i.e., political practices); weak to limited legal frameworks (i.e., legislation); and existing associations among different types of criminal non-state actors, state agents, legitimate corporations, and even local communities (i.e., relationships among legal and illegal actors). A theoretical framework that integrates physical particularities, political practices, socioeconomic conditions, legal frameworks, and the relationship between legal and illegal actors can compensate for individual field limitations and holistically address the geopolitical rationale of criminal non-state actors, demonstrating how criminal non-state actors operate within, or even influence geographic and geopolitical landscapes. Meanwhile, this framework makes it possible to identify some of the most relevant factors that make these particular locations deeply interconnected to other territories, criminal organizations, and illicit markets in different stages of illicit supply chains, from source and transit to consumer stages, in different levels of analysis.

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Secondly, considering the methodological paths to research organized crime discussed by Hobbs & Antonopoulos (2014),<sup>10</sup> this investigation adheres to a qualitative analysis framework, which is often substantiated by quantitative data on organized crime and illicit markets. Such data encompasses details of formal seizures, investigations, and law enforcement operations. Furthermore, notwithstanding its significant reliance on secondary sources, the study is bolstered by an exhaustive literature review comprising empirical evidence published over the past two to three decades by some of the most prestigious journals, publishers, and institutions. Correspondingly, it extracts and evaluates quantitative and qualitative data from books (47), book chapters (49), scientific articles (47), institutional reports developed by state and non-state institutions (51), theoretical collectanea (1), thesis (1), and journalistic evidence (35).

Thirdly, while research employing quantitative analysis may potentially succumb to the pitfalls of using skewed or inflated data, frequently adulterated by political agendas, the potential hazard of over-dependence on quantitative data will be mitigated as follows: relevant information will be gathered and cross-referenced from the most diverse sources possible and will only be utilized after a stringent process of credibility verification, both within the literature and in open-source information. After all, the development of research on organized criminality has historically suffered from what Cressey (1967, p.101) highlighted more than fifty years ago:

The secrecy of participants, the confidentiality of materials collected by investigative agencies, and the filters or screens on the perceptive apparatus of informants and investigators pose serious methodological problems for the social scientist who would change the state of knowledge about organized crime.

<sup>&</sup>lt;sup>10</sup> These are: research based on official data and considerations; quantitative and economic analysis; studies based on historical archives; network analysis; ethnographic research; and interviews with perpetrators, consumers/clients, and victims of organized crime. Firstly, the use of statistical registries, annual reports, surveys, governmental and parliamentary commission reports, police databases, surveys, pre-trial reports or trial transcriptions, and interviews with law enforcement and public agents. Secondly, the application of four research modalities, including the use of (non-)governmental and law enforcement statistical data, surveys, the study of price and quality elasticity, and the impact of public policies on illicit markets. Thirdly, the meticulous organization and evaluation of pertinent and occasionally random data about recorded instances of organized crime. Fourthly, the execution of in-person or virtual ethnographic research to understand the identities of organized criminals and their manipulation of identities in various contexts. Lastly, conducting interviews with key actors, such as dangerous criminals, imprisoned offenders, active consumers, or potential victims of organized crime (Hobbs & Antonopoulos, 2014, p.106-110).
Other controversies can be added to the list of methodological obstacles for social scientists interested in researching organized crime. Based on the analysis of 528 scientific articles written by a total amount of 627 authors between 2004 and 2019 in famous journals,<sup>11</sup> Hosford et al. (2021) convincingly demonstrated that organized crime research is "widely dominated" by White men from six specific countries in the Global North. The paucity of collaborative authorship in scientific authors, financial investment (i.e., from public, private, and civil sources), and consistent expertise in the field (i.e., most authors publish one paper and then move to other areas) further delineates its characteristics. This suggests that authorship in this research domain is significantly affected by challenges inherent in data collection, funding availability, structural factors, and other pertinent conditions. These conditions encompass disparities in gender, race, national origins, and institutional affiliations; the lack of active collaboration amongst authors and field experts; government-induced research priorities; ethical dilemmas in research development; access to privileged information and contacts; the risk of death; challenges associated with procuring research funds; and the constraints of time and rigid deadlines in conducting specific types of research (Hosford et al., 2021). Additionally, research in this field is primarily characterized by the evaluation of secondary sources and opensource intelligence material – with a notable gap in analyses rooted in statistical inferences. There is a considerable lack of victim and perpetrator "voices" in ethnographic research or surveys, while there is a high reliance on public and media-derived data, obtained through privileged access, pre-existing contacts, financial resources, or the support of specific political agendas. Instances of intentional data misconceptualization are also observed (Windle & Silke, 2019).12

Fourthly, recognizing that the degree of risk varies significantly among various research methodologies, especially in the context of scrutinizing

<sup>&</sup>lt;sup>11</sup> i.e., Trends in Organized Crime and Global Crime.

<sup>&</sup>lt;sup>12</sup> It is necessary to always have caution in handling official data produced by police agencies, intelligence sectors, informants, and mediatic institutions since they might be willingly "distorted" with manipulated information and myths about organized crime. For a more detailed analysis of issues involving plausible generalizations and replicability, the alleged objectivity of the researcher with its research object, the changing environmental conditions of the context under analysis, the quality of the information gathered, and the effective financial costs of pursuing certain methodological paths, see Windle & Silke (2019, p.403-408).

organized crime in regions like Brazil, this study's analysis is fully grounded on desk-based research. This approach relies heavily upon an examination of the geopolitical practices of organized crime as delineated in pre-existing literature and documentation. In this sense, in light of this study's aspiration to offer significant insights into the geopolitical logic of non-state criminal actors, one notable limitation of this research is its incapability to directly access the narratives of offenders involved in illicit activities, unless in instances where personal testimonials can be indirectly derived from third-party studies.

At last, the scope of the research, its magnitude, the constrained time frame for its execution, the absence of research collaborators, and the unavailability of access to exclusive sources, all inevitably limit its efforts to provide the most systematic depiction of geopolitical criminal strategies transpiring globally. Nevertheless, adhering to the requirements of a transnationalist and relationalist perspective, this study examines overlapping and interrelated factors involving the different levels of analysis. On one side, grounded in International Relations discussions about levels of analysis, this research focuses on transnational phenomena based on the interrelatedness of micro and macro scales. On the other side, based on von Lampe's (2006) insights, it also focuses on the interconnections between the mentality, attitudes, abilities, associations, organizational issues, power structures, activities of organized criminals, the interplay between the "licit" and "illicit", and the broad social and empirical contexts in which organized crime and illicit markets are embedded.<sup>13</sup>

These methodological decisions are far from arbitrary, but rather a conscious reflection of the contextual circumstances under which this project was developed, as well as particular dilemmas inherent in organized crime research. Despite these controversies and methodological challenges, I remain confident that the discussions mobilized throughout this chapter will yield

<sup>&</sup>lt;sup>13</sup> His extensive work indicates that research in the field tends to focus on six levels of analysis: the individual level; the structural patterns of association; the overarching power structures; the activities; the legal/illegal nexus; and the meta-level. Firstly, the mentality, attitudes, and skills of the criminals themselves. Secondly, the nature of criminal collaboration in terms of organizational structure or networks. Thirdly, the syndication of individual and collective criminals. Fourthly, the activities conducted by organized crime as a business sector. Fifthly, the overlap and implications between licit and illicit operations. Lastly, the influence of the social and empirical construction of organized crime within broader contexts (von Lampe, 2006, p.80-86).

significant "localized and specific generalizations" about the geopolitical practices of organized crime in the Amazonian context (Bueger & Gadinger, 2018, p.137).

The next chapter explores what this study labels as the "*crime-geopolitics nexus*". Based on a dialogue between International Relations, Criminology, and Geography, this chapter demonstrates how a transdisciplinary dialogue between these academic fields can provide comprehensive frameworks for analyzing, on one side, the geopolitical use of transnational organized crime by states and, on the other side, the geopolitical practices of transnational organized crime in the international system.

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## 2 Understanding the Crime-Geopolitics Nexus

Based on an extensive literature review, this chapter establishes a transdisciplinary dialogue among different academic contributions. It argues that fields and subfields should not be confined to their disciplinary boundaries, whereby making it necessary to combine "conceptual and theoretical fragments", lenses, and/or paradigms of different academic fields with special attention to empirical evidence to achieve a "high level of theoretical penetration into the objects of study" (von Lampe, 2006, p.77-78). This is important since, as von Lampe (2006, p.87) indicated, the "transferring of concepts and theories from other disciplines requires caution" and should occur "only after careful naturalistic observation and an attempt to organize the objects of study". In this sense, this chapter presents some of the major insights that can be achieved by combining particular debates inside the literature of International Relations, Criminology, and Geographers.

While these reflections are combined to discuss the prospects of consolidating a specific research agenda, scholars and practitioners particularly interested in Security Studies, Transnational Studies, Globalization Studies, Criminology of Place or Geography of Crime, Environmental Criminology, Global Criminology, Eco-Global Criminology, Studies on Organized Crime, Physical Geography, Economic Geography, Human Geography, Classic Geopolitics, Geoeconomics, and Critical Geopolitics will benefit extensively from the discussions presented here. After all, discussions involving the relationship between "crime" and "geopolitics" have received less attention compared to other inquiries dealing with organized crime and illicit markets.

Furthermore, some of the existing academic contributions concerned with this relationship were interested in understanding how organized crime is instrumentalized by states as statecraft instruments, distribute itself geographically, "move" across state boundaries, maintain territorial control, form alliances, coordinate routes, or regulate everyday life in certain locations. This chapter evaluates and compares a specific group of studies in potentially one of the few attempts (if not the first) to characterize them into what can be best described as different contributions of the same research agenda, yet never properly acknowledged as such – *the crime-geopolitics nexus*. It is important to highlight, however, that despite its special focus on how criminal non-state actors can be considered "non-state geopolitical actors", this study does not ignore the existence of cases in which states actors used organized crime groups, clandestine networks, and illicit economies as instruments of foreign and domestic policy. In addition, it is also worth mentioning that this chapter does not intend to simply add a new terminological category to the long list of existing "nexus" studied in research on organized crime and illicit markets, such as the "crime-terror nexus", the "crime-conflict nexus", the "peace-crime nexus", the "political-criminal nexus", or the "media-crime nexus" (Boer & Bosetti, 2015, 2017; Cockayne & Pfister, 2008; Felbab-Brown, 2017a, b; Godson, 2017; Kafatou-Haeusermann, 2007; Makarenko, 2004, 2012; Shelley, 2014; Walker & Restrepo, 2022).

Finally, besides systematically reviewing academic several contributions, this chapter presents its approach to addressing the geopolitical practices of organized crime, demonstrating that we should adopt a broader conception of the role of geography and geopolitics in the manifestation and operationalization of organized crime and illicit markets. An understanding that pays attention to how both physical and non-physical features of a territory (i.e., physical particularities, political practices, socioeconomic conditions, regulatory policies, and the relationship between legal and illegal actors) turn it into a "strategic hub" for organized crime groups involved in a single or more illicit market, influences the geopolitical rationale of criminal non-state actors and determines the networked dynamics of illicit supply chains connecting different territories, criminal organizations, and illicit markets in the international context. In other words, this chapter is not only an invitation to understand how territories become interrelated with specific criminal non-state actors and cross-border illicit markets in the international system, but also a clear sign that investigating the interstice between international relations, organized crime, and geopolitics is a path worth exploring!

#### 2.1 A Promising Dialogue

A transdisciplinary dialogue between International Relations, Criminology, and Geography can be highly beneficial to advance research on the interstice between international relations, organized crime, and geopolitics. By encouraging a pluralistic movement among disciplinary boundaries, this subsection indicates that this dialogue can generate future collaborative research projects among these fields and even policy-oriented research that combines the strengths of each field. This, of course, is in the context of developing effective and context-specific policy solutions against the geopolitical strategies of transnational organized crime. In terms of its structure, this subsection discusses the limitations of mainstream International Relations theories to address the geopolitical rationale of criminal non-state actors and the potential of giving more space to specific notions originating from Criminology and Geography to improve International Relations analysis toward this issue.

Some preliminary considerations can be summarized in this sense. International Relations, with its unique perspective, offers insights that enrich our understanding of phenomena that may remain elusive if investigated solely through the lens of Criminology or Geography. For example, besides providing relevant insights into the interactions and dynamics taking place in the international system, International Relations may be used to characterize organized crime and illicit markets as "non-conventional" or "transnational" threats. These threats pose significant challenges to a variety of security referent objects, such as state actors and (non-)human communities. The discipline's competence extends to the analysis of the emergence and proliferation of international anti-crime norms and institutions, and the development of bilateral and multilateral initiatives against organized crime and illicit markets. Moreover, International Relations may shed some light on the influence of international asymmetries on the operations of criminal organizations, contributing to our understanding of the historical dynamics of the illicit global economy. It further enables an examination of a diverse range of factors such as state weakness, corruption, governance, economic interests, normative beliefs, globalization, securitizing movements, and power dynamics that impact the context of organized crime and illicit markets. At last, International Relations has also the ability to produce several insights into the connections between the local and the global level, as well as the complex transnational ramifications and interrelationships connecting various territories, entities, and activities.

On the other hand, Criminology offers a wide variety of perspectives into why, how, where, and under which circumstances individuals commit crimes, patterns of victimization and criminalization emerge, punishment methods and criminal procedures are established against perpetrators, and criminal justice systems are institutionalized. Likewise, it provides valuable assessments of how political, socioeconomic, and legal factors contribute to the manifestation and operationalization of organized crime and illicit markets. Furthermore, it offers crucial assessments of the structure and "modus operandi" of transnational criminal organizations. Also, Criminology can examine relevant issues associated with the relationship between legal and illegal actors (e.g., infiltration in private and public institutions and interaction with local communities and among criminal groups) and challenges to law enforcement and criminal justice systems in investigating or persecuting transnational organized crime. Finally, this field also has valuable insights into the spatial dynamics of crime, criminal organizations, and illicit markets from the local to the global level.

At last, crucial insights concerning the geographical and geopolitical dimensions of organized crime is attainable through the contributions of the field of Geography. Geographers provide robust knowledge on how geographical and geopolitical factors (re)shape both physical and non-physical attributes of human and non-human life. From the concentration, distribution, and/or variation of homicides, burglaries, assaults, or thefts in streets, avenues, buildings, neighborhoods, cities, departments, provinces, countries, and regions, the role of spatial dynamics in the context of transnational criminality can be easily investigated based on the insights provided by Geography. In contrast with much of the literature on International Relations and Criminology, Geography has a more enhanced capability of analyzing why, how, where, and under which physical and non-physical factors organized criminal activity occurs, as well as what the logic influencing the geographical concentration, distribution, and variation of transnational criminality in different territories and, of course, within the broader geopolitical dynamics of the international context.

Indeed, the intellectual movement of bridging these academic fields together, therefore, has the potential of "liberating" the study of the geopolitical rationale of criminal non-state actors from its marginal, if not completely ignored, role in the literature of International Relations, while also supplementing the literature of Criminology and Geography with the insights of the former. These prospects become even clearer when one considers the common issues addressed by each one of these academic fields, such as "power", "state", "international system", "governance", "geography", "geopolitics", "territory", "territoriality", "position", "sovereignty", "borders", "globalization", "violence", "alliances", "networks", "strategy", "flows", "commerce", "regulations", "routes", "markets", "crime", "transnational crime", and "organized crime".

# 2.1.1 International Relations, Organized Crime, and Illicit Markets

The theoretical frameworks in mainstream International Relations can be utilized to provide explanations for the complexities of organized crime and illicit markets only in specific cases. However, the same cannot be said of the study of the geopolitical motivations, goals, and strategies of criminal non-state actors. Indeed, as Zabyelina (2009, p.13) asserted:

TOC has never occupied a central place in IR literature. The study of transnational criminal activities has, therefore, become an interdisciplinary endeavor. When analyzing the mainstream theories in IR, one is most likely to arrive at the conclusion that none of the core assumptions in IR theories sufficiently explain the essence of TOC.

Nevertheless, while creative uses of International Relations theory to analyze organized crime, illicit markets, or the illicit global economy as a whole do exist, we can identify few coherent uses to address these subjects within the field in contrast to various gaps in its existing theoretical frameworks.<sup>14</sup>

Consider, for example, some of the major theories in the field. Perspectives grounded on (neo)realism primarily focuses on the pursuit of power and security by sovereign states in an anarchic international system. This perspective is marked by its state-centric focus and militaristic bias. It insists on

<sup>&</sup>lt;sup>14</sup> It is important to highlight that this research does not intend to provide an exhaustive assessment of the particularities and limitations of all the theoretical frameworks of International Relations. Similarly, this work acknowledges the diversity and richness of these theories, especially considering the wide range of contributions made by different authors in this field over time. In this sense, far from interpreting International Relations theories as homogeneous, this research only provides a general overview of the major arguments of its mainstream theories.

considering sovereign states (i.e., a territorial, sovereign, rational, and homogeneous entity) as the only referent objects of security and main actors in the international system, conceptualizing "security threats" solely concerning external and military threats posed by other states willing to use of force against each other, ignoring the role of "non-conventional security threats" and "transnational threats" in contemporary dynamics of insecurity, emphasizing what is happening in the structure of the international system and not within or across states, and interpreting the international arena as a purely strategic space whereby interstate interactions are defined by the dynamics of war, fear of external and military threats (i.e., other states), the pursuit of prestige, power relationships, and desire to survive in an anarchic international system that operates through the logics of "zero-sum games" and accumulation of power and military capacities. Not by chance, it is worth mentioning that the (neo)realist perspective is directly related to the so-called "narrow" research agenda of Security Studies. Its proponents accuse the so-called "widening" and "deepening" agendas to be intellectually inconsistent, embedded in conceptual emptiness, and vulnerable to unintended consequences of labeling everything as a "security affair" (Buzan & Hansen, 2009; Friman & Andreas, 1999; Nogueira & Messari, 2005; Sulistyo et. al., 2022; Krause & Williams, 1996, 2018; Walt, 1991).

Consequently, it is possible to identify some key gaps in this perspective. Firstly, (neo)realist conceptions cannot explain the role of organized crime and illicit markets in providing feedback to several sources of insecurity in the international system. Some conceptions might not even acknowledge their existence in the international context. Secondly, its incapability to appreciate the role of the complex web of relationships and cross-border interactions among state and non-state actors in the international system also indicates how inadequate they are for the study of the geopolitical rationale of non-state actors. Thirdly, since criminal non-state actors are often non-unitary and non-homogeneous actors frequently driven by other types of motivations other than power or security, other gaps in (neo)realist perspectives are to be found in its tendency and insistence to interpret actors in the international system (i.e., sovereign states) as a "black box" driven primarily by the desire to obtain more power and maintain its security against external threats (i.e., other states).

At last, while the (neo)realist perspective discusses some of the power dynamics that might help in explaining the complex environment in which criminal non-state actors emerge and operate, they fail in providing coherent explanations for their geopolitical rationale. Therefore, it is safe to consider that (neo)realist conceptions in International Relations underestimate the "rising power of non-state actors" over state actors and "does not address the issues related to criminal activities transcending the borders of nation-states" due to its narrowed nature, leaving transnational organized crime and cross-border illicit markets to be interpreted as a "marginal threat to international security" (Zabyelina, 2009, p.14).

Liberal perspectives in International Relations face relatively similar yet distinct challenges. Liberalism is a significant theoretical tradition in International Relations marked by its focus on the "individual" as the main actor and referent object of security, characterization of sovereign states as nonunitary and non-homogenous actors, and optimistic beliefs over how interdependence, international law, international institutions, diplomatic channels, democracies, free trade, development, international cooperation, and "collective security" could promote peace and mitigate (external and internal) conflicts in an anarchic international system. It also emphasizes the importance of individual and moral freedom, the right to be treated equally, the right to property, the preservation and promotion of liberty, democratic participation and representation, human reason (e.g., as a philosophical, moral, and political principle), free will, human rights, and humanitarian intervention. In contrast with (neo)realist approaches, liberal perspectives do not conceive international relations based on "zero-sum games". In addition, liberal perspectives have focused on key issues involving transnational phenomena, such as its capacity influence both state and non-state actors in their interactions, to interdependencies, institutions, values, policies, and economic transactions. Last but not least, liberal perspectives conceive the state as a possible source of insecurity to its citizens in the threatening of individual liberties (Buzan & Hansen, 2009; Doyle, 1983; Fukuyama, 1952; Keohane, 1941; Nogueira & Messari, 2005; Nye & Keohane, 1971; Russet, 1993; Slaughter, 1958).

Although it can shed light on the importance and potential impact of international institutions and norms in combating transnational organized crime

and illicit markets, the possibility of approaching "criminals" from an individual perspective, or even hint at some of the unequal economic conditions which led people to crime, the liberal perspective fails to explain the strategic behavior of criminal non-state actors. This is simply due to three factors. Firstly, while some (neo)liberal scholars do focus on transnational phenomena and non-state actors in the international system, liberalism cannot explain why would individuals supposedly and inherently interested in mitigating conflict and immoral behavior chooses to commit crimes, join a criminal organization, endanger international security, and enjoy the loopholes of the international system in return for private gains.

Secondly, important issues that would contribute to the promotion of peace globally, according to liberalism, such as economic globalization, increasing commercial flows and trade, the creation of international legal frameworks, and the liberalization of trade and immigration, have been described by many analysts as some of the main drivers of transnational criminal organizations and cross-border illicit markets.<sup>15</sup> Last but not least, even if liberalism considers cross-border phenomena as subjects of analysis and non-state actors in the international system, the role of non-state actors is still considered to be marginal compared to the relevance given to the state.

On the other hand, constructivism emphasizes the role of ideas, norms, beliefs, cultures, identities, regulations, language, and discourse in shaping the behavior among state and non-state actors in the international system. Unlike (neo)realism and liberalism, which focus more on material factors and rational self-interest, constructivism argues that the international system is socially constructed and that states act according to shared beliefs, values, and practices. In this sense, the meaning and implications of international anarchy are not considered to be predetermined or fixed but shaped by these ideational factors, which influence directedly in the perception of security threats and the necessary policy responses to address them. In addition, besides contending that (non-)state interests and identities are not given but constructed through interaction with others in social environments, they argue that norms, whether formal or

<sup>&</sup>lt;sup>15</sup> This does not mean that they are negative phenomena in the international system. On the contrary, it only means that particular criminal organizations learned to take advantage of the consequences generated by globalization.

informal, influence how states define national interests and security policies (Buzan & Hansen, 2009; Finnemore, 1996; Katzenstein, 1996; Nogueira & Messari, 2005; Onuf, 1989; Wendt, 1992).

Constructivism might recognize the importance of non-state actors in the international system, as well as offer some insights into how anti-crime norms, ideas, and beliefs are diffused or incorporated by states in their legislation. Concurrently, constructivism may even be used in a creative way to investigate how the social construction of reality determines the emergence and behavior of criminal organizations in the international context or how come members of criminal organizations deal with shared ties of kinship, normative codes, and ritualistic practices. Nevertheless, constructivism fails to provide explanations for organized crime and illicit markets in some aspects. On one side, constructivism usually prioritizes ideational factors over material factors, which happens to be the major drivers of criminal organizations. On the other side, constructivism assumes that actors are socialized into a particular normative framework but organized criminals exist to evade established norms and regulations or use them strategically to advance their goals. In this sense, constructivism may not be well-suited to analyzing the motivations and norms that drive criminal behavior in organized crime and illicit markets, especially considering that they differ significantly from those of state actors.

Considering all of the aforementioned issues, it becomes clear that International Relations will not be capable of improving its capacity to understand the geopolitical rationale of criminal non-state actors if its scholars do not promote efforts toward a more transdisciplinary dialogue with other academic fields. After all, as Sulistyo et al. (2022) indicate, when popular notions in International Relations are mobilized to deal with organized crime or illicit markets, such as "international interest", "foreign policy", "diplomacy", "international organizations", "global governance", "human security", "securitization", and "international cooperation", the epistemological and methodological orientations used are, in most cases, state-centric and considerations seem to concentrate within the field. For example, these notions are mobilized to develop an analysis of how transnational organized crime and illicit markets became the subject of state-based preventive mechanisms; the matter of formal channels and bureaucratic actors involved in foreign policies; the topic of policy circles, communication methods, and negotiation processes among states; the subject of initiatives and environments where state and nonstate actors deal with the issue (especially in bilateral, multilateral, regional, and international cooperation forum); the matter of norms, legal frameworks, and strategies associated with the so-called "global crime governance"; and the target of discursive characterizations portraying the issue to be an "existential threat" or chronic threat to human dignity, development, and security. In this sense, it is necessary to promote creative ways of using International Relations theories to study organized crime and illicit markets and there are crucial insights located in other academic fields, such as Criminology and Geography, that might contribute in this sense. In this study, it is assumed that the crime-geopolitics nexus might serve as an open space to stimulate these transdisciplinary movements.

#### 2.1.2 Bridging International Relations and Criminology

A good example of promoting creative ways in the use of International Relations theories to study organized crime and illicit markets is Friman & Andreas's (1999) edited book. Their work was one of the first attempts to gather experts in international relations to reflect on the bridging between issues studied by International Relations and Criminology, such as those economic activities, transactions, and finance occurring outside legal parameters in the international system. Besides highlighting that state behavior toward the illicit side of commerce changed considerably throughout world history,<sup>16</sup> they indicate remarkable reasons for International Relations scholars to focus on "the system of transnational economic activities that are criminalized by states in importing or exporting countries", the so-called "illicit global economy" (Friman & Andreas, 1999, p.5).<sup>17</sup>

<sup>&</sup>lt;sup>16</sup> Often retreating, persisting, or reasserting in relation to transnational relations, interdependencies, prohibitionist policies, international institutions, domestic structures, and features of globalization related to illicit economies (Friman & Andreas, 1999, p.8).

<sup>&</sup>lt;sup>17</sup> It is worth noting that the use of the word "global" instead of "international" is not a coincidence. They state that, since "the global political economy is not limited to international dynamics involving nation-states and their governments" (Friman & Andreas, 1999, p.6), its illicit side suffers from the same feature.

Scholars, politicians, media, and the public have a wide-range interest in its measurement due to its global proliferation.<sup>18</sup> The illicit global economy is both a source of conflict and cooperation among state and non-state actors due to differences in national and international efforts against its related activities (especially in terms of police cooperation), disagreement in prohibitionist policies, controversies regarding the need for more punitive laws, the increase of the "fusion" between the police and the military's work, and the necessity to enhance criminal justice systems apparatus. Besides the growth of "debtstrapped" developing nations depending on the illicit global economy and the redeployment of Cold War agencies to law enforcement functions, states refocused their priorities from the fight against communism and concerns about military invasions to combating transnational crime in the 1990s. At last, they have noticed a considerable "gap" in the literature on International Political Economy that fails to even acknowledge the existence of the illicit side of transnational economic activities (Friman & Andreas, 1999, p.1-3).<sup>19</sup>

Another relevant contribution is Andreas & Nadelmann's (2008) work. They provided an excellent example of how the combination of mainstream theories of International Relations and processes analyzed by Criminology raise important insights into the history of internationalization of crime control. In other words, the history of international cooperation and conflict involved in the formation of the existing criminal justice control networks among states to detect, dissuade, and intercept actors and transnational criminalized activities throughout time, place, and issue area. In summary, they state that:

International relations scholars typically ask what theoretical perspective (...) best explains a particular phenomenon. The answer in our case is that only an analytically eclectic approach, selectively combining elements of different perspectives, can effectively make sense of the internationalization of crime control. Thus, we tell a liberal story emphasizing the growth of international police cooperation propelled by mutual interests between increasingly interdependent states in a context of more intensive and expansive transnational interactions; we tell a realist story stressing the enduring importance of power, conflict, and the priorities and influences of dominant states in

<sup>&</sup>lt;sup>18</sup> The perfect measurement of the illicit global economy is considered to be impossible for several reasons (e.g., lack of reliable sources, unreported activities, access to privileged information, different methodologies and indicators, and statistical obstacles). For a more detailed discussion, see Thoumi (2005) and Andreas & Greenhill (2010).

<sup>&</sup>lt;sup>19</sup> Without a doubt, today their arguments are easily reflected in the contemporary literature of International Relations that establish a dialogue with Criminology – or vice versa.

shaping the agenda, reach, and intensity of international crime control; and we tell a constructivist story highlighting how and why certain cross-border activities once considered "normal" are redefined and condemned as "deviant" — often through the proselytizing activities of transnational moral entrepreneurs — and become the subject of prohibition norms possessed of powerful symbolic appeal regardless of their effectiveness (Andreas & Nadelmann, 2008, p.7).

In this context, they demonstrate how global law enforcement practices and regulations emerged and were diffused by the moral beliefs and regimes of developed and powerful nations, such as the United States in recent decades and the British Empire in the last century.

Additionally, Andreas & Nadelmann (2008) discuss the challenges arising from the "widening" agenda of Security Studies. After all, considering that its proponents highlight the political function of the word "security", advocate for the expansion of the security agenda and concept beyond the political-military sector, abandon of "nuclear obsessions" of the Cold War, the addition of new subjects and referent objects in security analysis, and criticize the complicity of the narrow agenda of Security Studies in silencing social (Krause & Williams, 2018), the characterization of complexities "unconventional" or "non-traditional" issues in security analysis as "security issues" could, indeed, generate unintended consequences, such as the securitization of the crime control agenda.<sup>20</sup> In another work, Andreas (2015, p.787) even signals that the "security angle" might be "exaggerated" and capable of "distorting" analysis about the actual threat posed by the illicit global economy.<sup>21</sup> Not by chance, this concern echoes Waever's (1996) and Buzan et al. (1997) argument on how certain topics might be best asserted out of this "threat-defense sequence", into the ordinary public sphere, and toward the dessecuritization of issues.

Whereas these contributions are valuable in providing insights for both research and policy purposes, work addressing how International Relations

<sup>&</sup>lt;sup>20</sup> Here understood as in the terms of the Copenhagen School of Security Studies: securitization as a particular type of intersubjective and socially constructed policy, a political choice, and self-referential practice that takes politics beyond its "normal domains" and from the established "rules of the game", turning a specific issue area into a "matter of security" through speech acts promoted by a securitizing actor that performs a discourse depicting the matter as an "existential threat" toward an audience, and whose confrontation through exceptional measures is seen as necessary and legitimate (Buzan et al., p.5, 26, 31).

<sup>&</sup>lt;sup>21</sup> Whether through the use of alarming language or inflated rhetoric to speak of its related issues and to justify the growth of a "police state" and the militarization of police activity.

theories can be improved to investigate the geopolitical rationale of criminal non-state actors has yet to be developed. This study's argument rests on the belief that, in contrast to mainstream International Relations theories, International Practice Theory presents more promising insights into how the field should study the geopolitical rationale of criminal non-state actors.

International Practice Theory has emerged as an influential approach within International Relations scholarship in recent years. Its rise can be attributed to several factors, including dissatisfaction with the limitations of mainstream theories, the growing importance of understanding day-to-day interactions in global politics, and the influence of social theory. Also, whereas mainstream theories may overlook the micro-level interactions and practices that usually influence global outcomes, International Practice Theory focuses on the everyday practices of actors that frequently overlaps different levels in the international system in an attempt to capture the complexity and interconnectedness of various aspects often ignored or inadequately analyzed by mainstream theories.

In the context of criminal non-state actors, International Practice Theory can be used to build a particular research methodology oriented toward the theory of practice of organized crime in geopolitical terms (see Chapter 1). This perspective creates a window of opportunity for International Relations to investigate the motivations, objectives, and strategies of criminal non-state actors based on their day-to-day geopolitical practices and routines. In addition, it opens the possibility of exploring how criminal non-state actors engage in illicit activities, control territories, adapt to changing circumstances, conduct decision-making processes, promote their transnationalization, coordinate operational dynamics, establish contacts and alliances, or exploit the vulnerabilities in the international system. Last but not least, International Practice Theory embraces disciplinary dialogues as a way of enhancing our understanding of the international system. In this sense, it is also important to consider how contributions in other academic fields are capable of improving International Relations' capacity to investigate these issues.

Based on the insights provided by specific debates within the literature of Criminology, two arguments can be translated in this subsection to this study's analysis to improve the capacity of International Relations theories to understand how criminal non-state actors operate strategically in the international context. The first argument refers to an issue that became famous in policy circles and international institutions and regulations at the end of the 1990s and the beginning of the 2000s: the classic discussion inside the literature of Studies on Organized Crime concerning what is the meaning of the concept of "organized crime", "transnational crime", and "transnational organized crime".<sup>22</sup> While "crime" can be easily defined as an act criminalized by national or international legal apparatus, the same cannot be said for organized crime. This is because there are several theories of organized crime yet no universal definition for the phenomenon – in fact, there are more than 200 definitions of the subject (Kleemans, 2014; von Lampe, Jan. 2020).<sup>23</sup>

In this sense, we are dealing with a "contested concept", since organized crime is not easily "visible" from a conceptual perspective. According to the literature, this is due to different forms of defining organized crime in various countries, as well as the influence of historical and cultural experiences on how they regulate the phenomenon (Sinn, 2016, p.24). Similarly, the different meanings, territorial reach, and the issue of scientific/political legitimacy on the available definitions of organized crime also contribute to this scenario (Paoli & Beken, 2014).

Nevertheless, from all the available theories of organized crime, this research is particularly interested in the so-called "Enterprise Theory of Organized Crime". Based on its premises, organized crime can be conceived as the "continuation of commerce by illegal means" (Williams, 2009, p.106). In other words, organized crime groups can be best understood as "criminal enterprises" whose primary goal is profit and survival (Albanese, 2011). According to Albanese (2007, p.3-4), organized crime can be defined as:

(...) a continuing enterprise that rationally work to make a profit through illicit activities, and that it ensures its existence through the use of threats or force and through corruption of public officials to maintain a degree of immunity from law enforcement.

<sup>&</sup>lt;sup>22</sup> This research does not intend to provide an exhaustive account of all existing definitions related to these topics. For more detailed information, access von Lampe's virtual database: <<u>http://www.organized-crime.de/organizedcrimedefinitions.htm</u>>.

<sup>&</sup>lt;sup>23</sup> With regard to existing theories, there is the "Alien Conspiracy Theory"; "Bureaucracy Model"; "Illegal Enterprise Theory"; "Protection Theory"; "Social Network Approach"; and the "Logistic or Situational Approach".

This assumption implies, for example, that the practices of criminal organizations are influenced by specific factors, such as state regulations, their skills to enter an illicit market, law enforcement capabilities, public and private corruption levels, objective availability of products or services, ease of movement/sales, history of organized crime groups in the market, profitability and harms related issues, current demand for a product or service, and its related elastic/inelastic nature of demand (Albanese, 2011, p.6).

Last but not least, the word "transnational" started being applied to "crime" to highlight the cross-border nature of its manifestations. In this sense, "transnational crime" can be interpreted as "activities whose planning, proportion, direct and indirect effects always involve more than one country" (Albanese, 2011, p.2). On the other hand, when "transnational" is accompanied by the concept of "organized crime", then we can interpret transnational criminal organizations as the "illicit counterparts of multinationals" (Williams, 2011, p.106). As Williams (2009, p.164) described, among the decades-long disputes over the nature and meaning of organized crime within Criminology, three approaches have emerged:

> (...) those which embody simple lists of characteristics; those with more sophisticated lists that identify some essential characteristics and some à la carte characteristics; and those that try to capture the essence of organized crime. The former can be found in almost any textbook on organized crime and usually includes such characteristics as enduring association for criminal purposes, a minimum number of people (often three), some kind of organizational structure and hierarchy, and the use of corruption and violence. The more sophisticated list approach distinguishes between primary characteristics, all of which have to be present, and secondary characteristics, only some of which will be present. The third kind of definition seeks to provide the essence of organized crime. An example of this is Interpol's definition, which sees organized crime in terms of "any group having a corporate structure whose primary objective is to obtain money through illegal activities, often surviving on fear and corruption." An alternative and neo-Clausewitzian type of definition is to suggest that organized crime is simply the continuation of business by other means. Transnational organized crime is, then, criminal business that, in one way or another, crosses national borders. The border crossing can involve the perpetrators, their illicit products, people (either illegal migrants or women and children being trafficked illegally), their profits, or digital signals (a virtual border crossing).

The second argument refers to the interconnections between transnational organized crime, states, and the international system. While the Enterprise Theory of Organized Crime has its origins in a particular moment when scholars were trying to demystify fictional representations of criminal organizations (Albanese, 2007),<sup>24</sup> it is imperative to acknowledge how organized crime is a phenomenon deeply interrelated with the state and the international system. This is because organized crime groups are not generated in a vacuum but "materialized in a specific context in time-space and with particular social, technological, political, and human conditions" (Sansó-Rubert, 2016, p.182). They "transform and are transformed by the social infrastructures in which they operate" (Ellis, 2018, p.8).

In very distinct ways, if criminal organizations are considered as the product of specific contextualized social realities, then one can conceive "organized crime as a dynamic process historically and institutionally produced" always associated with the state (Chávez & Peñafiel, 2019, p.282-283). However, this should come as no surprise. After all, there is a deep connection between transnational organized crime, states, and the international system. On one side, besides the fact that transnational organized crime exists within the tensions between globalization and state boundaries, there are no doubts that transnational organized crime "challenge the territorial sovereignty of states", as well as "any notion that states can determine who or what comes across their border, and what activities are permissible in the territory under their jurisdiction" (Williams, 2009, p.165).

On the other side, transnational crime and transnational organized crime always coexisted and thrived under the expansion of capitalism and the expansion of global trade and capitalist economies, whereby different criminal networks were capable to accumulate wealth and resources through illicit activities often integrated or facilitated by capitalism, or manage to operate outside the control of established powers (Gallant, 1999). During different statebuilding processes, for example, various noble families, governments, and public agents had given incentives for the fostering of illicit activities and criminal organizations, either by benefiting from the profits involved in illicit markets, utilizing criminals as "proxies" to extend their power and undermine rivals, or to simply provide the necessary conditions for them to thrive in their territory (Andreas, 2013; Tilly, 1985; Shelley, 2018).

<sup>&</sup>lt;sup>24</sup> Such as those diffused in popular TV shows and movies, like The Sopranos, Narcos, El Chapo, The Godfather, Goodfellas, and so forth.

Therefore, one can assert that states determine organized crime. It is the "territory, socioeconomic characteristics, the relationship between state actors and illegal actors, and regulatory and prohibitionist policies" that creates the "spaces for organized crime" in reality (Chávez & Peñafiel, 2019, p.283). Similarly, if we consider the international system as a space marked by a constellation of different states employing regulatory policies that inserts certain activities and associations into the spectrum of illegality (Friman & Andreas, 1999; Andreas & Nadelmann, 2008), then this means that the international system affects directly in the shapes of the illicit global economy. It is the relationship between historically constructed inequalities of the international system that creates a criminogenic environment rich with the necessary conditions for the emergence of transnational illicit flows (Passas, 1999, 2000).<sup>25</sup> In other words, organized crime and illicit markets are what states make of them, but transnational organized crime and cross-border illicit markets are what the asymmetric architecture of the international system makes of them.

Now that we have explored some creative ways of using or improving International Relations theories to study organized crime and illicit markets, as well as numerous reflections into how Criminology might provide the necessary insights into this matter, we can redirect our attention to the spatial dynamics of transnational organized crime and cross-border illicit markets. This, in turn, is the perfect opportunity to bring Geography into this promising dialogue.

## 2.1.3 From "Crimes" and "Places" to Geopolitical Thought

This subsection addresses two arguments about the spatial dynamics of transnational organized crime and cross-border illicit markets. Whereas the first argument refers to the relationship between "crimes" and "places", the second argument delves into the prospects of addressing organized crime and illicit markets based on specific premises grounded on geopolitical thought. Firstly, a good way to understand the relationship between "crime" and "place" is to consider Chainey & Ratcliffe's statement (2005, p.1):

Crime has an inherent geographical quality. When a crime occurs, it happens at a place with a geographical location. For someone to have

<sup>&</sup>lt;sup>25</sup> Passas (1999, p.402) calls these "structural discrepancies, mismatches, and inequalities" in diverse realms, such as law, politics, and culture" as "criminogenic asymmetries".

committed a crime they must have also come from a place (such as their home, work, or school). This place could be the same location where the crime was committed or is often close to where the crime was perpetrated. 'Place' therefore plays a vital role in understanding crime and how crime can be tackled.

Indeed, crime does not manifest itself in a vacuum, but with connections to certain places. Scholars and practitioners need to start questioning, therefore: "where does crime take place in an environment, why are some places more crime prone than other places, and how do conditions in space shape crime outcomes" (Owusu & Frimpong, 2020, p.5). In summary, "place matters" to understanding crime, as a group of criminologists recently advocated (Weisburd et al., 2012; Weisburd et al., 2016; Sherman et al., 1989). It is worth mentioning some aspects of the literature specialized in this discussion.

Inside the so-called "Geography of Crime" or "Criminology of Place", both criminologists and geographers developed several studies regarding the spatial dynamics of crime. According to Chainey (2020, p.2-3) and Chainey & Ratcliffe (2005, p.81) in their work about the increasing use of Geographic Information Systems (GIS) for crime prevention and policing,<sup>26</sup> "although spatial studies of crime have been recorded for nearly 200 years, many key research periods have punctuated the history". They divide these periods into three schools of thought: the Cartographic School, the Chicago School, and the GIS School.<sup>27</sup>

Based on Chainey's (2020, p.3-8) and Chainey & Ratcliffe's (2005, p.81-86) descriptions, the first school of thought is the result of a series of studies developed in France, Belgium, and England during the 19<sup>th</sup> century. Despite focusing majorly on case studies involving European and/or American settings, they were interested in several types of inquiry, ranging from research about the risks and distribution of violent and property crime across jurisdictional divisions and between social groups to analyses related to other offending patterns in cities, countries, and regions. Later on, in the 20<sup>th</sup> century, scholars from what became the Chicago School started studying the relationship between "sociocultural triggers" of crime and "models for urban development", outlining

<sup>&</sup>lt;sup>26</sup> For information, see: <<u>https://www.esri.com/en-us/what-is-gis/overview</u>>.

<sup>&</sup>lt;sup>27</sup> Each one of them provided extensive contributions to our current understanding of crime and place, although they vary in terms of methods employed, theoretical basis, level of analysis, and case studies.

the role of temporal and spatial characteristics of social ecology, and comparing, for example, the influence of socioeconomic, physical, and demographic factors, or even aspects related to social mobility, injustice and cohesion, availability, and concentration of incentives to commit crimes, levels of education, structural mistreatment, race, poverty, immigration, homeownership, and residential stability in crime patterns. At the end of the 20<sup>th</sup> century, there were specific advances in theories of crime prevention, technological instruments used in policing, the creation of programs of "Crime Prevention Through Environmental Design" (CPTED),<sup>28</sup> and methods to assess cross-scale variations in crimes, giving rise to the GIS School.<sup>29</sup>

As the literature concerned with this "crime-place conundrum" started to grow throughout the years, certain "principles" in spatial analysis of crime started to be pinned down by its experts to justify the use of micro-level units of analysis instead of macro-level units of analysis.<sup>30</sup> These are the hidden variations in spatial patterns of crimes, the supposedly strong stability of "crime hot spots" and the matter of crime displacement (Weisburd et al., 2012; Weisburd et. al., 2009).

Firstly, spatial crime analysts argue that macro-level units of analysis hide typical variations in crimes, leading to misleading understandings of their manifestation in specific locations, whereas important differences would appear otherwise when micro-level units of analysis are used. Secondly, they argue that the social and contextual characteristics of places vary just as much as crime patterns, which suggests that crime is strongly linked to temporarily stable hotspots. Lastly, they indicate that the displacement of crime from a location where law enforcement agencies have targeted their prevention efforts to other locations would not be a frequent phenomenon.

<sup>&</sup>lt;sup>28</sup> For more information, see the website of the International Crime Prevention Through Environmental Design Associate: <<u>https://www.cpted.net</u>>. Accessed: January 27. 2022.

<sup>&</sup>lt;sup>29</sup> The widespread application of GIS in mapping crimes became a daily routine in public security agencies all over the world, since "maps continue to be a vital tool for visual representation of criminogenic phenomena and establishing the relationship between space and crime", where GIS is used "to map out crime patterns in neighborhoods, settlements, and even a whole country, thus helping in how they deploy resources into combating and preventing crime" (Owusu & Frimpong, 2020, p.5-9).

<sup>&</sup>lt;sup>30</sup> On one side, micro levels of analysis would include personal addresses, street segments, and neighborhoods. On the other side, macro levels of analysis would include nations, regions, municipalities, provinces, and departments.

As one should expect, this research disagrees with these principles. While they are not inherently invalid, they seem to be unsuitable premises for those interested in studying the existing networked dynamics of illicit supply chains linking the local to the global level. The roots of these disagreements, of course, are to be found in the ontological and epistemological commitments adopted at the beginning of this research (see Chapter 1). Considering this study's transnationalist and relationalist inspirations, we question what happens to the credibility of these principles when one substitutes the notion of "crime" for "transnational crime" or "cross-border illicit markets"? Would the exclusive use of micro-level units of analysis still be a good analytical option if we consider how transnational criminality connects and crosses different levels in the international context? Considering the adaptive and fragmented nature of transnational criminal operations, would crime hot spots still be relatively stable as they suggest? Also, based on the so-called "balloon effect" or "pillow effect",<sup>31</sup> would crime displacement still be a non-frequent phenomenon?

There are several empirical cases of transnational crimes and crossborder illicit markets scattered throughout the world that challenge the credibility of these principles. Patterns of transnational crime are deeply interrelated to networked dynamics that connect crimes to specific places in a multiscale way, from local communities to distant regions of the world and viceversa. It is only by expanding our notions of "crime" to encompass those offenses with cross-border nature that International Relations scholars will be able to identify the connections between micro and macro-level of analysis, as well as investigate the networked dynamics that link different illicit markets and criminal organizations to strategic hubs around the international system.

The second argument refers to how insights into the subfield of Geopolitics can help us address the geopolitical rationale of criminal non-state actors, a subfield that went from a policy-driven agenda used by state leaders to inform their strategic policies during the so-called "Golden Age of Classical Geopolitics" to a broader academic environment in recent times (Brigola, 2020;

<sup>&</sup>lt;sup>31</sup> If you put pressure into a balloon or a pillow, its air or content moves in a different direction. In this sense, metaphorically speaking, these notions are generally used to describe circumstances where law enforcement target one specific geographical location or route controlled by organized crime groups in order to dismantle their operations only to have their efforts constrained by their highly flexible and adaptative transformation toward elsewhere.

Flint, 2016).<sup>32</sup> In this context, issues of analysis included the accumulation of power through the conquest of territories, the matter of interstate wars, the protection of national borders, access to resources, the control of sea, land, and air routes, and the formation of military and economic alliances with other states.

The origins of the terms "Golden Age" and "Classical Geopolitics" have their roots in the period of rivalries between England, Germany, Russia, and the United States. Flint (2016, p.4) explains that the foundations of Classic Geopolitics were present during the age of European exploration, a period where there was a clear "desire and need to see the world as an interconnected whole, made up of labeled parts (such as 'barbaric' and 'empty') in comparison to the West" - assumed to be "civilized" and "developed". Classical Geopolitics, in clear connection with (neo)realist thought, understands the world as an "arena" marked by competing states for supremacy and whose interactions could supposedly be predicted or predetermined by its theoretical premises. Unsurprisingly, besides justifying the exploitation of resources in specific geographic locations of the world, Classical Geopolitics also served as the foundation for several imperialist and colonialist policies, with geographic determinism thought to be a "natural law", pre-determining political actions, national strategies, and even the supposed superiority over one state to another (Flint, 2016, p.12).<sup>33</sup>

With the end of both World Wars, Geopolitics suffered academic ostracism due to its influence on policy-makers' minds and its apparent ideological and expansionist nature – only to be revisited with more scientific rigorism during the Cold War. Along with the emergence of the multipolar world, scholars performing geopolitical analysis started to distance themselves from their former environmental determinist assumptions and toward a more inclusive posture around new issue areas and subjects that are, in fact, more analogous to the current globalized world and its contemporary interdependence among state and non-state actors.

<sup>&</sup>lt;sup>32</sup> Throughout history, its major proponents develop theories in geopolitical thought only to provide theoretical grounds to justify how their lords could (and should) accumulate power.

<sup>&</sup>lt;sup>33</sup> Flint (2016, p.5) presents a remarkable argument when he states that Classical Geopolitics is a specific way of seeing the world that is marked by its ambition to propose a seemingly "objective and global perspective of the world" but which in reality has been "an effort by an elite of predominantly white men, but not exclusively, in western countries that aim to promote a particular political agenda".

One of these changes was what became known as "Geoeconomics". Based on the rise of the United States as the major economic and military power in the world and the economic rise of Western European countries, Japan, and China, geopolitical analysis began confronting how economic variables determined states' strategies (Brigola, 2020, p.14-20).<sup>34</sup> As for its origins, despite being the subject of past academic interventions, the term "Geoeconomics" was only created in the 1990s with Luttwak's (1990) work and the need to explain the role of economics on state interactions. As he stated, "Everyone, it appears, now agrees that the methods of commerce are displacing military methods–with disposable capital in lieu of military-technical advancement, and market penetration in lieu of garrisons and bases" (Luttwak, 1990, p.17).

Concurrently, geopolitical thought was being influenced by another alternative proposition: "Critical Geopolitics". Intending to distance the subfield from its old paradigms, which were marked by its strong military, territorial, and state-centric bias, some scholars adopted "discourse" as their main object of geopolitical analysis from the 1990s onwards in an attempt to describe how policy-making practitioners, state intellectuals, and the media shape geographical spaces based on their strategic interests. Not by chance, International Relations theories such as constructivism were directly influenced by this context.

With a strong influence of postmodern thought, Critical Geopolitics defends the "retreat of the state" in the subfield and denounces the controversial bias in classical geopolitical thought (Flint, 2016, p.5). In this sense, while this critical proposition is not a demand for a complete exclusion of the state in geopolitical analysis, besides demonstrating how discourses shape geographical territories, one of its greatest innovations might be the characterization of non-state actors as "non-state geopolitical actors" (Brigola, 2020, p.20; Flint, 2016, p.14). This is a bold yet strong proposition considering the issue areas and premises of classical geopolitical thought diffused over the centuries.

<sup>&</sup>lt;sup>34</sup> e.g., "international commerce", "markets", "economic alliances", "political economy", "finance", and so forth.

While each one of its versions provides relevant insights about how interstate interactions, geographical imperatives, and geopolitical strategies are interrelated, they also provide relevant insights into the interconnections between international relations, organized crime, and geopolitics. Firstly, while this study does not make use of discourse analysis to investigate these interconnections, Critical Geopolitics opens the door for the characterization of organized crime groups as "non-state geopolitical actors", the inclusion of criminal organizations and illicit markets in geopolitical analysis, and the identification of the (non-)physical forces in the shaping of territories as "strategic hubs" for them. Secondly, Classical Geopolitics, on the other hand, reminds us that geographical locations with specific physical particularities, access to resources, and routes are used by criminals throughout the world as "strategic hubs" in the management of their operations. Thirdly, Geoeconomics contributes to our understanding of the role of resources, supply chains, and economic dynamics involved in the planning of illicit activities. Taken together, these notions provide substantial insights into how we should approach the geopolitical rationale of criminal non-state actors in this study.

#### 2.1.4 Geopolitical Rationale of Criminal Non-State Actors

What does investigating the geopolitical rationale of criminal non-state actors in illicit supply chains mean? The present research posits that this entails developing a comprehensive analysis of the strategic motivations, decisions, and actions e entities undertake within the international context to achieve their operational ambitions. To understand this study's contribution, particularly concerning the "geopolitical rationale of criminal non-state actors", it is first important to highlight what this study means by "geography" and "geopolitics".

Traditionally, "geography" and "geopolitics", although often used interchangeably, have distinct meanings in the context of international relations. On the one hand, "geography" usually refers to the physical characteristics of the Earth and its environment, including elements like topography, climate, natural resources, and the distribution of populations. Furthermore, the term is often used in discussions about how physical particularities influence a range of outcomes in international relations, from the viability of political borders and the locations of military positions to the accessibility of resources and the patterns of human settlement and movement. In this context, states with easily defendable borders are often considered to be less prone to external threats. Likewise, their physical particularities might enable them to allocate fewer resources to defense and more to other areas like economic development. Conversely, states located in regions with harsh climates or scarce natural resources may face significant developmental challenges. In contrast, a state with abundant natural resources may attract foreign interests and interventions, while a state with contested borders might face recurring security threats.

On the other hand, "geopolitics" is a term often used to describe the influence of geography on the strategic behavior of states internationally. That is, how geographical factors—such as the location, size, climate, and natural resources of a country-shape its foreign policy, its relationships with other countries, and its overall role in the international system. Based on conventional interpretations, geopolitics usually involves factors like power balances between states, military alliances, ideological conflicts, and economic interdependencies in relation to specific territories in the international system. It helps in explaining why certain states engage in territorial disputes, how they choose their allies, or why they adopt particular foreign policy stances. Nonetheless, as we saw in the previous subsection, it is necessary to expand our interpretation of geopolitics beyond the role of physical imperatives to include the influence of political, socioeconomic, and historical dimensions in the strategic behavior of both states and non-state actors. In summary, while "geography" provides the physical stage upon which international relations are (re)built, "geopolitics" demonstrates how a variety of dimensions operating on this stage influence the strategic behavior of states and non-actors.

We can now delve deeper into what it means to investigate the geopolitical rationale of criminal non-state actors in illicit supply chains. Since traditional interpretations of geopolitics typically center around state-centric analyses, emphasizing the influences of geography on the strategic behavior and foreign policies of sovereign states, we need to expand our understanding of geopolitics to include non-state actors as relevant forms of geopolitical representation in our world. This allows us to examine how they elaborate their strategies in the international system. However, this does not imply that all members of criminal organizations demonstrate a keen awareness of how their organization perceives the strategic role of particular territories for the management of illicit supply chains. On the contrary, some of these members might not even understand the cross-border and interrelated phenomena associated with the criminal organizations they are part of, let alone the geopolitical environment in which they are embedded. Nonetheless, there are undoubtful reasons to believe that the operations of organized crime groups are influenced by a geopolitical rationale. After all, they are guided by strategic logics and motivations, often associated with maximizing profit, ensuring survival and operational continuity, minimizing the risk of being caught or prosecuted, sharing or disputing the control of illicit markets, evading law enforcement efforts, and adapting their smuggling routes. Likewise, physical and non-physical factors of the international system shape the opportunities and constraints that organized crime groups face both in their manifestation and operationalization.

Therefore, geography and geopolitics are crucial when investigating the geopolitical rationale of criminal non-state actors for several reasons. For example, as we will discuss in the next section, certain terrains may serve as hideouts or base areas for organized crime groups, and porous borders may facilitate smuggling activities. Conversely, organized crime groups instrumentalize geographic conditions within broader political, economic, and societal contexts to further their operations. They may exploit political instability in certain regions, weak governance structures, socioeconomic disparities, or even legal differences among states. Additionally, criminal organizations often alter their operations, alliances, and the nature of their activities based on shifts in political relations, law enforcement strategies, and even global economic conditions.

Accordingly, when this study refers to the "geopolitical rationale" of criminal non-state actors, it refers to the logical basis on which organized crime groups elaborate their geopolitical strategies. To investigate their "geopolitical rationale" in illicit supply chains is to explore the underlying logic that explains why and how they operate in the way they do, especially in relation to the broader international system and the illicit global economy. When one considers the networked dynamics of illicit supply chains, it becomes clear that understanding the geopolitical rationale influencing their shifting flows can help pinpoint links, nodes, pathways, and, of course, territories that are particularly vulnerable or important to these operations.

In light of these issues, it must be acknowledged that producing evidence-based assessments on the geopolitical rationale of criminal non-state actors holds immense potential but also faces significant challenges. On one side, generating hard evidence on this matter is not without its difficulties since criminal organizations operate covertly at the interplay between the "legal" and "illegal", frequently adapting their strategies and operating within complex settings. This opacity and fluidity make gathering reliable and comprehensive data on their strategies difficult. Furthermore, geopolitical environments are inherently dynamic, shaped by a mixture of physical, political, socioeconomic, and legal factors. This complexity can make it challenging to discern and predict the (re)configuration of the strategic behavior of criminal non-state actors.

On the other side, there should be no doubt that researchers can gain insights into their decision-making processes, priorities, and strategic adaptations. This knowledge can be used to develop targeted interventions that disrupt these supply chains and impede the flow of illicit goods or services throughout the international system. Through such investigation, scholars can reveal the complex web of interrelationships that characterizes the illicit global economy, providing valuable insights for policymakers, law enforcement agencies, and international organizations tasked with combating these phenomena. Indeed, while this endeavor can contribute to fostering global cooperation against transnational crime and formulating more effective policies and interventions to disrupt the most complex illicit supply chains, preventive policies designed without a complete understanding of this geopolitical rationale are at a high risk of being ineffective or, worse, exacerbating the problem, especially when one considers that both transnational organized crime and crossborder illicit markets are complex and multifaceted phenomena associated with distinct physical and non-physical characteristics of the international system.

This is the context in which the crime-geopolitics nexus emerges as a promising research agenda. Far from being just a matter of academic interest, this study demonstrates that the investigation of the geopolitical rationale of criminal non-state actors has very empirical implications for combating organized crime, ensuring security, and even promoting sustainable peace from the local to the global level. To enhance our theoretical understanding of the crime-geopolitics nexus, our next step is to evaluate and compare the work of twenty authors deeply motivated by some of these same insights and preoccupations.

## 2.2 Crime and Geopolitics

The academic contributions examined and compared to develop this section have laid the foundations of what this study labels as the crimegeopolitics nexus. Not only they are important contributions to its consolidation as a research agenda since each one of them carries relevant propositions and implications in theoretical and empirical terms, but they also provide the basis on which this study's approach was built. For example, some of them are more or less state-centric in their premises, focusing solely on the agency of the state or non-state actors. On the other hand, others attempt to understand the networked dynamics between the macro and micro level of analysis, while some focus exclusively on very local or global cases. The following pages will focus on how twenty authors investigated the connections between "crime" and "geopolitics" in the last decades.

## 2.2.1 (Some) Existing Approaches

Despite several statistical limitations,<sup>35</sup> Naím's (2006, 2012) works have received considerable mediatic and institutional attention for providing a relatively comprehensive yet alarming analysis of the so-called "dark side of globalization",<sup>36</sup> as well as the threat posed by the proliferation of illicit trade, organized crime, "geopolitical black holes", and so-called "Mafia states".<sup>37</sup> Firstly, he contends that globalization has facilitated not only legitimate trade in

<sup>&</sup>lt;sup>35</sup> See, for example, Andreas's (2015) and Andreas and Greenhill's (2010) critiques of Naím's (2006) work.

<sup>&</sup>lt;sup>36</sup> This is, "the negative forces unleashed as a result of the compression of space and time [that was] made possible by modern technology", resulting from the "unrelenting growth of crossborder illegal activities (...) that threaten the institutions of the state and civil society in many countries" (Heine & Thakur, 2011, p.4).

<sup>&</sup>lt;sup>37</sup> It is worth mentioning that Naím (2006, p.269-273) mentions in superficial (and often inaccurate) terms certain aspects of International Relations theories.

various ways but also illicit trade. This can be attributed to factors such as increased connectivity and technological advancements, including the emergence of the virtual realm, international financial structures, and transportation routes (Naím, 2006, p.17-26).

Secondly, Naím (2006) underscores the importance of internationally coordinated cooperation against illicit networks, as they involve various types of organized crime groups, terrorist organizations, corrupt officials, and companies from multiple parts of the globe. The fact that these illicit networks have become more adaptable, flexible, and decentralized in recent years also contributes to his argument (Naím, 2006, p.224-228). Thirdly, Naím (2006) introduces the concept of "geopolitical black holes" in contrast to "geopolitical bright spots" to characterize specific areas or countries that have emerged as hubs for illicit activities. In summary:

The politics of a world altered by pervasive illicit trade creates a new global opposition between two poles. It is no longer the old opposition of East and West, nor that of a rich North and a poor South. It is even less the opposition that some now see between Judeo-Chirstian and Islamic cultures. Rather, it is something new, the collision of geopolitical bright spots and black holes. (...) Geopolitical black holes are the places where the trafficking networks "live" and thrive (Naím, 2006, p. 261).

The use of contrasting terms such as "black holes" and "bright spot" is by no means coincidental.<sup>38</sup> Drawing from astrophysical characteristics, Naím (2006) employs the term metaphorically to demonstrate how these locations attract illegal activities and become hubs for illicit trade. He identifies several factors that contribute to transforming a particular location into a geopolitical black hole, such as internal conflicts, high levels of corruption and impunity, instability, weak governance, uncontrolled borders, and insufficient international cooperation in addressing the threat posed by illicit trade. For illustrative purposes, Naím (2006, p.263) asserts:

The blackholes can be "lawless"-that is to say, anarchic-regions within countries like Transdniester in Moldova, the mountain heart of Corsica,

<sup>&</sup>lt;sup>38</sup> He states that "What distinguishes the two is not whether illicit networks are operating. They are, everywhere. The difference is whether in a given setting there is enough state and civic capacity to counter the networks, to get the better of them. And that is not purely the responsibility of governments or that of citizens. It is both. That is the difference between a geopolitical bright spot and black hole. It is a difference that can cleave in two a country, a city, or even a family" (Naím, 2006, p.263).

or the Mexican states that make up the border with the United States. They can be frontier regions that cross countries like the Golden Triangle of Southeast Asia or the "Triple frontier" of South America. They can be systems of neighborhoods and localities, such as the Lebanese communities across the capitals of West Africa. And increasingly they are disembodied space on the Internet. Simply because they are hard or impossible to pinpoint on a map does not mean they do not exist. Quite the contrary—those qualities are what make them attractive to the networks.

At last, Naím (2012) argues that there exist countries where the government is either controlled by criminal organizations or deeply involved in organized crime activities, labeling them as "Mafia States" and emphasizing the threat it poses by enabling illicit trade and guaranteeing a haven for criminal networks and their operations.<sup>39</sup>

In a similar yet complementary vein, Costa (2018) established a direct relationship between nation-states and organized crime groups, illustrating how states employ criminal and terrorist organizations as a "tool" for policies designed to increase their strategic position within the international context and maintain national sovereignty.<sup>40</sup> Firstly, Costa (2018) argues that nation-states and their agents are not "passive", since there is "a relation in which the nation-state is an active agent who uses criminal organizations as tools" (Costa, 2018, p.1). Secondly, he claims that geopolitics and organized crime may operate within the same strategic realm, notwithstanding the inherent challenges in connecting two subjects often perceived as different, unrelated, polemic, non-scientific, and rich in contested notions.<sup>41</sup>

Thirdly, he establishes a dialogue between Pierre Bourdieu's *Forms of Capital* and Friedrich Raztel's territorial studies, endeavoring to explain the

<sup>&</sup>lt;sup>39</sup> It is worth mentioning that there is extensive literature addressing how the line separating states and organized crime is becoming increasingly blurred, with some suggesting this line, in fact, never existed. For a complete discussion concerning "Captured States", "Parallel States", "Crooked States", "Criminal States", "Gangster States", "Kleptocratic States", "Mafia States", and "Criminally Possessed States", see Chabat (2019).

<sup>&</sup>lt;sup>40</sup> His book focuses on how the United States, China, and the Soviet Union turned these nonstate actors into part of their "asymmetrical warfare strategy" from the twentieth century to contemporary times. His focus on the aforementioned countries is due to two reasons: their richness in terms of resources and materials and their extremely developed knowledge of how to control and use irregular groups in warfare compared to other countries. He also argues that other countries also employ such tactics, but these three states are the most efficient in doing so – whether from a qualitative or quantitative perspective.

<sup>&</sup>lt;sup>41</sup> As he states, "connecting the idea of organized crime factions operating with national policies (...) to achieve geopolitical and strategic objectives without sounding like a conspiracy theorist is very difficult" (Costa, 2018, p.9).

relationships among state authorities, local powers, and regional powers – both regular and irregular. Conversely, he integrates Henry Kissinger's geopolitical perspective and Saul Alinsky's explanation of the logic of power and cooperative interactions to connect "the notion of state-level powers dealing with equals with the idea of small-scale powers dealing with, and defying, the structures of power" (Costa, 2018, p.3).

At last, he offers an alternative perspective concerning the prevalent discourse on how nation-states are addressing threats such as organized crime and terrorism: they are neither losing their importance nor getting weaker due to them. Instead, they are actually "gaining power by asserting control over groups that, technically, are supposed to be out of its range, using them externally and internally as needed" (Costa, 2018, p.3). It is "an adaptation by nation-states in terms of the strategies they use to cover their legitimacy–to conserve 'energy' and cloak their activities" (Costa, 2018, p.86). He even suggests that the improvement of states' control over irregular actors represents the "future of international geopolitics", labeling this strategy as "Godfather power" (Costa, 2018, p.83).<sup>42</sup>

Analogous to Naím (2006) and Costa (2018), Farah (2012) examines the active and strategic relationship between states and irregular actors, such as transnational organized crime groups and terrorists.<sup>43</sup> He contends that "criminalized states" in Latin America, in conjunction with their extra-regional state and non-state collaborators, utilize organized crime and terrorist networks as instruments of state policy and guarantee haven for them to operate with relative impunity.<sup>44</sup> Together, they are considered interconnected threats that have evolved into a "tier-one" national security priority for the United States and other nations in the region, increasing instability, insecurity, violence,

<sup>&</sup>lt;sup>42</sup> "A form to expand its influence by using underground connections, proxy wars with irregular groups, hybrid warfare (State and Non-governmental actors simultaneously) and outsourced clandestine operations" (Costa, 2018, p.83).

<sup>&</sup>lt;sup>43</sup> However, contrary to Costa (2018), Farah (2012) does not pay attention to the role of the United States as a protagonist in these practices.

<sup>&</sup>lt;sup>44</sup> "The term 'criminalized state' (...) refers to states where the senior leadership is aware of and involved – either actively or through passive acquiescence – on behalf of the state in transnational criminal enterprises, where TOC is used as an instrument of statecraft, and where levers of state power are incorporated into the operational structure of one or more TOC groups. The benefits may be for a particular political movement, theocratic goals, terrorist operations, or personal gain of those involved, or a combination of these factors" (Farah, 2012, p.5).

corruption, and social unrest. Drawing from the research conducted at the International Assessment and Strategy Center, he synthesizes the existing scholarship on these states and other pertinent issues, addressing the evolving nature of transnational organized crime in Latin America and West Africa, the "hybrid nature" of criminal and terrorist groups, the alliances with (extra)regional (non-)state actors, and how the "self-proclaimed Bolivarian states of Latin America" have been endorsing crimes as "part of coherent, multistate instruments of statecraft" articulated in a form of the military doctrine of asymmetric warfare by states that sponsor terrorist organizations, radical Shi'a Islam and the revolutionary Left against the United States and its allies (Farah, 2012, p.iii-iv).<sup>45</sup>

About Iran's sponsoring of Hezbollah and the Bolivarian alliance sponsoring the former Marxist Revolutionary Armed Forces of Colombia (FARC), Farah (2012, p.1) indicates that:

> [there is an] emerging combination of threats comprised by a hybrid of criminal-terrorist, and state and nonstate franchises, combining multiple nations acting in concert, and traditional TOCs and terrorist groups acting as proxies for the nation-states that sponsor them.

To introduce a geographical dimension to the issue, he argues that these franchises operate within specific geographic territories that afford them a secure environment for their activities. Referring to these territories as "pipelines" or "recombinant chains of networks", he characterizes the adaptability and efficiency of these geographical spaces to solving logistical demands, dissolving alliances, occupying physical and cyberspace, utilizing modern and developed institutions, and coordinating smuggling routes (Farah, 2012, p.2).

Firstly, he discusses the misguided notions of picturing specific locations as "ungoverned spaces" or "lawless zones".<sup>46</sup> Farah (2012, p.18-19) emphasizes that these areas are, in reality, controlled by non-state actors possessing "sufficient force" or public support to enforce decisions and norms within an "alternate power structure" that challenges the state. Secondly, when

<sup>&</sup>lt;sup>45</sup> At that time, Farah (2012) was making reference to a particular group of nations: Venezuela, Ecuador, Bolivia, and Nicaragua.

<sup>&</sup>lt;sup>46</sup> These notions are usually used to explain contexts in which there is an apparent lack of governing authority in these spaces – in this case, authority from states. Nevertheless, another segment of the literature criticizes these notions since there are, in fact, alternative forms of governance and norms present in these contexts.

mentioning of "geopolitics of transnational organized crime", Farah (2012, p.24-29) explores how terrorist groups, transnational criminal organizations, militias, and insurgencies interact within the broader global context of "alliances *de facto*" or "alliances of convenience". These alliances are characterized by their unique operational dynamics but consistently maintain networked relationships spanning different countries and continents.

Thirdly, he explores the role of what he proceeds in calling the "geography of pipelines" and its geopolitical dimensions. He begins by stating that:

The central feature binding together these disparate organizations and networks which, in aggregate, make up the bulk of nonstate armed actors, is the informal (meaning outside legitimate state control and competence) "pipeline" or series of overlapping pipelines that these operations need to move products, money, weapons, personnel, and goods. The pipelines often form well-worn, customary, geographical routes and conduits developed during past conflicts, or traditionally used to smuggle goods without paying taxes to the state. Their exploitation by various communities, organizations, and networks yields recognizable patterns of activity (Farah, 2012, p.29).

He subsequently asserts that the geopolitical dimension of these pipelines "extend to the value of the geographical spaces", whereby they become the "object of competition and war" due to their utilization in moving commodities into the "supply chain of the illicit economy". Not by chance, he underscores the very lucrative and potentially conflictual nature of controlling the physical space of a pipeline, particularly if located in border regions (Farah, 2012, p.30). This is because some border areas are marked by poorly integrated adjacent territories, while others offer easy access to communications, weapons, provisions, transports, and banks. Simultaneously, state boundaries, contingent upon geographical imperatives, create "a fluid, trade-friendly environment" or provide the necessary terrain and topography to hide laboratories, plantations, or even clandestine runways (Farah, 2012, p.35).

Just like Naím (2006), Costa (2018), and Farah (2012), Galeotti (2018, 2019) also express apprehensions regarding the utilization of organized crime as an instrument of state policy.<sup>47</sup> While his research on criminal organizations in Russia, such as the so-called "Vory v Zakone", predominantly focuses on

<sup>&</sup>lt;sup>47</sup> The timing of his work is perhaps one of the most distinguished due to crucial issues affecting the world stage today, such as the ongoing Russo-Ukrainian conflict.

multiple issues,<sup>48</sup> Galeotti (2018, 2019) illustrates instances where Russia has employed organized crime as a tool for the "dark aspects" of its foreign policy on several occasions. Recent examples, such as the illegal Russian incursion into Ukraine, exemplify instances where criminals aided the Kremlin in achieving its strategic objectives within the country or throughout Europe.<sup>49</sup> He states that in these situations, criminals did not merely operate as collaborators (akin to pirates, raiders, and smugglers both in the past and contemporary times) but as formal combatants (Galeotti, 2018, p.243).<sup>50</sup>

However, it is worth noting the following argument:

To the gangsters, this was not about geopolitics, less yet about redressing what Putin called the 'outrageous historical injustice that occurred when the Crimean peninsula was transferred from Russia to Ukraine in 1954, it was about business opportunities (Galeotti, 2018, p.243).

Based on this study's perspective, this notion can be characterized as misleading. Within the framework of classical geopolitical thought, a state-centric emphasis may lead to the interpretation of "geopolitics" and "business opportunities" as distinct realms, particularly when considering the (supposedly separated) objectives of criminals and states. However, adopting a more critical perspective and recognizing gangsters as non-state geopolitical actors reveals an alternative narrative: geopolitics was always at the core.

When one considers how organized crime groups perceive the international system in geopolitical terms, it can be argued, in broad terms, that "the geography of the illicit" for nearly all categories of illicit markets can be divided into three segments: "the point of production or supply; the trafficking or transportation of the illicit commodity in question (including through zones or countries of transit); and the markets where it is consumed" (Shaw; Goodwin, 2022, p.36).<sup>51</sup> Nonetheless, this study suggests that further consideration is

<sup>&</sup>lt;sup>48</sup> e.g., the blurred division between the "criminal world" and the state in Russia or the complex social and political relationships leading to the adaptation of the Russian mafia from Stalinism to contemporary times.

<sup>&</sup>lt;sup>49</sup> He even asked in a NATO workshop in 2015 if Crimea was the first conquest in history conducted by gangsters working for a state (Galeotti, 2018, p.243).

<sup>&</sup>lt;sup>50</sup> See Tilly (1985), Andreas (2013), and Shelley (2018) for more historical information concerning the use of criminal non-state actors in state-building.

<sup>&</sup>lt;sup>51</sup> To examine the operational dynamics of transnational organized crime based on the term's "source", "transit", and "demand" zones is very useful. Nevertheless, as Ellis (2018, p.13)
required to discern what renders these locations optimal for source, transport, and consumer ends. This is particularly crucial for comprehending how criminal non-state actors define their strategies, promote their transnationalization, formulate alliances, and improve their control over the management of relevant territories, illicit markets, and institutions along illicit supply chains in the international context.

Consider, for instance, Varese's (2013) research on the emergence of the mafia and its "transplantation" – defined as "the ability of a mafia group to operate an outpost over a sustained period outside its region of origin and routine operation" (Varese, 2013, p.6). To comprehend why certain transplantation processes succeed while others fail, Varese (2013) emphasizes various factors contributing to one of these two outcomes. These encompass migration, forced resettlement, fear or evasion of punishment, resourced-seeking motivations, investment opportunities, mobility capabilities, the size and presence of local protectors, socioeconomic instability, widespread corruption, weak or strong law enforcement capacity, weak or strong demand for illicit goods and services, and local support or resistance.

Varese (2013) asserts that mafia transplantations might be "boosted" by generalized migration of specific social groups sharing the same cultural, ethnic, or linguistic backgrounds, individuals specifically trained in violence and "mafia skills", and mafia members attempting to escape "mafia wars" and prosecution or simply searching for resources and investment opportunities (Varese, 2013, p.7).<sup>52</sup> In this sense, he addresses how mafia exploitation may occur as a result of economic opportunities provided by globalization and diaspora networks. After all, globalization as a process facilitates the movement and eventually transplantation of organized crime, and mafias exploit and capitalize on diaspora

argued, this characterization is imperfect given the variety of products and services made available by organized crime, as well as due to existing variations in the strategic role of a given country or region depending on the type of transnational crimes under analysis.

<sup>&</sup>lt;sup>52</sup> It is worth noting that "migration as such is clearly not a cause of mafia transplantation. (...) Only when migration is coupled with illegal employment and the absence of state protection does a demand for criminal protection emerge that can be met by a mafia" (Varese, 2013, p.10). In this sense, "generalized population migration on its own cannot explain the mob's successful and long-term transplantation in a new territory" (Varese, 2013, p.191).

networks that contribute to the establishment of valuable contacts, the gathering of sensitive information, and the control of resources in the new territory.<sup>53</sup>

However, Varese (2013) also offers valuable insights that challenge the narrative characterizing globalization's capacity in expanding criminal organizations to new territories throughout the world. In his own words:

Globalization increases labor mobility generally, and therefore a mafia probably does not need to open an outpost abroad to attract workers to its traditional area of operation. Moreover, mafias hire people they trust locally, rather than open a branch abroad to recruit workers for their home turf. To the extent that mafias seek specialized technical equipment, such as arms, globalization could increase the number of international locations from which a mafia group obtains its resources, and thus there would be no need to open a branch abroad. They can simply buy the goods on the open market. Some mafia investments might require close scrutiny and give rise to incentives to open outposts abroad to monitor investments in distant territories. (...) Marketseeking ventures of mafia groups are unlikely to involve the takeover of territories already occupied by existing local groups, unless the local groups are particularly weak and the incentives to move there are overwhelming. More generally, I do not expect a rational decision to open a branch in order to conquer a territory in a faraway land. Transplantation is more likely the outcome of unintended consequences (Varese, 2013, p.21).

In this sense, if organized crime groups such as mafias have "even less reason to open branches abroad to look for recruits" despite the extent to which globalization increased labor mobility (Varese, 2013, p.192), Varese is clear in emphasizing how the geographical expansion and distribution of organized crime does not occur as conventional narratives would suggest – failure to acknowledge this might lead to inadequate state policies targeting criminal organizations that merely displace the problem from one country to another (Varese, 2013, p.198).

In Gayraud's (2010) study about the "geopolitics of the mafia", he offers a detailed analysis of the historical, social, and economic factors that contribute to the emergence and persistence of organized crime throughout the world. This includes power vacuums, weakened state institutions, and times of upheaval. Besides highlighting the need for a more coordinated international response to properly tackle organized crime and the root causes of criminality,

<sup>&</sup>lt;sup>53</sup> This discussion has the potential of echoing crucial reflections and challenges associated with the so-called "ethnicity trap", this is, the "tendency to describe both transnational crime (and organized crime) around the world in ethnic terms", whereby explanations for transnational criminality "fails to explain the existence of the activity itself and often comes perilously close to racial and ethnic stereotyping" (Albanese, 2011, p.5).

he also acknowledges the impact of globalization on transnational criminal networks, which made them more sophisticated and adaptable to law enforcement incursions and present them with new opportunities to expand their operations and networks in a context of increasing interconnectedness of countries, liberalization of international trade, and ease of cross-border movements.

In addition, he emphasizes a crucial element of what we have been exploring in this research: the need to delve deeper into the mentality of those in charge of transnational organized crime groups, as well as into how criminal groups exploit existing social, cultural, and economic ties with local communities to further their interests. He asserts that this understanding is a vital step toward enhancing our comprehension of the existing "indivisible borders" and "fragmented planetary non-state geography" upon which transnational criminals operate. This is the complex web of relationships and networks that connect criminal organizations around the world.

Finally, Gayraud (2010) also contributes to the geopolitical dimensions of organized crime, demonstrating how criminal organizations exploit vulnerabilities of states and their institutions, operate in areas used as "bases" for their illicit activities, and where state control is weak or absent, and destabilize states by actively engaging in different types of illicit markets. Within this context, criminal organizations design operational strategies that depend, for example, on a relative level of impunity toward their illicit activities and enjoy the opportunities to explore existing gaps in law enforcement and regulatory mechanisms to evade detection and prosecution.

Labrousse (2010), in a more particular endeavor, contributes by conceptualizing what he terms the "geopolitics of drugs" and by providing a comprehensive analysis of the complex relationships between drug trafficking, geopolitics, and the global economy. He attempted to create a "new discipline", explore the historical, social, and political factors that contribute to the emergence and resistance of drug-related criminal activities worldwide, and investigate the direct and indirect links between drug markets, armed conflicts, and state-building processes.<sup>54</sup> In a very detailed work, he illustrates how various criminal organizations, guerillas, and insurgents conduct their drug trafficking operations, ranging from cocaine production in South American nations primarily located in the Andean region (i.e., Colombia, Peru, and Bolivia) to opiates from Asian countries (i.e., Myanmar, Afghanistan, Pakistan, Laos, and Turkey), and hashish from Northern Africa (i.e., Morocco). He traces the origins of drug cultivation and consumption back to ancient civilizations and demonstrates how historical events, such as colonialism, shaped the modern drug trade.

By highlighting the value of social and cultural interactions shared among local communities about criminal operations, Labrousse (2010, p.15) adopts a notion grounded in classical geopolitical thought to explain the geopolitics of drugs, stating that drug trafficking is inherently geopolitical as it involves the movement of illicit substances across national borders and often has significant implications for regional and international relations. He also indicates how "illicit cultures" and local communities determine the nature and scale of drug trafficking operations, as well as how drug traffickers operate due to the existing support and protection provided by the locals.

In this context, he carefully analyzes the primary drug routes used by traffickers to transport illicit substances from source countries in the developing world to consumer countries in the developed world, how these substances cross conflict zones and areas of weak governance while, at the same time, contribute to instability and insecurity in these locations and guarantee the increasing in "earning escalations" at each stage of the supply chain (Labrousse, 2010, p.15-23).<sup>55</sup> At last, Labrousse (2010) highlights the strategic importance of certain transit points and how the competition among various criminal organizations is

<sup>&</sup>lt;sup>54</sup> i.e., drug markets often fuel violence by providing funding opportunities for armed groups and exacerbating existing social and political tensions.

<sup>&</sup>lt;sup>55</sup> e.g., Profits obtained in drug markets vary depending on the level of elaboration of the product and the physical obstacles faced throughout the supply chain. In this sense, if coca leaf costs a specific price in source countries, this price will be considerably higher in consumer countries, when the product is already transformed into cocaine hydrochloride.

driven by conflicts for power over the control of territories, their resources, lucrative trafficking routes, and the individuals producing them.<sup>56</sup>

Similar to Labrousse's (2010) preoccupation with the strategies of drug trafficking operations, the constraints of physical geography, the access to strategic routes, and the disputes between criminals and state actors, Emmerich (2015) also provide important insights into the geopolitical rationale of criminal non-state actors. Firstly, he analyzes the "geopolitics of narcotrafficking" in Latin America by elucidating how organized crime elaborates its strategies based on both physical, socioeconomic, and political realities within geographical locations and how they act upon market characteristics that influence each stage of the supply chain. He argues that the roots of drug trafficking in Latin America can be traced back to the colonial period, whereby European powers introduced and cultivated various drug-producing plants like coca and opium.

Afterward, he describes instances where states have been protagonists in giving support to drug trafficking organizations due to their willful blindness or involvement in illicit activities. This is the context he states that corruption and weak institutions end up contributing to the persistence of the drug trade. Furthermore, besides identifying how the drug trade is capable of generating serious implications for regional security (e.g., the erosion of state sovereignty, the proliferation of armed groups, and the militarization of law enforcement), Emmerich (2015) also describes the counterproductive effects of U.S. foreign policy initiatives in Latin America grounded on the War on Drugs' narrative, defends the rethinking on the current punitive approach to drug policy implemented in several countries, and examines how high levels of poverty, inequality, and social exclusion contribute to the growth of drug trafficking organizations.<sup>57</sup>

Concerning how organized crime groups elaborate their strategies, Emmerich (2015) contends that their planning is strongly predicated on the "geopolitical characteristics" of states. In his own words, "the geopolitical

<sup>&</sup>lt;sup>56</sup> All natural-based illicit drugs have a deep connection to specific territories and geographical conditions. However, Labrousse (2010, p.15) explains that synthetic drugs are an exception to this rule since they do not need physical territories to be produced, only the necessary equipment in laboratories that could be stationed anywhere. Therefore, "the geopolitical questions in their commerce are (...) much more limited".

<sup>&</sup>lt;sup>57</sup> Especially in the sense of creating a wide range of potential recruits for cartels and fostering a culture of violence.

characteristics from Brazil, Mexico, and Colombia configure and determine the specific behaviors of narcotrafficking organizations in each country" (Emmerich, 2015, p.140).<sup>58</sup>

Moving forward, one of the few contributions examined in this study that explicitly indicated the integration of classical, economic, and critical geopolitical notions into its framework is Paula's (2015) work. Upon expressing his desire to investigate what he terms as a "rupture of the social contract and the competence of the monopoly of violence in some zones within the states", Paula (2015) examines some country cases in which state authority is being usurped by criminal organizations that provide goods and services in a seemingly "legitimate" manner.<sup>59</sup> Simultaneously, they establish new laws and normative values in these zones, even when encountering resistance from individuals and the state.

Firstly, he contributes by utilizing the classical geopolitical notion of "territoriality" to invoke two principles associated with the control and management of a territory: "sovereignty" and the "security-defense set" (exemplified by the monopoly of the legitimate use of violence). By connecting this notion to organized crime, which he regards as a "non-state geopolitical actor" under Critical Geopolitics, Paula (2015, p.2) characterizes these locations as "zones with diffuse state control", as the authority of one or more criminal organizations has surpassed that of the state.

Secondly, "strategic environment" refers to the notion of "interest zones" wherein, as he asserts, the "conditions for resource domination and exploration" dictate the spatial distribution of organized crime. In other terms, the strategic environment of organized crime corresponds to their interest zones, which are subsequently utilized in their strategic planning. Given the transnational nature of organized crime's operational capacities, he states that "organized crime breaks the classical state paradigm" (Paula, 2015, p.2). Finally, the author employs the notion of "position" to reference the control exerted by criminal organizations in areas such as ports and commercial routes, whereby the flow of goods from criminal groups can be channeled to their clients both

<sup>&</sup>lt;sup>58</sup> These include, for example, the Colombian Putamayo River, the Bolivian Chapare, the Peruvian Alto Huallaga, the Panamese Darién, the Mexican Petén, and the Brazilian Amazon.
<sup>59</sup> Paula (2015) focuses on Brazil, Peru, Colombia, Mexico, and Argentina.

through legal or illegal means. In summary, he argues that "criminal organizations can control or clash for control of a territory, extend to strategic environments or interest zones, and maintain dynamic borders with several countries", especially due to their capacity to "penetrate institutions linked to the commanders and logistical branches of the state" (Paula, 2015, p.2).

Likewise, Brown & Hermann (2020) exhibit concerns regarding the same situation. Within their examination of the repercussions of transnational crime on sovereignty and the international economic structure, they argue that scrutinizing transnational criminal strategies necessitates the identification of strategic hubs located beyond the effective control of the state and governed by non-state actors. They illustrate the presence of different geopolitical motivations against the backdrop of criminal operations that probe the tensions between "territorial sovereignty' and "globalization". On their geopolitical motivations, they offer the following examples: profit maximization, the control of "pleasant places", provision of security services to local communities, the establishment of their authority, ensuring stability to residents, easy access to markets, and the necessary conditions to circumvent state regulations. Concerning their examination of tensions between territorial sovereignty and globalization, they describe how criminals seek to execute operations in hubs characterized by border environments, safe havens, weak institutions, and easy access to other countries.

In summary, Brown & Hermann's (2020) aim is to comprehend how individuals participating in transnational crimes see the international system. The authors identify specific geographic areas situated beyond the effective control of the state and governed by criminal, terrorist, and insurgent organizations. Analogous to black holes in astronomy that defy the laws of Newtonian physics, they employ the concept of "Black Spots" to illustrate how these geographical spaces do not fit in our conventional definitions of state, as they challenge the world delineated by the Westphalian state system, function as safe havens for criminal activities, and generate "nodes" that interconnect and facilitate the coordination of various illicit activities (Brown & Hermann, 2020).

In a similar vein, Keefe (2013) expresses interest in what he refers to as "convenient logistical hubs" upon which transnational criminal organizations rely in their global and networked activities. After all, he states that: Whether your cargo is narcotics or light arms, undocumented people or dirty money, endangered species or highly enriched uranium, you will find that some geographic locales prove to be especially congenial and can function as a staging area or transshipment point or even a base of operations (Keefe, 2013, p.98).

In his contribution to the "geography of badness" or "geography of the illicit global economy", Keefe (2013) offers a comprehensive examination of the strategic locations that function as "essential nodes" of the illicit global economy and explores how illicit networks exhibit significant adaptability worldwide, despite the challenges linked to their relocation from one country to another.<sup>60</sup> While arguing that transnational criminal actors operate as networks, wherein each criminal actor represents a "node" in a "dispersed associational map" and the associations between them as "links", he asserts that specific characteristics make transnational criminal organizations "migrate their operations" to appealing locations within certain jurisdictions. Consequently, these features transform them into "hubs" capable of functioning both as engines and enablers for illicit economies (Keefe, 2013, p.98-99).

Like other authors, Keefe (2013) emphasizes the role of these hubs in interconnecting various criminal organizations, enabling the movement of illegal goods, services, and finances across international borders, as well as the adaptability and resilience of transnational criminal organizations that exploit the vulnerabilities of the international economic structure and the interconnectivity offered by globalization. In this context, he challenges the conventional notion that transnational criminal organizations seek to coordinate their operations in "failed states", arguing that key logistical hubs for criminals are situated in "weak states" and major urban centers of "relatively coherent states" since they "rely for their very existence on some baseline level of infrastructure and services" (Keefe, 2013, p.100).<sup>61</sup> To encompass additional factors that render a geographical location in a given country or region a strategic hub for the illicit global economy, Keefe (2013, p.102-107) introduces a list of seven variables that aid in identifying these hubs: partial state degradation;

<sup>&</sup>lt;sup>60</sup> e.g., competition, pressures from law enforcement, shifting regulatory frameworks, demands of the global market, and so forth.

<sup>&</sup>lt;sup>61</sup> For an extensive analysis of the connections between patterns of transnational crime and state weakness, see Patrick's (2011) work.

borderlands and breakaway states; corruption; poverty; informal economy; tribes and kinship networks; and state capture, rogue states, and the criminal state.

Another crucial contribution addressing how organized crime elaborates its "criminal geopolitical strategies" is Sansó-Rubert's (2016) work on the evolving trends in criminal organizations and their geographical mobility from a geopolitical and criminal intelligence perspective. Drawing on the idea that transnational organized crime is capable of "overcoming" the physical and legal boundaries of the Westphalian system of states in what he conceptualized as "criminal geopolitics", he describes how the territorial control of criminal organizations poses challenges to local, national, and international sovereignty, thereby influencing security and stability on various scales. Similar to other authors, he underscores the adaptability and resilience of organized crime groups, how they capitalize on political, social, and economic vulnerabilities to establish their operations, and the role of strategic locations that facilitate their activities, such as border areas, weak states, and locations with a high level of corruption and reduced risk of detection and intervention by law enforcement.

In summary, he examines the evolving nature of criminal organizations (i.e., transitioning from hierarchical structures to more fluid, networked, and adaptive entities), their geographical mobility and transnationality (i.e., operating across borders, capitalizing on globalization and worldwide interconnectedness, and exploiting regulatory gaps, weak governance, corruption, instability, and conflict settings), the influence of technological advancements on their modus operandi (i.e., the internet, encrypted communication, and cryptocurrencies), the convergence between illicit activities, the importance of an intelligence-driven approach rooted in geopolitical thought to better anticipate, prevent, and disrupt criminal activities, and the role of international cooperation and capacity-building.

In this context, he asserts that researchers should examine the rationale and ambitions of those overseeing the management of criminal organizations, identifying their geopolitical motivations, how their strategies determine "how" and "why" a territorial expansion will take place, the intervenient factors involved, and the criteria employed to determine the establishment of cooperative or conflictive relationships among criminal groups. Moreover, he emphasizes that, as "criminal geopolitical realities" constantly appear and disappear, it is necessary to identify a basic territorial core that spawned the criminal organizations under analysis (Sansó-Rubert, 2016, p.187-188).<sup>62</sup> Last but not least, Sansó-Rubert (2016, p.189) also contends that "the mobilization of these organizations follows an expansionist market-oriented strategy, previously planned, projected, and supported by risk analysis" aimed at the pursuit of "profit opportunities" globally, confrontation with state authorities, and potential conflicts with other criminal organizations for territorial control.

Carbajal-Glass's (2021) work, conversely, can be characterized as a notable appeal for analysts to shift their focus toward the micro-level of analysis when discussing the connections between organized crime and geopolitics. In addition to emphasizing the role of technology and globalization in shaping the adaptable and resilient nature of organized crime in the 21<sup>st</sup> century, he conceptualizes a new and multidisciplinary framework for analysis and intelligence strategies, termed the "micro-geopolitics of organized crime". Carbajal-Glass (2021) investigates the spatial dynamics of organized crime groups within local contexts. Although he does not ignore the importance of the macro level of analysis, he asserts that a study dedicated solely to analyzing the macro level will be unable to fully comprehend the political role that criminals assume in complex social orders existing within specific geographical settings.

This is crucial because criminals exert influence and frequently govern the daily lives of entire communities at the local level, either through the selective or indiscriminate use of violence or based on extralegal forms of governance. According to Carbajal-Glass (2021), there are two reasons for redirecting our focus to the local level. Firstly, criminals are not only diversifying their revenue sources, but they are also operating more locally. He attributes this is due to the "fragmentation provoked mainly by criminal defection and government action, and the ensuing reduction of a criminal group's international capabilities and logistical sophistication". Secondly, he advocates for the incorporation of the political dimension of organized crime at the local level. After all, organized crime operates through a complex amalgamation of power relationships with "legitimate entrepreneurs, civil

<sup>&</sup>lt;sup>62</sup> This is due to their vital importance for the survival, emergence, and strengthening of criminal groups.

servants, and politicians", whereby criminals frequently seek, for instance, to influence or manipulate political decision-making processes for their benefit or infiltrate private institutions, and maintain close contact with civilians.

Hall's works (2012a, b) provide significant insights into the spatiality and territoriality of organized crime. Primarily focused on addressing the gap in Economic Geography literature concerning what he terms the "geography of the illicit" and the "geography of transnational organized crime", Hall (2012a) advocates for a more geographically informed approach to examine transnational organized crime, emphasizing the necessity to examine the role of spaces, networks, and flows. In doing so, he demonstrates that organized crime is an inherently spatial phenomenon, with criminal organizations strongly relying on networks and flows to facilitate the movement of illicit goods, services, and people, efficient coordination of operations, and evasion of law enforcement agencies. This reliance is further underscored by the opportunities created due to the interconnectedness of the global economy, weak governance structures, and regulatory gaps. Within this context, Hall (2012a) highlights the relevance of territoriality, even in the face of a transnational phenomenon such as organized crime, as criminal organizations maintain strong connections with specific territories that serve as operational hubs.

Furthermore, in light of the influence of economic, political, and cultural globalization processes, Hall (2012a, b) recognizes increased economic interdependence, rapid technological advancements, and trade liberalization as major forces creating an opportunistic environment for the growth of organized crime. This encompasses, for example, the exploitation of porous borders, enhanced mobility, and access to new markets globally. Concurrently, Hall (2012b) also asserts that the spatial configuration of criminal networks is shaped by the "geography of the illicit", which leads to strategic distribution and direct association with particular geographic features, such as proximity to borders, transportation infrastructure, and favorable regulatory environments.

In addition, Hall (2012b) not only emphasizes the deeply intertwined and symbiotic nature of licit and illicit economies within the global economy but also delves into the importance of integrating micro and macro-level analyses to generate a "better image" of criminal strategies in the international system. He underscores that examining organized crime across multiple scales can offer insights into the spatial dynamics, social structures, and economic factors contributing to the worldwide proliferation of organized crime.

On one side, micro-level analysis allows for the examination of local contexts shaping illicit activities, which might be obscured in macro-level analysis. On the other side, macro-level analysis enables the investigation of overarching patterns and trends in which criminal networks interact with and are influenced by global economic and political structures. Taken together, both micro and macro-level analyses can generate valuable insights into the connections between cross-border illicit flows in different locations throughout the world.

This is particularly relevant when considering the relationship between the Global North and Global South, as both regions play interconnected roles in the proliferation and dynamics of organized crime, albeit with varying involvement in terms of the nature and scale of criminal activities. Consistent with other authors, Hall (2012b) contends that the demand for illicit goods and services in the Global North often drives the growth and strengthening of criminal networks in the Global South. Likewise, the financial systems and regulations, advanced technology, sophisticated infrastructure, and trade policies of the Global North facilitate criminal network operations through money laundering or other illicit activities. At last, it is worth mentioning that Hall (2012b) identifies urban centers and "global cities" as major hubs for organized criminal activities, offering a wide range of opportunities for organized crime due to their high levels of connectivity, functioning as nodes in various types of transnational criminal networks, and consequently enabling the continuous flow of illicit goods, services, and finance.

Moreover, drawing from insights across several academic fields, especially Sansó-Rubert's (2016) work, Aranega (2020) investigates the complex relationship between the state, transnational organized crime, and what he terms the "criminal geopolitics of firearms trafficking" in Brazil. Furthermore, Aranega (2020) illustrates, in the Brazilian case, how a combination of specific physical particularities, political practices, socioeconomic conditions, legal frameworks, and relationships between state and criminal organizations creates an opportunistic environment for transnational criminal organizations engaged in firearm trafficking to profit extensively or obtain a substantial arsenal of weapons both in Brazil and South America (e.g., the Red Command and the First Capital Command).

This encompasses factors such as the extensive land borders and vast coastlines, relatively remote and porous border areas with multiple countries, insufficient resources and political will to monitor territorial borders, rampant corruption, state and police violence, mass incarceration, social inequality, and widespread poverty, discrimination, economic opportunities in participating in illicit activities, a sizable national arms industry, pro-gun lobbying, and drastic modifications in Brazilian gun law. Aranega (2020, p.73) even suggests that the gun policy implemented by the Bolsonaro administration increased Brazil's strategic relevance for transnational criminal organizations.<sup>63</sup>

In this context, considering macro-level patterns of cross-border illicit flows in the illegal arms trade, Aranega (2020) argues that the geopolitical role of Brazil should be examined from both intra-regional and inter-regional perspectives. On one side, although South America embodies a complex mixture of source, transit, and consumer zones for illicit firearms, he characterizes Brazil as an "indispensable piece" in South America for illicit firearms while also being a consumer country for various types of illicit weapons produced by its neighboring and extra-regional nations (Aranega, 2020, p.75-78). On the other side, while Brazil serves as a regional supplier of illicit firearms, it also functions as a transit country for illicit firearms, linking suppliers from other regions, such as North America, Central America and the Caribbean, Europe, and Asia, to transporters and buyers in South America and beyond (Aranega, 2020, p.78-79).

Finally, the most recent and edited work examining the connections between organized crime and geopolitics is that of Brombacher et al. (2022). They have compiled a volume with chapters that, in various manners, explore the links between transnational illicit flows, local actors, a "web of players in other world regions", licit markets, commercial structures, and state authorities (Brombacher et al., 2022, p.13).<sup>64</sup> In this sense, their work investigates the

crime" (Brombacher et al., 2022, p.17).

<sup>&</sup>lt;sup>63</sup> For a more detailed analysis of how the flexibilization of Brazilian gun law promoted by the Bolsonaro administration will increase firearms circulation, firearms-related mortality (in the form of homicides, suicides, and accidents), opportunities for diversion to criminal activity, firearms trafficking, and decrease gun prices in the illegal market, see Aranega & Kenkel (2022).
<sup>64</sup> In their own words, their main objective is to "generate insights into the merging of illegal, grey and legal markets at certain points of the production chain and to trace linkages to organized

<sup>85</sup> 

complex connections between the Global South and Europe considering the broader geopolitical context of organized crime and illicit markets. As they state:

> The geopolitical calculus in the supply of (European) criminal markets from the Global South consists in using the networked environment of supply chain structures in order to profit from low state surveillance and potentiate the agility of the criminal actors to adapt to and capitalise on the changes in routes and technologies (Brombacher et al., 2022, p.26).

Based on this perspective, they illustrate how adopting a supply chain perspective on the spatial aspects of illicit economies and the convergence between licit and illicit markets generate valuable insights about the extensive array of existing licit/illicit transactions occurring from source to destination zones.<sup>65</sup> This occurs, of course, within a context of asymmetric power dynamics between the Global South and Europe, where disparities in political and economic influence, the often corrupt relationships between state and non-state actors, and the growing interconnectedness of the global economy inadvertently facilitate the expansion of illicit networks globally and particularly between these regions.

Brombacher et al. (2022, p.19) suggest that "a pattern of geopolitics of the illicit" emerge when analyzing the dynamics of various illicit markets and how "criminal actors exploit geographical spaces and their respective legal regimes to maximise profit and to reduce risk along the respective supply chains". This is where they emphasize the role of geography and geopolitics in shaping illicit networks. In conjunction with political dynamics such as weak governance, weak states, and conflict zones, they highlight the importance of geographical and geopolitical factors that enable the manifestation and operationalization of illicit networks. For example, factors like space, distance, resources, transit routes, border regions, and strategic hubs enable the production, transportation, and commercialization of illegal goods and services. In summary:

(...) geopolitics along supply chains are driven by rent-seeking and risk avoidance, as in classical realist geopolitical theory. However, the geopolitics of the illicit are governed by a plethora of legitimate business, criminal and state interests, while traditional approaches to

<sup>&</sup>lt;sup>65</sup> Indeed, "Supply chains are economic structures where the legal and illegal flows overlap and mix, creating highly attractive environments for criminal rent-seeking, not least because of the heavy impact of illegality on price formation and because of diverging schemes of prohibition along the supply chain" (Brombacher et al., 2022, p.18).

geopolitics are guided by state-centred assumptions (Brombacher et al., 2022, p.19-20).

The emerging pattern of the geopolitics of the illicit, they contend, has links within "highly diverse sets of legitimate and criminal actors with different interests, organisational features and roles in functional macro-networks of the global sphere" (Brombacher et al., 2022, p.19). To understand "the nature of the geopolitics of the illicit", they assert that it is essential to merge and disentangle these connections.

At last, given that the majority of organized crime groups specialize only in specific segments of the supply chain, they argue that adopting geopolitical terminology in the study of the manifestation of illicit flows is not intended to "convey the idea of global criminal enterprises that possess a high level of organizational capabilities that allow them to organize full-fledged supply chains from plant to plate and take geopolitical decisions on a global scale" (Brombacher et al., 2022, p.20). After all, besides the active participation of states and legal enterprises in various situations, in reality, the illicit global economy is largely characterized by different types of criminal groups often interacting with each other for distinct tactical reasons as part of a complex "criminal cycle" (Sansó-Rubert, 2016, p.197-198). In this regard, they emphasize that the geopolitics of the illicit is driven by "localised rationales and limited criminal capabilities, lacking centralized governance structures, in all the stages of supply chains and independent of the respective jurisdictions" (Brombacher et al., 2022, p.20).<sup>66</sup>

### 2.2.2 Similarities and Differences

This research has demonstrated how twenty scholars developed their research with a precise interest to explore the connections between organized crime and geopolitics. As we just saw, from perspectives dedicated to analyzing how states are using organized crime for statecraft purposes to inquiries developed to investigate the geopolitical rationale of criminal non-state actors,

<sup>&</sup>lt;sup>66</sup> This is a crucial argument. After all, since "discussions of this 'globalisation' of illicit flows and markets can overshadow the role of the local context", one needs to remember that it is precisely the "local criminal groups with their connections to government and local networks and knowledge [that] are much better placed than external criminal actors to ensure the control and regulation of local criminal economies (Shaw; Goodwin, 2022, p.36-37).

each one of them carries important contributions, limitations, insights, and implications. Nonetheless, the majority of them agree that the figure of the "nation-state" is no longer the sole form of geopolitical representation globally, with organized crime being, indeed, a crucial non-state geopolitical actor capable of producing insecurity in various forms and levels. At the same time, although these scholars produced different contributions with often distinct and similar arguments, they can be best described as different parts of the same research agenda – the crime-geopolitics nexus.

All the authors acknowledge that organized crime and illicit markets have become a global problem, with a diverse, fluid, adaptable, and transnational nature that challenges traditional law enforcement methods, facilitated by advances in technology and globalization (e.g., growing connectivity and communication) – with Varese being the only one suggesting that the expansion of organized crime to other geographical locations is not as simple and easy as it sounds. Some of them (e.g., Farah, Galeotti, Varese, Gayraud, Labrousse, Emmerich, Paula, Keefe, Brombacher et al., and Brown & Hermann) highlight the blurred boundaries between licit and illicit markets, as well as how the latter often thrive due to the dynamics of the former. Furthermore, many of the authors (e.g., Farah, Gayraud, Labrousse, Emmerich, Paula, Aranega, Brombacher et al., and Brown & Hermann) indicate the growing importance of investigating the relationship between state authorities and criminal organizations, whether through corruption, direct involvement, or due to weak governance and insufficient state control of their activities.

Also, multiple authors (e.g., Carbajal-Glass, Hall, Aranega, and Brombacher et al.) propose a multidisciplinary or integrated approach to studying organized crime and illicit markets, recognizing the limitations of a single-focused analysis. On the other hand, with relation to the organizational structure of criminal groups, all of the authors address that many criminal organizations operate more like loose networks rather than hierarchically structured entities, while others may have a varying degree of organizational sophistication, from loosely connected networks to highly organized entities. Similarly, all of the authors emphasize the importance of geography and geopolitics in shaping the emergence and operational dynamics of organized crime and illicit markets. It is important to highlight that some of the authors focus on the macro level of analysis, considering organized crime and illicit markets in the context of international systems, global markets, financial structures, and (cross-)regional environments (e.g., Costa, Gayraud, Labrousse, Hall, Aranega, and Brombacher et al.). Others (Carbajal-Glass, Hall, and Brombacher et al.) stress the importance of micro-level analysis or the combined use of micro and macro levels of analysis to examine how their spatial dynamics occur in local or networked contexts.

In addition, differences exist in the perceived role and extent of involvement of state and non-state actors in facilitating organized crime and illicit markets, whereby some authors (e.g., Naím, Farah, Gayraud, Labrousse, Emmerich, Paula, Aranega, Varese, Brombacher et al., and Brown & Hermann) highlight the significant involvement of state actors, either through corruption or weak governance. Others focus more on the role of non-state actors, such as private corporations and civil communities (e.g., Sansó-Rubert and Carbajal-Glass). In this sense, some of them (e.g., Emmerich, Paula, Aranega, and Brown & Hermann) suggest that the state can be an active participant in crime due to corruption and weak governance. Others describe the state as more of an unwilling accomplice, with organized crime exploiting weaknesses in state institutions and governance (e.g., Sansó-Rubert, Carbajal-Glass, and Brombacher et al.).

With relation to the primary focus of their analysis, each author has a unique perspective in their work – some focus on particular illicit markets such as drug trafficking (e.g., Labrousse and Emmerich). Others redirect their attention to specific countries and regions or the globe as a whole (e.g., Galeotti, Farah, Varese, Gayraud, Paula, Brown & Hermann, Sansó-Rubert, Keefe, Hall, Carbajal-Glass, Aranega, and Brombacher et al.). Besides indicating the intersection between different forms of organized crime and illicit markets (e.g., Galeotti, Varese, Gayraud, Aranega, and Brown & Hermann), some of them (e.g., Labrousse, Sansó-Rubert, Aranega, and Brombacher et al.) also stress the role of economic, social, and legal contexts in the emergence and operationalization of organized crime and illicit markets locally and globally.

The similarities and differences between their approaches toward the relationship between "crime" and "geopolitics" produces a clear and inescapable

reality: there is a deep transdisciplinary bond between them that can turn what this study labels as the "crime-geopolitics nexus" into an eclectic space for producing scientific studies concerned with the interstice between international relations, organized crime, and geopolitics. Indeed, the crime-geopolitics nexus has the prospect of providing comprehensive assessments of an oftenunderestimated feature of our world and enhancing our knowledge of the strategic logic influencing the illicit activities certainly being planned and conducted at this very moment. Thus, now that we have evaluated and compared the work of twenty authors that were deeply motivated to investigate the intricate relationship between "crime" and "geopolitics", we can redirect our focus to this study's approach toward the crime-geopolitics nexus.

# 2.3 This Study's Approach

Based on an inductive approach, this subsection combines the insights generated by the previous contributions into a specific framework for analysis of the geopolitical rationale of criminal non-state actors. First and foremost, irrespective of someone's interpretation about whether transnational criminal actors are challenging or strengthening states, it is important to always remember that states use organized crime groups to achieve their geopolitical objectives and transnational organized crime groups elaborate their strategic planning within the international system based on a geopolitical rationale. Therefore, one perspective does not exclude the other and, at the same time, regardless of the ambitions of states and whether organized crime groups are converging into the same strategic goal or not, what matters is that both state and non-state actors should be considered "geopolitical actors" that operate in the same complex geopolitical environment.

Throughout this chapter, we evaluated how and why specific territories scattered globally become highly strategic in logistical terms for criminal operations, especially in a context of increasing interconnection among transnational and interrelated phenomena. This, in turn, is strongly associated with this study's transnationalist and relationalist inspirations. Therefore, transnational organized crime and cross-border illicit markets occur in very particular spaces, generally with very strong connections between the local and the global level, and with links to the Global North to the Global South. Likewise, these "strategic hubs" challenge conventional notions of the Westphalian system of states and possess several characteristics making them strategically attractive for criminal non-state actors and interconnected to other hubs (i.e., territories), transnational criminal organizations (i.e., entities), and cross-border illicit markets (i.e., activities) throughout each stage of illicit supply chains.

Since it is impossible to fully understand the geopolitical rationale of criminal non-state actors without considering the influence of non-physical factors in their planning, as we just saw in many of the previous contributions, this study utilizes a very specific set of interdependent and multi-level indicators to identify and analyze strategic hubs for organized crime in the international context: physical particularities; political practices; socioeconomic conditions; legal frameworks; and relationships among legal and illegal actors.

From geographical locations marked by their border areas with easy access to other countries, strategic routes, and locations suffering from the absence or weak law enforcement and governance to conflict settings, high levels of corruption, inequality, financial returns, regulatory frameworks, and alliances between different types of (non-)state actors, together these indicators are capable of identifying the relevant features that enable the operationalization of organized crime and illicit markets in particular strategic hubs. Similarly, these indicators are multi-level in the sense that they are capable of capturing the ties and interactions that connect these hubs at local contexts and source sites to broader global contexts and transit/consumer sites. They allow for the evaluation of the networked dynamics connecting "nodes" and establishing "links" between different strategic hubs for organized crime groups to other locations, criminal organizations, and illicit markets. In other words, they are capable of identifying the complex web of associations between territories, criminal organizations, and illicit markets involved in different stages of an illicit supply chain.

Therefore, these indicators can be operationalized into two interrelated variables: the physical and non-physical features of a location for organized crime groups involved in a single or more illicit market and the networked dynamics of illicit supply chains, from the local to the global level. In recognizing the role of criminal non-state actors as non-state geopolitical actors, the connections between the Global North and the Global South in illicit supply chains, and the existing context of a highly fragmented criminal cycle characterized by transnational illicit flows that link different strategic hubs, criminal organizations, and illicit activities in each stage of illicit supply chains, these indicators are capable of capturing relevant factors usually addressed by the literature in an integrated manner. Based on these indicators and the many insights gathered in the previous pages, this study investigates the geopolitical role of the Amazon Forest in illicit environmental supply chains through an examination of the physical and non-physical features of the strategic hubs for transnational environmental crimes in the Amazonian territory and the networked dynamics of illicit environmental supply chains, from the local to the global level (see Chapter 4).

Therefore, this study's approach is grounded on the idea that we should adopt a *broader conception* of the role of geography and geopolitics in the manifestation and operationalization of organized crime and illicit markets. An understanding that pays attention to how *both physical and non-physical features* of a territory (i.e., physical particularities, political practices, socioeconomic conditions, regulatory policies, and relationships between legal and illegal actors) *turn* it into a "strategic hub" for organized crime groups involved in a single or more illicit market, *influences* the geopolitical rationale of criminal non-state actors and *determines* the networked dynamics of illicit supply chains connecting different territories, criminal organizations, and illicit markets in the international context.

While this framework might be seen as incomplete or even considered a non-satisfactory proposal for many analysts, its indicators and variables were built upon relevant aspects documented throughout the last two to three decades in evidence-based research concerned with the connections between crime and geopolitics. In addition, while some of the previous authors attempted to conduct cross-disciplinary movements to provide a more "clear picture" of the spatial dynamics of organized crime and illicit markets, this study's approach was built to provide a more integrated perspective toward the geopolitical rationale of criminal non-state actors. Indeed, while this is only a small contribution toward the consolidation of an eclectic space around what could become the crimegeopolitics nexus, this research hopes to inspire future works and innovative approaches toward the interstice between international relations, organized crime, and geopolitics.

Areas for future research might include inquiries dedicated to further advanced discussions related to methods and methodology for the crimegeopolitics nexus; levels of analysis; the illicit-licit interface; the influence of regulations; the elaboration of preventive responses involving state and non-state actors; the role of the virtual space; the (non-)converging patterns of different illicit commodities and flows; the major or less known routes used by criminals in the international context; the direct and indirect harms of their geopolitical strategies; the impact of technological innovations in their strategic planning; the relevance of structural factors from the international system in their geographical distribution and expansion; how criminal organizations shape social spaces (and vice-versa); and the role of gender and racial relations in the strategies of organized crime. Without a doubt, whereas these are only a few suggestions for future research, the prospects for the crime-geopolitics nexus as a research agenda seem to be endless!

# 3 The Case of Transnational Environmental Crimes

The illicit global economy is composed of different types of crossborder illicit markets. Drug trafficking, arms trafficking, human trafficking, counterfeiting, contraband in illicit antiques, piracy, extortion, fraud, money laundering, contract killings, theft in intellectual property, and cybercrime are all good examples of the cross-border illicit markets taking part in the broader illicit global economy. Whether due to popularized notions of organized crime activity or the extent of research already developed with most of these activities, transnational environmental crimes are often considered an "under-researched" affair and less important (or urgent) to policymakers and security agencies. Especially when compared to other illicit markets, like drug and human trafficking. Nevertheless, somehow paradoxically, the number of scholars, nongovernmental organizations, and international institutions actively involved in the promotion of theoretical debates and publishing of evidence-based research on the types of transnational environmental crimes, their operations, and the dangers it poses to global security grew considerably in the last decades.

This chapter was developed through a literature review of scientific and open-source information, especially institutional documentation, media reports, and scientific analysis from experts and civil society organizations working on environmental and crime-related issues. Concerning its criterion to collect and examine within this chapter, it focuses on conceptual and legal definitions for environmental crimes and transnational environmental crimes; examples of their modalities, associated crimes, and international regulations; the drivers of different types of transnational environmental crime; the actors involved in illicit environmental supply chains; the networked dynamics of transnational environmental crimes regionally and globally; major source, transit, and consumer countries; the existing connections between the Global North and Global South in each type of environmental offense; the relationship between climate change and crime; statistical evidence from state and non-state institutions regarding transnational environmental crimes; and official seizures, investigations, and law enforcement operations targeting organized crime groups or criminal operations related to transnational environmental crimes.

To delve deeper into how transnational environmental crime manifests itself in the international context, first, we explore definitions of "environmental crimes" and "transnational environmental crimes" and identify their modalities. This includes illicit logging and timber trafficking; illicit mining and trafficking in precious metals; wildlife trafficking; illegal, unregulated, and unreported fishing; waste disposal and trafficking; and the illegal trade in ozone-depleting substances. Afterward, it focuses on the conduct of its operations and how they are usually coordinated along the three stages of illicit environmental supply chains. Finally, grounded on hard evidence, this chapter highlights the consequences of each of the environmental offenses discussed previously, especially considering the connections between the local and global levels. At the end of this chapter, despite the similarities and connections between transnational environmental crime and other forms of "traditional transnational organized crime", it becomes clear how this form of criminality is, indeed, very unique in various senses. These are necessary steps if one wishes to properly comprehend the "bigger picture" associated with transnational environmental crimes and some of the aspects that influence how criminal non-state actors perceive the geopolitical role of a particular territory for transnational environmental crimes in the international system.

### 3.1 Types

There is no universal definition of "environmental crimes". Nevertheless, this term is generally discussed based on two interpretations. On one side, there is a broad interpretation of "environmental crimes". On the other side, there is a rather conventional, legally binding, interpretation of the issue. According to the famous Environmental Investigation Agency (EIA) (2008), environmental crimes can be defined in broad terms as "illegal acts which directly harm the environment". Specific forms of marine pollution, forestrelated crimes, and waste-related activities can be easily associated with this broad definition.

These include, for example, land-based marine pollution; ship-source fuel pollution; bilge water dumping; the burning of bunker fuel; bottom trawling; fisheries crime; illegal deforestation; illegal logging and trafficking in timber and other forest products; illegal mining and trafficking in precious metals and stones; wildlife trafficking; waste trafficking; plastic waste trafficking; and trafficking in ozone-depleting substances, such as Chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCHCs) (United Nations Office on Drugs and Crime & World Wildlife Fund, 2022).<sup>67</sup>

White (2018, p.182-184), on the other hand, goes even further – especially in his attempt to demonstrate how "green criminology" has been the primary lens for the analysis of transnational environmental crime.<sup>68</sup> Besides categorizing types of environmental crimes in terms of color (i.e., "green", "brown", and "white"),<sup>69</sup> he argues that:

To speak of *environmental crime* or *eco-crime* is to acknowledge some kind of specificity in the act or omission that makes it distinctly relevant to environmental considerations. Yet, as with crime generally, there is much dispute over what gets defined as environmentally harmful and what ends up with the legal status as 'crime' per se.

In this sense, it is important to remember that the term "environmental crimes" is also, in conventional and legal terms, tied to the idea of a "deliberate evasion of environmental laws and regulations by individuals and companies in the pursuit of personal financial benefit (...)" (Brack & Hayman, 2002, p.3-4). Therefore, whether a dimension of environmental crimes or its linkages with other crimes is being regulated by legal provisions, the aforementioned "deliberate evasion" is usually tied to specific international conventions and regional treaties.

For example, the 1973 Convention on International Trade in Endangered Species of Wildlife and Flora; the 1979 Convention on Long-range

<sup>&</sup>lt;sup>67</sup> For a detailed discussion about the UNODC's mandate and involvement in the fight against environmental offenses, especially wildlife and forest-related crimes, see Broussard (2016).

<sup>&</sup>lt;sup>68</sup> He states (2008, p.181) that "Green criminology' refers to the study by criminologists of *environmental harms* (that may incorporate wider definitions of crime than are provided by strictly legal definitions); *environmental laws* (including enforcement, prosecution and sentencing practices); and *environmental regulation* (systems of criminal, civil, and administrative law designed to manage, protect, and preserve specified environments and species, and to manage the negative consequences of particular industrial processes)".

<sup>&</sup>lt;sup>69</sup> Green types of environmental crime essentially refer to "natural resource" crime, indicating "idealized notions of nature"; brown stands for "pollution" crime, highlighting "refuse and waste associated with production and consumption"; and white as "science-based" crime, making reference to "laboratories and application of new technologies". These categories would include, for example, environmental harms ranging from deforestation and devastation to plant, animal, and human welfare and rights to the illegal theft and trade in reptiles, fishing-related crimes, wildlife trafficking, and waste disposal.

Transboundary Air Pollution; the 1979 Convention on the Conservation of Migratory Species of Wild Animals; the 1985 Vienna Convention for the Protection of the Ozone Layer; the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer; the 1989 Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and Other Wastes and their Disposal; the 1992 Convention on Biological Diversity; the 2003 United Nations Convention against Transnational Organized Crime; the 2005 United Nations Convention against Corruption; and arrangements among regional fisheries management organizations.<sup>70</sup>

Nevertheless, as in the case of "environmental crimes", one should not forget that "the definition of transnational environmental crime is [also] (...) contentious and ambiguous", depending on "who is defining the harm, and what criteria is used in assessing the nature of the activities (...)" (White, 2018, p.183). Thus, it should come as no surprise that civil society institutions have been protagonists in pushing for some of the most important and promising characterizations of environmental offenses as threats to global security. Consider, for example, the Environmental Investigation Agency's (2008) position concerning them: they are growing illicit activities committed by serious, organized, and transnational criminal enterprises that generate tens of billions of dollars every year – frequently at the cost of the well-being of several local communities, legitimate business, and the planet itself. Indeed, "environmental crimes by their very nature are transboundary and involve crossborder criminal syndicates" (Environmental Investigation Agency, 2008, p.1). This is where the term "transnational environmental crimes" becomes relevant, especially compared to old-fashioned designations of the phenomena.<sup>71</sup> After all, as Wright (2011, p.336) stated:

<sup>&</sup>lt;sup>70</sup> Several legal initiatives have also been promoted in the last century to protect the environment and whose imperatives might have been violated by criminal non-state actors. Consider, for example, the 1911 Convention for the Preservation and Protection of Fur Seals in the North Pacific Ocean; the 1933 Convention Relative to the Preservation of Fauna and Flora in their Natural State; the 1940 Convention on Nature Protection and Wild Life Preservation in the Western Hemisphere; the 1968 African Convention on the Conservation of Nature and Natural Resources in the Algiers; the 1972 Stockholm Declaration; the 1979 Convention on the Conservation of European Wildlife and Natural Habitats; and the 1992 Rio Declaration.

<sup>&</sup>lt;sup>71</sup> Some analysts and policy bodies only started using the term "transnational environmental crime" after it became clear that "international environmental crime" was not capable of capturing relevant features of these activities or phenomena associated with organized crime.

Environmental crime is often by its nature transnational, and can be termed as such wherever there is a movement of illegal goods across national borders or where the effects of the crime are transboundary in nature. The transnational nature of much environmental crime is obvious: consider the distance from poacher to purchaser or forest to furniture store. TEC [Transnational Environmental Crime] is conducted by a multiplicity of actors (...), some of which are organised groups, including small amateur groups and large-scale organised criminal groups.

Elliot & Schaedla's (2016) contribution is also important. They highlight that the term "transnational environmental crime" entered the "academic lexicon" in distinct ways, despite the absence of a universal definition of the phenomenon.<sup>72</sup> Also, they define it as the "cross-border trading of species, resources, waste or pollutants in violation of prohibitions or regulatory regimes established by multilateral environmental agreements, or in contravention of national law" (Elliot & Schaedla, 2016, p.3).

Dealing specifically with transnational environmental crime from a conventional legal perspective, White's (2018, p.182-183) explanation is also another contribution that promotes useful insights. According to him, transnational environmental crimes, in this case, refers to:

unauthorized acts or omissions that are *against the law* and therefore subject to criminal prosecution and criminal sanctions; crimes that involve some kind of *cross-border transference* and an international or *global dimension*; and crimes related to *pollution* (of air, water, and land) and *crimes against wildlife* (including trade in ivory as well as live animals).

In this sense, to be a "transnational environmental crime", the phenomena under analysis must involve the movement of people, objects, or decisions across borders, as well as an internationally shared recognition of its harm as a "crime". Also, as White (2018, p.183) demonstrated, in a more "expansive definition" used by green criminologists, transnational environmental crime could be extended to the issue of harm, such as:

Transgressions that are harmful to humans, environments, and nonhuman animals, regardless of legality per se; and

Environmental-related harms that are facilitated by the state, as well as corporations and other powerful actors, insofar as these institutions

Similarly, the same happened between the terms "transnational organized crime" and "international organized crime".

<sup>&</sup>lt;sup>72</sup> e.g., as a "term of art" within Criminology or the subject of governance and regulation, international political economy, international law, security studies, and global public policy.

have the capacity to shape official definitions of environmental crime in ways that allow or condone environmentally harmful practices.

Indeed, the nature of transnational environmental crime is often too complex to be merely scrutinized by standardized legal interpretations. It is a "concept that identifies multiple offences" generally based on "a category of crime in a socio-normative rather than in a strictly legal sense" (Elliot & Schaedla, 2016, p.4). From the trade in endangered species to illegal logging, illegal exploitation and trafficking of mineral resources, the illicit trade in ozonedepleting substances, and the dumping and trafficking of waste, transnational environmental crime is a diverse form of criminality that involves coordinated activities whose planning, proportion, direct and indirect effects always involve more than one country. They are forms of transnational crimes where criminal entrepreneurs enjoy opportunities to gain substantial profits by plundering and destroying the Earth's flora and fauna. They can literally destroy our planet's ecosystems and eliminate the necessary conditions for human existence.

## 3.2 Dynamics

Just as with any other types of cross-border illicit markets, environmental crimes became increasingly transnationalized in the last decades, manifesting themselves within the tensions between globalization and state boundaries. Since this study wants to understand how strategic hubs for organized crime within the international system became interrelated with other territories, cross-border illicit markets, and transnational criminal organizations along networked dynamics of illicit supply chains, this part of the chapter will focus exclusively on the drivers of transnational environmental crimes and the dynamics of global illicit environmental flows in supply chains. Hopefully, the information presented here will serve as a preliminary and useful guide to understanding relevant aspects of the networked dynamics of illicit environmental supply chains discussed in other parts of this study (see Chapter 4).

The literature on transnational environmental crimes indicates that the main drivers operating behind their emergence have been correlated to three factors: differential costs or values; regulatory failure, and enforcement failure (Brack & Hayman, 2002). In summary, as in Elliot & Schaedla's (2016, p.5) words:

These markets are driven by both price and cost differentials. Those differentials occur when expected returns (price) are higher than for analogue legal trade, when demand exceeds the supply of legal products' and when compliance with regulations (cost) can be avoided through illegal practices as is the case in the black market in ODS and hazardous waste.

In the case of illicit logging and timber trafficking, for example, its market dynamics are driven in part by demand in wealthy nations from the Global North for cheap or, sometimes, rare and expensive timber products from the Global South, which suffers with the loss of its biodiversity and revenue, and increase in deforestation. On the other hand, its dynamics are largely affected by "commodity substitution", whereby less risky and more profitable timber types become the primary product being commercialized (Environmental Investigation Agency, 2002). Nevertheless, often underestimated, "the value and criminogenic potential of tropical timber" can be worth "thousands of euros" (Solinge, 2014, p.503).

Now consider the wildlife trade. Its dynamics are heavily driven by demand, with products ranging from high-value goods to lesser-known species, plants, seeds, and related parts. In this transnational environmental crime, the relationship between high profit and low risk of being caught by authorities is often what makes its profits attractive on their own or even for the finance of other operations (Environmental Investigation Agency, 2002). While there is a multiplicity of products, a broad consumer base, high-value products, and several transportation methods involved in this illicit market, it is important to consider that just like in the case of illicit logging and timber trafficking, its related illicit flows usually begin in developing countries and reach their end in developed countries, with parts of animal species or live animals being transported across the world in terrible conditions to satisfy the demand for this product (Brack & Hayman, 2002).

The case of illegal, unregulated, and unreported (IUU) fishing also presents important dynamics. While IUU fishing can take place anywhere in the oceans and is conducted through different types of poaching operations, its dynamics usually involve source zones closely located to large river systems, huge coastal areas, exclusive economic zones, or conservation areas in the Global South – with rare exceptions in the Global North. The illicit trade in ozone-depleting substances, on the other hand, is highly driven by price differentials and economic imperatives despite consumer preference. This is because of attempts to minimize costs with the use of cheaper chemicals. At last, there is the illegal trade in hazardous wastes - this is, chemical products or so-called e-waste. This is a supply-driven offense "mobilized by a desire on the part of waste producers to avoid high disposal costs and by the profit motive on the part of those who are able to sell on the waste for illegal disposal" (Elliot & Schaedla, 2016, p.6). In addition, this is the only environmental crime that presents a contrasting dynamic to the general rule regarding the North-South division. In this case, source zones are primarily located in the Global North, while consumer zones are in the Global South (Brack & Hayman, 2002; Environmental Investigation Agency, 2002; United Nations Office on Drugs and Crime & World Wildlife Fund, 2022).

Based on these considerations, it becomes clear that the dynamics of transnational environmental crime have, indeed, similar attributes to other more conventional cross-border illicit markets. First, their dynamics are largely influenced by the "globalization of crime" and the advantages brought by this phenomenon. Second, they are also "enterprise crimes", whereby environmental crimes are meeting a demand for the provision of an illicit product or service. Third, as in other types of illicit markets, the dynamics of global illicit environment flows point to a specific direction: consumer zones for transnational environmental crimes are largely located in the Global North, whereas source zones are mostly present in the Global South and transit zones take on alternative shapes depending on the case (Wright, 2011, p.336).

Meanwhile, it has also become clear that the roots of transnational environmental crimes are also strongly tied to what Solinge (2014, p.501) conceptualized as a "crime curse". In his own words:

> The presence of natural resources, in particular in forested tropical regions with low population density and weak governance, not only makes it likely that a resource-rich country or area will perform relatively poorly in economic terms but also makes that country vulnerable to criminal activities such as illegal natural resource exploitation, corruption, collusion, and, in some cases, (systematic)

violence. In this way, the resource curse is a crime curse, too: the presence of many natural resources correlates with crime and violence.

In this sense, a similar characteristic of the geographical and geopolitical dynamics of most transnational environmental crimes is the fact that some of its manifestation and operationalization are deeply connected to particular regions of the world (White, 2018).

This is where we ought to turn our focus to the classic division among the source, transit, and consumer stages of supply chains. The Global Initiative Against Transnational Organized Crime (2014) published a report on the global response to transnational environmental crime with very helpful insights into this matter, demonstrating the different processes, types of crimes, and criminal actors involved in every step of the "criminal chain" of environmental crimes.

At their beginning, in source zones largely located in the Global South, poaching and live capture, felling of trees, illegal fishing, extraction of minerals/resources, and the collection and disposal of waste are all examples of "criminal acts" committed by a wide range of "criminal actors" in specific locations where environmental commodities are extracted, harvested, or hunted. This includes poachers, loggers, fishermen, producers, collectors, disposers, and local corrupt enforcement. In source zones, besides the presence of corrupt state agents such as government officials, enforcement officers, or even compromised corporations facilitating various types of transnational environmental crimes by accepting bribes or turning a blind eye to illicit activities, local communities also end up engaging in illicit activities due to lack of alternative revenues, low incomes, and widespread poverty, while also serving as frequent "workers" of organized criminals (Global Initiative Against Transnational Organized Crime, 2014, p.13). From a regional perspective, the major source countries for transnational environmental crimes include, for example, the Amazon Forest in South America; the Democratic Republic of Congo, the Central African Republic, South Africa, Kenya, and Tanzania in Africa; and Indonesia, Thailand, Philippines, and Malaysia in Southeast Asia.

During transit zones in many countries of the Global South or, in some cases, in countries of the Global North, "criminal acts", such as carving, tanning, document fraud, bribery, concealment, smuggling, and money laundering, can be conducted by other "criminal actors". This, for instance, involves manufacturers, designers, smugglers, brokers, shipping companies, fraudsters, financiers, and corrupt border agents. The countries operating as transit zones serve as intermediary points between source and consumer zones, somehow enabling the transportation, transformation, or smuggling of illicit environmental products. In these zones, while corruption may also play a significant role in allowing illicit goods to pass through borders and checkpoints, many criminal organizations hide their products in legal cargo or concealed them using creative methods to evade customs and law enforcement agencies in very particular locations, such as seaports, airports, highways, and so forth (Global Initiative Against Transnational Organized Crime, 2014, p.13). From a regional perspective, some of the major transit countries for transnational environmental crimes include Guatemala, Honduras, El Salvador, Panama, and the Dominican Republic in Central America and the Caribbean; Turkey, Greece, Italy, and Spain in Europe; the United Arab Emirates and Oman in the Middle East; India, Bangladesh, and Sri Lanka in South Asia; and China and South Korea in East Asia.

At last, when they reach consumer zones largely located in the Global North, the "criminal acts" becomes directly involved in the consumption, purchase, or use of a specific illicit environmental product, while the "criminal actors" are usually market controllers, vendors, traditional medicine practitioners, wildlife restaurant owners, pushers, consumers, and entertainers. In consumer zones, demand for illegal environmental products is finally sold for customers as exotic pets, luxury goods, food, and as the bases for traditional medicine (Global Initiative Against Transnational Organized Crime, 2014, p.13). From a regional perspective, some of the major consumer countries for transnational environmental crimes include China and Vietnam in Asia; the United States in North America; and the United Kingdom, France, and Germany in Western Europe.

Once illicit environmental supply chains are properly established within this complex scenario, distinguished patterns of networked dynamics emerge. In the Asia-Pacific region, Southeast Asia experienced extensive deforestation due to illegal logging driven by the global demand for timber and palm oil, particularly in Indonesia, Myanmar, and Malaysia. As for wildlife trafficking, the Asia-Pacific region serves as an important mixture of source, transit, and destination zone for wildlife trafficking. On one side, internal demand for traditional medicine, exotic pets, and luxury goods in countries like China and Vietnam fuels the illegal trade of endangered species such as pangolins, tigers, and rhinos. On the other side, countries like China, Vietnam, Thailand, Malaysia, and India also serve as important source countries for wildlife trafficking. In the case of waste disposal and trafficking, China, India, Bangladesh, and Vietnam are all relevant source countries.

Meanwhile, the large majority of the African continent is a major source hub for wildlife trafficking, with criminal organizations targeting iconic species such as elephants, rhinos, and pangolins. In this particular illicit market, major source countries are South Africa, Tanzania, Kenya, and Nigeria. In the case of illicit logging, extensive rainforests and protected areas have turned specific states into major source countries for wildlife trafficking, such as the Democratic Republic of Congo, Gabon, and Cameroon. Illegal mining, on the other hand, is strongly spread in Africa, often generating deforestation, water pollution, and health hazards. Major source countries are the Democratic Republic of Congo, Ghana, and Sierra Leone. The United Nations Environment Programme (UNEP) estimates that up to 40% of the gold produced in Africa comes from illegal mining. As for waste disposal and trafficking, it is important to highlight that West Africa has become a hotspot for the illegal dumping of electronic waste from developed countries, thereby leading to serious environmental and health consequences. Major source countries for waste disposal and trafficking are Nigeria, Ghana, and Ivory Coast.

Europe operates both as a destination and transit point for wildlife trafficking due to its high demand for exotic pets, hunting items, and luxury goods. This includes, for instance, reptiles, birds, and marine species. Not by chance, the European Union is the world's largest importer of reptiles, many of which are illegally traded. Nevertheless, it is also important to highlight that Balkan countries, Spain, and Italy are relevant source countries for this specific illicit activity. Similarly, Europe is a significant importer of illegally sourced timber, primarily from Russia, Southeast Asia, and the Amazon Forest. However, specific countries such as Russia, Romania, and Ukraine also serve as important source countries for illicit logging and timber trafficking. In the case of IUU fishing, Mediterranean countries, Spain, and Italy are considered major source nations. As for waste disposal and trafficking, criminal networks enjoy the substantial amount of electronic waste being generated by European nations to illegally export them to developing countries for disposal. Major source countries are Italy, the United Kingdom, and Germany.

Concurrently, North America is also a significant destination and transit point for wildlife trafficking, with the United States being one of the largest markets for its products – losing only to the European Union. While the United States is a major consumer country for illegally logged timber from other regions, such as from Southeast Asia and South America, the exportation of illicit timber from North America occurs to a lesser degree compared to its importation, with Canada standing out as the exception. In a similar vein to the European Union, North America produces a considerable amount of electronic waste that is illegally exported to developing countries.

At last, in Latin America and the Caribbean, illegal logging and deforestation are largely associated with the Amazon Forest due to the high demand for timber, agricultural land, and cattle ranching. Major source countries are Brazil, Peru, and Colombia. Illicit mining, particularly in the Amazon Basin, is directly associated with increasing deforestation, water pollution, and mercury contamination. Major source countries are Colombia, Peru, Venezuela, Brazil, and Suriname, The Global Initiative Against Transnational Organized Crime (2016) estimates, for example, that over \$2.4 billion is generated in annual revenue by those involved in illicit mining in Latin America. In the case of wildlife trafficking, the region also acts as a substantial source of wildlife trafficking, with species such as birds, reptiles, and amphibians also targeted for traditional medicine, exotic pets, and luxury goods. Major source countries are Brazil, Colombia, Mexico, and Peru.

Therefore, one can conclude that the most accurate picture concerning the dynamics of environmental crimes is one that considers a context where different types of criminal organizations operate jointly with other (non-)state actors, including traditional organized crime groups and criminal networks, with each one of them conducting a specific function inside the illicit supply chain. From a smaller and micro association to a bigger and macro relationship, the dynamics of the many types of illicit markets involve criminal organizations and other (non-)state actors specialized in distinct functions, from harvesting products to poaching, transporting non-human life, or disposing of various types of waste.

In summary, the networked dynamics of these environmental offenses indicate a simple scenario: in a context of transnational illicit environmental flows, the Global North is keeping the timber, animals, plants, fishes, and minerals from the Global South while the biodiversity and natural resources of the second is being "exchanged" for trash from the former. Accordingly, the next subsection demonstrates how this scenario produces very dangerous consequences to the security of different states and (non-)human communities from various regions of the world.

#### 3.3 Consequences

When predictive statements are made about the future of our world, especially concerning climate change, some common scenarios emerge. Coastal zones and entire countries are being flooded by rising seas. Increasing populated and violent urban centers. Most of the world's biodiversity is destroyed. Several animal species were extinguished. Extensive deserts with cut or burned-dorm forests. And, last, expanding conflicts for resources (e.g., water and food stocks). Whatever future lies ahead, there is one thing we can be sure of, transnational environmental crimes will persist and evolve, with criminal entrepreneurs enjoying opportunities to gain substantial profits by plundering and destroying the Earth's flora and fauna. Concurrently, as quantitative models have been indicating in the past years about the "relationship of mutual causality" between climate change and crime (i.e., the first promotes conditions for more crime and the second decreases the capacity to resist climate change), some important aspects of our future will probably be defined by the extend in which the convergence between organized crime and environmental degradation will increase in the next decades (United Nations Office on Drugs and Crime & World Wildlife Fund, 2022, p.27).

This part of the chapter focuses on the consequences generated by the most known direct and indirect consequences of transnational environmental crimes on the security of states and (non-)human communities. Without any exaggeration, transnational environmental crimes are quite a unique phenomenon compared to other forms of criminality. Of course, this is not because other types of crimes or criminal entities are less important than environmental crimes. As we just discussed, not only do illicit environmental supply chains depend extensively on different types of "converging crimes" or "associated crimes" to keep operations running from source to consumer stages, but they are also responsible for considerable harm and negative effects in states and (non-)human societies on their own. As Wright (2011, p.339) argues:

The nature of the impacts of TEC is intrinsically different that of traditional TOCs. This is because the effects of TEC are not only damaging, but are often also definitive and long lasting, even permanent. Whereas there is a potentially unlimited supply of narcotics, there is a finite stock of an endangered species. Thus, once an animal is poached, it is gone forever. Likewise, once pristine rainforest is illegally logged it is irreplaceable and when ozone-depleting substances are released they cannot be stopped from damaging the atmosphere. Whereas trafficked persons can be offered support and counselling and drug users can enter rehabilitation, rectifying the effects of environmental crime can take a very long time, if they can be rectified at all.

Environmental crimes affecting coastal and marine ecosystems, forestrelated crimes, and infractions associated with waste disposal and trafficking are threatening our security, from the local to the global level. From the impacts on the survival of relevant marine ecosystems and organisms (e.g., the phytoplankton) to the decreasing of the ocean's capacity for carbon sequestration, the United Nations Office on Drugs and Crime & World Wildlife Fund (2022) identified that different types of marine pollution increase eutrophication processes and decrease oxygen levels in the oceans. The burning of fossil fuels, on the other hand, contributes to global emissions and the discard of tons of bilge water, waste residues, or bunker fuel pollutes the oceans and disrupts the reproduction process of marine life and photosynthesis. Furthermore, the act of dragging heavy nets along the seafloor to catch large amounts of fish destroys the seabed along with its biodiversity, while illegal, unreported, and unregulated fishing decreases fish stocks and increases unsustainable levels of fish consumption globally. Not to mention how it threatens legitimate business and the safety of local fishermen. As Brack & Hayman (2002, p.9) stated:

threats posed to species survival (including other species caught alongside the fish, such as sea turtles, or albatrosses), but also the economic costs of exhaustion of fish stocks.

Estimates indicate that, in a group of 54 countries, the total value of economic losses associated with IUU fishing is between \$10-23.5 billion annually, representing between 11-26 million tons of fish (Agnew et al., 2009). Recent estimates identified West Africa as a "global epicenter" for IUU fishing, where 40% of the global IUU fishing took place with a loss of up to USS \$9.4 billion in illicit financial flows (Financial Transparency Coalition, 2022). In Europe, over 30-40% of the total catch in the Mediterranean was considered to be related to IUU fishing (World Wildlife Fund, 2015). Another recent estimate indicates that, in nine Latin American and Caribbean countries, between 8-15% of the annual catch is lost to IUU fishing, accounting for as much as 815,000 tons of seafood harvested irregularly or illegally each year (American University Center for Latin American & Latino Studies & Insight Crime, 2022).

Since "the destruction and degradation of the world's forests continue at an alarming rate", forest degradation is leading tropical forests to lose their capacity for carbon sequestration, and the rise in temperatures reach "the tipping point and begin an uncontrolled dieback process, wherein tree health progressively deteriorates" (United Nations Office on Drugs and Crime & World Wildlife Fund, 2022, p.13). Continental-sized forests, such as the Great Northern Forest along North America to Europe, the Xishuangbanna Forest in China, the Taman Negara Park in Malaysia, the Congo Basin in Central Africa, and the Amazon Forest in South America, are all at constant risk of disappearing in the next decades. This is especially true since, "in some tropical forest areas, illegal logging accounts for 50-90% of all forestry-related activities" (United Nations Office on Drugs and Crime & World Wildlife Fund, 2022, p.13). Not by chance, according to Global Witness (2013), a large part of logging activities in the African continent is presumed to be illegal. Similarly, between 2000 and 2012, tropical rainforest ecozones accounted for 32% of global forest cover loss, with nearly half of which occurred in South America (Hansen et al., 2013).

Wildlife trafficking profits from the targeting of (frequently rare or exotic) plants, animal species, and seeds removes (or simply destroys) relevant parts of ecosystems, spreads diseases, and introduces invasive species to new habitats. It is, indeed, a dangerous environmental offense with various nefarious
consequences for environmental and biodiversity conservation. Nevertheless, criminal organizations of the most distinct kinds profit from the destruction of entire habitats regardless of their environmental consequences.

Its impacts become even clearer when one considers some statistical estimates. Thousands of elephants are killed every year (i.e., one killed every 15 minutes) in Africa (Ingham, Feb. 2014). More than 3,600 live cheetahs were illegally traded worldwide between 2009 and 2019 (Africanews, Nov. 2021). Meanwhile, at least 23.5 tons of pangolins (i.e., the world's most trafficked mammal) and their parts were trafficked in 2021 alone, especially to major consumer countries such as China and Vietnam, while other estimates indicate that over 1,000,000 pangolins have been poached in the last decade (TRAFFIC, 2022). Other trends in Latin America and the Caribbean, for example, also deserve special attention. This is because the region is home to more than 40% of the world's biodiversity but animal population sizes have dropped by 94% in the last 50 years [1950-2020] due to human activity (World Wildlife Fund, 2020), with over 65 unique species being trafficked through the air transport sector and wildlife trafficking operations extending from the region to over 53 countries globally only during the period between 2010 and 2020 (TRAFFIC, 2021).

The same reality is present in the case of illicit mining and trafficking of precious metals and stones. Considering that production in African countries (e.g., Botswana, Angola, South Africa, Sierra Leone, and the Democratic Republic of Congo) accounts for an estimated 65% of the world's diamonds, armed conflicts have been extensively funded through illicit trade in so-called "conflict diamonds" or "blood diamonds" in most of the continent (Hummel, 2007). Similarly, in Latin America, a considerable amount of the gold mined in Peru (i.e., 28%), Bolivia (i.e., 30%), Ecuador (i.e., 77%), Colombia (i.e., 80%), and Venezuela (i.e., 80-90%) is estimated to be illegal, where over thousand kilometers of forest have already been destroyed due to illicit mining (Global Initiative Against Transnational Organized Crime, 2016; International Crisis Group, 2019).

Thirdly, the United Nations Office on Drugs and Crime & World Wildlife Fund (2022, p.15) characterize the waste sector as responsible, on a global level, for 10% of greenhouse gas emissions and that one-third of the waste generated is mismanaged, with open dumping accounting for 31% globally and 93% in some developing countries. It is usually responsible for serious environmental and health impacts in destination countries and its consequences can be summarized in the following manner:

Waste exported illegally often ends up in illegal landfills, illegal storage sites, and other public ecosystems. Alternatively, it is burned in the open. (...) Wastes imported illegally often do not follow safe waste management practices and often end up in illegal landfills or are burned openly, releasing black carbon and Persistent Organic Pollutants which are dangerous for public health (United Nations Office on Drugs and Crime & World Wildlife Fund, 2022, p.15).

In Africa, waste disposal and trafficking are particularly present in many parts of the continent. This reality becomes clear when one considers that the average municipal solid waste collection rate is only 55% in the continent, more than 90% of waste generated in Africa is disposed of at uncontrolled dumpsites and landfills associated with open burning, and 19 of the world's 50 biggest dumpsites are located in Sub-Saharan Africa (United Nations Environment Programme, 2018).

On the other hand, besides the eradication of maritime and land biodiversity, the illegal trade in ozone-depleting substances is a highly dangerous illicit activity that trades products dependent on or made of chemicals that destroy ozone molecules. After all, "all life on Earth is dependent upon the ozone layer, a thin layer of gas in the upper atmosphere, which shields the Earth's surface from harmful solar ultraviolet radiation" (Environmental Investigation Agency, 2002, p.14).

Statistical estimates demonstrate a dangerous reality regarding this issue. In 1995, it was estimated that between 16,000-38,000 tons of illegal CFCs were traded worldwide, especially those sourced from countries located in Asia and the Pacific region (United Nations Environment Programme, 2007). In the European Union, the illegal trade of CFCs is estimated to be around 6,000 to 20,000 tons of CFCs annually (Environmental Investigation Agency, 2003). In the United States, between 1995 and 2001, there were more than 650 seizures of illegal ozone-depleting substances between 1995 and 2001 in the U.S. (United Nations Environment Programme, 201). Between 2012 and 2016, an average of 413,000 tons of polyether and 128,000 tons of polyurethanes were exported annually from China to the United States and Turkey, as well as to other

countries in Asia and the Middle East (Environment Investigation Agency, 2018b).

Indeed, the direct and indirect consequences of transnational environmental crimes are damaging, frequently definitive, long-lasting, or permanent to ecosystems or habitats. Their effects undoubtedly produce deadly security threats to states, as well as (non-) human communities. If not by its main characteristics or operational features, the intense destruction generated by transnational environmental crime (unfortunately) creates the need for us to redirect our attention to the strategies of those criminal non-state actors involved in them. After all, besides understanding the root causes for the emergence of transnational organized crime groups, if one wishes to tackle the challenge posed by criminal organizations and illicit markets accordingly, it is necessary to investigate the day-to-day geopolitical practices and routines of criminal nonstate actors, as well as their motivations, strategies, adaptability, and capacity to exploit vulnerabilities in the international system. In the next chapter, we provide coherent explanations of the case of the Amazon Forest and demonstrate how this case is a strong indicator of all of the aforementioned theoretical and empirical discussions promoted throughout this study.

## 4 The Amazon Forest in Illicit Environmental Supply Chains

The Amazon Forest usually occupies a very particular space in academic and policy debates. Discussions concerning the sovereignty and the territorial control of bordering nations, sustainable development, climate change mitigation, public and private liability in environmental issues, "internationalization" of its exploration and preservation, and national, international, and regional cooperation initiatives among states and non-state actors are all issues frequently echoing common notions about the Amazon Forest.

The case of the Amazon Forest provides insightful considerations as to how cross-border illicit markets, transnational criminal organizations, and territories become intertwined in the international system. At the same time, this chapter demonstrates how this case is a strong indicator of all of the aforementioned theoretical and empirical discussions promoted throughout this study. Accordingly, based on this study's foundations and approach toward the crime-geopolitics nexus (see Chapter 1 and Chapter 2), this final chapter explores the geopolitical role of the Amazon Forest in illicit environmental supply chains through an extensive analysis of the physical and non-physical attributes of the strategic hubs for transnational environmental crimes located in the rainforest and the networked dynamics of illicit environmental supply chains.

Initially, this study presents four arguments to explain why the Amazon Forest is a case worth analyzing. They are the limitations of mainstream International Relations theories in South America, Brazil, and the Amazon Forest; the context of insecurity in these locations; the geographical, territorial, and ecological distinctiveness of the Amazon Forest; and the effects of the Bolsonaro administration's (anti-)environmental policy [2019-2022]. Afterward, based on evidence-based studies produced by state and non-state institutions, which encompass hard data on official operations and seizures conducted by law enforcement and military agencies, as well as investigations carried out by journalists, we identify some major strategic hubs for transnational environmental crimes in each jurisdiction that shares borders or part of its territories with the Amazon Forest – Brazil, Bolivia, Peru, Ecuador, Colombia,

Venezuela, Suriname, Guyana, and French Guiana. Then, after applying the interdependent and multi-level set of indicators proposed in this study, it provides relevant assertions about the strategic planning of those involved in transnational environmental crimes in the Amazon Forest.

Furthermore, it analyzes how the networked dynamics of illicit environmental supply chains connect several territories, entities, and activities throughout the source, transit, and consumer stages in the international system. Finally, this chapter provides arguments that deliver a comprehensive and coherent explanation of the geopolitical role of the Amazon Forest in illicit environmental supply chains, while, at the same time, verifying this study's initial hypothesis. At the end of this chapter, this study hopes to demonstrate how it is important to investigate how those engaged in cross-border illicit markets perceive the strategic relevance of the Amazon Forest in geopolitical terms, especially concerning the broader international system and, of course, the illicit global economy itself.

#### 4.1 Why the Amazon Forest?

Each one of the four arguments presented in this subsection provides a different (but deeply interrelated) reason for why the Amazon Forest is a case worth analyzing within the discussions promoted throughout this study. Firstly, while mainstream International Relations theories provide valuable frameworks to explain only certain aspects of South American international relations, they often fall short of capturing some of its major complexities and indicate the necessity for a contextually embedded theoretical approach that could offer a more accurate understanding of the region's international relations. Secondly, in contrast with mainstream International Relations literature, the context of insecurity in South America, Brazil, and the Amazon Forest involves a complex array of non-military factors and violent (non-)state actors that go beyond traditional interstate conflicts, which makes them particularly relevant subjects for analysis. Thirdly, the geographical, territorial, and ecological distinctiveness of the Amazon Forest ought to be considered here due to its role in explaining patterns of organized criminal activity. At last, the timing of this study makes it relevant to acknowledge the role of the Bolsonaro administration's (anti)environmental policy in creating an opportunistic environment for the coordination of transnational environmental crimes and probably increasing the strategic relevance of the Amazon Forest for those transnational criminal organizations involved in environmental offenses both regionally and globally. After all, while transnational environmental crimes are a historical challenge for Brazilian authorities to tackle, this administration became internationally known for inadvertently incentivizing and facilitating environmental offenses by dismantling environmental agencies and regulations, which, in turn, may lead to the increase of the Amazon Forest's strategic relevance for transnational criminal organizations operating in South America or beyond.

## 4.1.1 The Limitations of Mainstream International Relations Theories in South America, Brazil, and the Amazon Forest

Mainstream International Relations theories, such as (neo)realism, liberalism, and constructivism have been utilized to understand the context of interstate interactions in South America, Brazil, and the Amazon Forest in different ways. Firstly, there should be no doubt about how these theories can provide comprehensive perspectives to analyze interstate interactions in these locations. In South America, for example, the use of (neo)realist perspectives has been important in signaling how power dynamics and competition influences the survival and strategic interests of South American states. Liberalism, on the other hand, has been a key perspective in investigating the logic operating in the building of regional institutions and cooperation regionally, while constructivism contributes to highlighting how specific norms, ideas, and identities shaped both state and non-state behavior in the region.

Indeed, from analysis describing the rise and decline of regional powers to examinations of the regional dynamics involving the development of the socalled "Southern Common Market" (MERCOSUR) and "Union of South American Nations" (UNASUR), it would not be an exaggeration to assume that mainstream International Relations theories can be useful in understanding some of the aspects associated with the historical interactions of South American nations. Nonetheless, it would not be an exaggeration to assume that they provide limited insights into most of its complexities. According to the literature, this is due to the Eurocentric origins of most of the mainstream perspectives in International Relations, which may be limited in their applicability toward non-Western contexts like South America and inadequate to account for the unique historical, cultural, social, and political dimensions of the region. In addition, as we have discussed in the previous chapter, its state-centric focus can lead to an overemphasis on the role of states in shaping international relations in the region, while some of the most significant non-state actors are excluded from their analysis, including the role of indigenous communities, environmental organizations, social movements, and, not by chance, transnational organized crime. Concurrently, mainstream International Relations theories do not adequately address some of the most pressing issues influencing the dynamics of insecurity regionally (Cervo, 2009; Hirst, 2012; Bertucci & Falleti, 2014; Hochstetler, 2010; Viola & Franchini, 2016; Tickner, 2017; Rigobón, 2013; Tussie, 2009).

In a similar vein, it is also important to highlight that these theories reveal some inadequacies to analyze the geopolitical rationale of criminal nonstate actors. Firstly, their state-centric focus overlooks the existence or importance of transnational organized crime in providing feedback to several sources of insecurity regionally. This is particularly relevant since there are many types of criminal non-state actors operating across national borders, challenging conventional notions of state sovereignty and contributing to regional insecurity.

Secondly, by often prioritizing the macro-level of analysis, mainstream International Relations theories tend to ignore many of the key aspects that contribute to understanding the manifestation and resilience of criminal nonstate actors locally, such as weak governance, corruption, and multiple kinds of inequalities. In other words, by overlooking these aspects, mainstream International Relations theories struggle to explain the complex relationship between state and criminal non-state actors, as well as fail to acknowledge the role of internal phenomena in shaping organized crime and illicit markets. Concurrently, its incapability to appreciate the role of the complex web of relationships and cross-border interactions among state and criminal non-state actors in the international system also indicates how inadequate they are for the study of the geopolitical rationale of criminal non-state actors in South America, Brazil, and the Amazon Forest. After all, they are not well-equipped to acknowledge many of the transnational phenomena taking place within and across their states' boundaries.

Thirdly, by emphasizing the role of military and economic capabilities in power dynamics, mainstream International Relations theories also do not account for many of the alternative forms of power used by criminal non-state actors in the South American context. Especially considering how criminal nonstate actors are often non-unitary and non-homogeneous actors frequently driven by other types of motivations other than power or security, Fourthly, they are also incapable of accounting for the motivations of criminal non-state actors in challenging, undermining, and evading shared norms among South American nations to achieve material goals – the major drivers of organized crime and illicit markets. Not to mention their inability to explain why would individuals supposedly and inherently interested in mitigating conflict and immoral behavior choose to commit crimes, join a criminal organization, endanger international security, and enjoy the loopholes of the international system in return for private gains in these locations.

Fifthly, they are inadequate to explain why certain individuals in the region became interested in using the liberal and capitalist systems to profit from engaging in illicit markets. In this sense, considering how transnational criminal organizations operate and collaborate in different countries to facilitate the flow of illicit goods, services, and finance in the international system, it is safe to consider that more nuanced and well-equipped approaches are needed to understand the South American, Brazilian, and Amazonian context than those provided by mainstream International Relations theories.

# 4.1.2 The Context of Insecurity in South America, Brazil, and the Amazon Forest

Notwithstanding this study's critiques of mainstream International Relations theories, there are some important considerations to be underscored about the context of insecurity in South America, Brazil, and the Amazon Forest. After all, in contrast to the conventional security threats addressed by these theories, it is, in fact, different types of organized crime groups operating as "criminal enterprises" or "illicit multinationals" that are deeply responsible for providing feedback to multiple sources of insecurity in these locations. Concurrently, considering how organized crime and illicit markets in South America are determined by its states and the broader international system, this insecurity cannot be detached from the asymmetric architecture of the international system, whereby key operations related to transnational criminal organizations and cross-border illicit markets in these locations are strongly determined by the disparities among the Global North and Global South. This is the background in which this study believes that we should explore the context of insecurity in South America, Brazil, and the Amazon Forest. Now it is time to delve deeper into the roots of this argument.

Although scholars have described South America as "one of the most peaceful regions in the world" or simply as a "zone of peace" (Kacowicz, 1998; Mares & Kacowicz, 2016), this region is one of the most dangerous of the world, especially in terms of homicide rates (Ferreira, 2022; Muggah & Aguirre, 2018). This term, "zone of peace", refers to the context of the "long peace" of the Cold War period in Europe (1945-1989) and the separate peace among the democracies that developed progressively throughout the last 200 years (Mares & Kacowicz, 2016, p.23). A "zone of peace" is a space characterized by:

(...) a discrete geographical region of the world in which a group of states have maintained peaceful relations among themselves for a period of at least thirty years—a generation span—though civil wars, domestic unrest, and violence might still occur within their borders, as well as international conflicts and crises between them. (...) zones of peace in the international system develop when states are conservative in their territorial claims and when they are usually satisfied with the territorial status quo of their international borders and of the region in general (Kacowicz, 1998, p.9).

If one considers the fact that this region did not experience the same amount of interstate armed conflicts throughout its history compared to other regions of the world, then, indeed, it makes sense to interpret South America as a "zone of peace". However, this interpretation loses its credibility when we consider that "the absence of conflicts between states does not ensure a peaceful social environment, nor a zone of peace" (Ferreira, 2022, p.5). Thus, insecurity in this region ought to be studied and understood in terms of those issues most related to its regional history. For example, "non-conventional violence", "criminal violence", "state violence", "poverty levels", "chaotic urbanization", "homicide rates", "violent colonization", "social inequality", "social exclusion", "lethal police actions", and "transnational crimes" (Ferreira, 2022, p.17-23).

Indeed, apart from the insecurity promoted by state actors in South America, its proper manifestation can only be understood if one considers how intrastate wars and transnational criminality are the major sources of violence affecting its nations (Herz, 2010, p.603). Not by chance, Herz (2010) argues that concepts in security analysis in South America have undergone a process of broadening throughout the decades, moving beyond the traditional focus on state-centric military threats to encompassing issues such as human security, environmental security, economic security, and regional cooperation. Indeed, the notion that "Latin America would be progressively one of the most peaceful regions of the world in international relations, and not only South America" (Mares & Kacowicz, 2013, p.23), therefore, is extremely inadequate. This inadequacy becomes even clearer when one considers how the state is an active player in increasing violence levels regionally and how the "line" between states and organized crime groups in the region is often blurred.

For example, Brienen (2019) demonstrates that a considerable amount of officials working in the Bolivian police and criminal justice systems are involved in drug trafficking operations among Colombian and Brazilian criminals, whereby corrupt public agents keep a peaceful relationship with them as long as they profit both in the legal and illegal market involving coca leaves. Polga-Hecimovich (2019), on the other hand, describes how the political, economic, and institutional chaos in Venezuela created the necessary space for criminals to infiltrate justice and security institutions, allowing the state to maintain social order in national prisons and violent neighborhoods, as well as target those opposing the government's ambitions. Isacson (2019) demonstrates how paramilitary and drug trafficking groups in Colombia assisted corrupt politicians in past elections, frequently by eliminating opposing politicians, collecting votes in their favor, or establishing new "agreements" with Colombian authorities – as in the case of new criminal organizations that emerged after the FARC was officially demobilized in 2016. Cutrona (2019) states that, although "partnerships" among public agents and criminals are often rare in Argentina, recent investigations and trials promoted over the last decade indicate that criminal networks in the country are creating (or strengthening) their relationships with high-ranking officials in the police and criminal justice systems.

If we redirect our focus to insecurity in Brazil, a similar scenario also emerges. While many portray Brazil as a "pacific" and "cheerful" country due to its low participation in international conflicts or cultural events, Brazil's true history is one of intense violence associated with internal conflicts and inequality, prejudice, and minority recognition; its biggest security challenge today is the social and chronic violence throughout its territory – especially the one involving the Brazilian state and organized crime (Ferreira, 2020). Not by chance, Brazil has been statistically characterized as "the world's most homicidal country in absolute terms" (Waiselfisz, 2017, p.1).

According to Wolff (2019), whether inside the Brazilian prison system or in urban centers, the evolution of criminal organizations in Brazil had the help of state agents and institutions that directly or indirectly benefited from their presence.<sup>73</sup> On one side, local policemen demand "taxes" from drug trafficking organizations in exchange for allowing them to freely control marginalized communities in the country's periphery while elected politicians frequently redirect public money to mafia-type organizations (i.e., the so-called "*milícias*") in exchange of electoral support. On the other side, the government reduces prison expenses, informally delivering its management to criminals and taking responsibility for homicide reductions when these were the result of organized crime imposing its social order and territorial control. Undoubtedly, as in other South American countries, insecurity in Brazil today is largely associated with how corruption, historical inequality, and poverty contribute to the expansion of transnational organized crime. As Ferreira (2019, p.52) argued:

> (...) it is clear that crime and structural violence in Brazil are mutually influencing phenomena", helping transnational organized crime "to reproduce conditions of social marginalization, discrimination, devaluation of human life, inequality and poverty, these same structural conditions of violence lead hitherto unaffected youths to join criminal organizations and the users of drugs to commit illicit acts. Thus, a spiral of crime and violence is reproduced, undermining the possibility of peace in Brazil.

<sup>&</sup>lt;sup>73</sup> For a detailed analysis concerning the emergence of the major criminal organizations in Brazil, see, for example, Amorim (2018), Manso & Dias (2018), Marinho et al. (2019), and Penglase (2008).

Insecurity in the Amazon Forest, on the other hand, is more associated with a different scenario despite sharing some similarities with the aforementioned issues. Although major transnational criminal organizations involved in the most diverse illicit markets (e.g., from more conventional criminal activities such as drug trafficking to transnational environmental crimes) from all over South America are deeply responsible for producing insecurity in the Amazon Forest, there are other participants in this scenario worth mentioning. They are legitimate enterprises, corrupt state agents, brokers, large land-owners or land-grabbers (i.e., "grileiros"), poachers (i.e., "caçadores"), loggers (i.e., "madereiros"), fishermen and so-called "river pirates", miners (i.e., "mineradores"), prospectors (i.e., "garimpeiros"), "rainforest militias", "timber mafias", small gangs, patrones, and even guerrillas. They are all involved in the exploitation of the rainforest's natural resources, operating across the blurred line between "legal" and illegal", different illicit markets, and often willing to threaten or kill those standing in their way. Indeed, according to Abdenur et al. (2020, p.6):

In many areas of the Amazon, criminal networks -- groups of individuals who organize themselves and specialize in one or more of these activities -- finance, organize, and execute actions that lead to widespread socio-environmental damage. They are frequently financed with resources generated through legal businesses, and their actions are facilitated by corrupt government officials, including law enforcement actors, notary clerks, and politicians. The proceedings from these activities are typically laundered, whether locally or abroad, through a variety of methods that range from purchase of farms to mixing of illegally sourced gold with legally extracted gold that is exported as far as India and UAE. These groups also adopt the use of new technologies, from social networks and crypto currencies to drones and satellite technologies, so as to facilitate their activities and evade law enforcement.

Just like in South America and Brazil, the Amazon Forest's criminal landscape is essentially fragmented, connecting both legal and illegal actors, as well as different traditional organized crime groups and criminal networks in joint operations, to guarantee that all the logistical imperatives of illicit supply chains will be satisfied. As the Fórum Brasileiro de Segurança Pública (2022, p.46) stated, "the major criminal groups act as the managers of the Amazon, managing people's lives, the economy, and the territories controlled by them". Nevertheless, sometimes those involved in transnational environmental crimes or other criminal activities in the Amazon Forest are not even physically present in the Amazonian territory. Some of them live in different locations inside Brazilian territory or in foreign countries, operating closely with local suppliers and relevant transporters (Abdenur et al. 2020, p.12).

In this sense, even if its ramifications appear to be largely confined to those countries that are part of the Amazonian territory, they are frequently all interrelated parts of a criminal landscape with regional and transnational ramifications that connect the local to the global level – and vice-versa. After all:

"The dynamics of organized crime in the Amazon goes beyond the territorial borders of the Brazilian state, thus having a transnational character. This transnationality of crime involves networked relationships of national and international [criminal] factions that operate in South America, thus creating a complex and complete organizational structure of illicit activities" (Fórum Brasileiro de Segurança Pública, 2022, p.54).

Likewise, as explored in previous chapters, the so-called "ecosystem of environmental crime" in the Amazon is characterized by "a set of illicit or illegality-tainted economies" that, in essence, refers to "economic activities developed in forest areas, totally or partially outside the law, without proper authorization of relevant agencies or incurring 'illegal deforestation liability' in their supply chains" (Waisbich et al. 2022a, p.6). Indeed, the study of "the rationale behind the ecosystem of related environmental and non-environmental crimes allows us to understand the organized macro criminality" that threatens the rainforest (Waisbich et al. 2022a, p.9).

While the next parts of this chapter will be exclusively dedicated to analyzing the geopolitical rationale influencing the strategic planning of this variety of criminal non-state actors, it is important to highlight here that local community indigenous leaders or representatives, honest public agents, religious figures, investigative journalists, and environmental, land, and human rights defenders are among the major victims of these actors. This is because they have denounced the irregularities of their work, investigated their crimes and operations, or conducted advocacy initiatives against them (Human Rights Watch, 2019; Solinge, 2014). This is deeply associated with the fact that Brazil has been described over the last decade as "the most murderous country" of land and environmental defenders since Global Witness (2022) started reporting on their killings in 2012 (i.e., 342 lethal attacks against land and environmental defenders, indigenous or Black individuals represented one-third of these cases, and around 85% of them took place within the Amazon Forest) (Global Witness, 2022).

While insecurity is certainly a multifaceted and heterogeneous phenomenon with great (sub-)national variations, today some of the most dangerous locations in Brazil are located in the Amazon Forest. According to the data presented by the Fórum Brasileiro de Segurança Pública (2021, p.6), while homicide rates fell 19,2% in the Southeast region of the country between 1980 and 2019, there was an increase of 260,3% in its Northern region and 296,8% in its Northeast region during the same period. Based on another report developed by the Fórum Brasileiro de Segurança Pública (2022), violence rates in the so-called "*Amazônia Legal*" (i.e., Legal Amazon) exceeds the national average by 38%, with one-third of the most violent cities in the country being located in this region.<sup>74</sup>

## 4.1.3 The Geographical, Territorial, and Ecological Distinctiveness of the Amazon Forest

Whether we are thinking about the discussions about the intricate relationship between "crime" and "place", or how criminal organizations can be considered pivotal "non-state geopolitical actors" that are influenced by geographical and geopolitical factors, this subsection echoes some of our earlier attempts to emphasize the importance of examining the spatial dynamics of transnational organized crime and cross-border illicit markets in the international system. By focusing solely on some of the major physical particularities of the Amazon Forest, this subsection lays the foundations for future assessments about how non-physical features also determine the geopolitical rationale of criminal non-state actors. Nevertheless, to truly understand how patterns of transnational crime are deeply interrelated to networked dynamics that connect crimes to specific places in a multiscale way, from local communities to distant regions of the world and vice-versa, first one needs to acknowledge how the geographical,

<sup>&</sup>lt;sup>74</sup> The notion of Legal Amazon emerged in the 1950s to make reference to a geographical location with 772 Brazilian municipalities in nine federative units: Acre, Amapá, Amazonas, Mato Grosso, Pará, Rondônia, Roraima, Tocantins, and Maranhão.

territorial, and ecological distinctiveness of the Amazon Forest influence in the daily practices and movement of both state and non-state actors. Especially if one wants to properly explain the geopolitical practices of organized crime in the international context or the geopolitical role of the Amazon Forest in illicit environmental supply chains.

The Amazon Forest is located primarily in the Northern part of Brazil, "sharing borders" and even territories with eight other South American countries and one overseas territory – Brazil, Bolivia, Peru, Ecuador, Colombia, Venezuela, Suriname, Guyana, and French Guiana. According to the Brazilian Institute of Geography and Statistics (IBGE) and the Brazilian chapter of the WWF, while the size of the Legal Amazon is 5.015.067,86km<sup>2</sup> (i.e., over 58,93% of Brazil's national territory), the continental-sized rainforest extends itself to 6.700.000km<sup>2</sup> (i.e., twice the size of India and almost 28 times the size of the United Kingdom).<sup>75</sup> This is because its "natural boundaries" usually surpass Westphalian foundations established during the South American countries' state-building processes. Nevertheless, as the Brazilian chapter of WWF highlighted, if the Amazon Forest was a country, then it would be the seventh-biggest country in the world.

It is also relevant to consider some physical particularities of the other countries that are part of the Amazon Forest – especially since they represent around 20% of its territory. Interesting findings can be found in a report published by Insight Crime & Igarapé Institute (2022a). Bolivia encompasses less than 7% of the Amazon Forest, although 44% of the country is located inside the rainforest. Five departments located in the Northern region of the country are part of the Bolivian Amazon: Pando, Beni, Cochabamba, La Paz, and Santa Cruz. Just like Bolivia, Venezuela represents less than 7% of the Amazon Forest but over 51% of the country's territory is located inside the Venezuelan Amazon. Three states located in the Southern part of the country are part of the Amazon Forest: Bolívar, Delta Amacuro, and Amazonas. On the other hand, Colombia encompasses 10% of the Amazonian territory, though 35% of the country is

<sup>&</sup>lt;sup>75</sup> For more information, see: <<u>https://www.ibge.gov.br/geociencias/cartas-e-mapas/mapas-regionais/15819-amazonia-legal.html#:~:text=A%20Amaz%C3%B4nia%20Legal%20apresenta%20uma,%2C93%25%20 do%20territ%C3%B3rio%20brasileiro> and <<u>https://www.wwf.org.uk/learn/fascinating-facts/amazon></u>. Accessed: April 15. 2023.</u>

located inside the rainforest. Relevant Colombian departments are the following: Amazonas, Caquetá, Guainía, Guaviare, Putumayo, and Vaupés. Likewise, 60% of Peruvian territory is located inside the Amazon Forest, representing over 13% of the entire Amazon Forest. Manu, Tambopata, and Iquitos are all Peruvian regions located in the rainforest. To a lesser extent, Ecuador encompasses only 2% of the Amazon Forest, though 42% of the country is located in the Ecuadorian Amazon. Six eastern provinces of the country represent the Amazon region: Sucumbíos in the north, Napo, Orellana, and Pastaza in the center of the country, and Morona Santiago and Zamora Chinchipe in the south. In contrast to these countries, Guyana and Suriname face another reality. Over 98% of Guyana is located inside the Amazon Forest, while the rest of the country only represents 3% of the overall Amazonian territory. Likewise, 90% of Suriname's territory is located in the Amazon Forest, though its territory represents only 3% of the rainforest. In this country, the southern districts of Para, Brokopondo, and Sipaliwini are all part of this Amazonian region (Insight Crime & Igarapé Institute, 2022a).

In general, although the Amazon Forest has major cities, small towns, and even dispersed settlements in its territory, its enormous and often impenetrable jungle areas frequently turn territorial access to the rainforest into a difficult task for many state actors. This physical reality is a particular territorial characteristic of all countries sharing borders with the Amazon Forest also capable of influencing the actions and movement of those involved in criminal organizations. However, specific ways to access the Amazon Forest do exist. On air, the use of (e.g., tourist or military) planes and helicopters is one of the most common ways of accessing the Amazon Forest's interior. On land, while several cars, motorcycles, or trucks can be used to cross a few federal highways (i.e., the most famous is probably the Trans-Amazonian Highway) or minor state highways, the majority of its jungle areas makes it necessary to use relatively small riverboats, so-called *voadeiras*, speedboats, or even luxury cruises to transport people and products within the largest hydrographic network in the world.

Most people might not believe how relevant those territorial characteristics are to organized crime groups. For example, as Farah (2012) indicates, the frequent impenetrable jungle areas of the Amazon Forest are often used as "shelters" or safe havens to "cloak" illegal activity. In this sense, its physical imperatives provide logistical conditions for the coordination of different criminal operations or the hiding of laboratories, plantations, or even clandestine runaways. Moreover, there is a "structural problem with law enforcement" to maintain an active and effective monitorization of the Amazon Forest due to "the remoteness of the areas and low population densities" (Solinge, 2014, p.511). Colombia, for example, has the third-largest forested areas in South America, with its southeastern part having "lush jungles [that] have never been controlled by the central government, but rather been the refuge and preserve of nonstate armed groups" (Insight Crime & Igarapé Institute, 2021, p.1). In fact, for many decades, the FARC was the "de facto guardian to much of the country's virgin jungle" in this part of the country.

Furthermore, from marijuana and coca production to the extraction of minerals, hunting of exotic wildlife, and harvesting of illicit timber from Brazil, Bolivia, Peru, Colombia, Ecuador, Venezuela, Guyana, French Guiana, and Suriname, the Amazon Basin, and its hydrographic network have been used as a crucial transit route for several criminal activities to consumer markets primarily located in Europe and the United States (Ellis, 2018, p.35). Formed by several river streams, creeks known as "igarapés", riverside areas called "várzea", and a particular ecosystem called "restingas", the Amazon Basin is composed of the following rivers: Rio Amazonas, Rio Negro, Rio Solimões, Rio Madeira, Rio Trombetas, Rio Purus, Rio Tapajós, Rio Branco, Rio Javari, Rio Juruá, Rio Xingu, Rio Japurá, and Rio Ica. They are all used as transit routes by both local and transnational criminal organizations. Not by chance, one of the most famous (and often disputed) transit routes used by criminal organizations to transport their illicit products, especially drugs, from South America to Africa, Europe, and Asia is the so-called "Rota do Rio Solimões" that crosses the Northern and Northeast regions of Brazil toward the Atlantic Ocean (Abreu, 2022).

Last but not least, the physical proximity of some of the states of the Legal Amazon with bordering nations also provides opportunities for the most diverse criminal activities. According to Júnior & Freire (2022, p.90), the trafficking of people with Bolivia and Peru in Acre is "intense" due to the rivers that favor "the activities of networks that command drug trafficking", while Amapá has "a large outflow of people across its borders (...) – mainly illegal–in

Suriname or French Guiana" and the Amazonas has "a smaller flow at its borders when compared to the other states due to its relative isolation from border cities". In addition, due to its borders with Venezuela and Guyana, Roraima is largely characterized by the movement of illicit products through its rivers. On the other hand, the proximity of 28 municipalities located in Mato Grosso with their bordering neighbor, Bolivia, in a wet and dry environment, makes cross-border illicit activities "easy and intense". Meanwhile, in the case of Pará, the crossing between its borders with Suriname and Guyana are very challenging – albeit feasible – for criminal organizations due to its mountainous nature and large rivers (Júnior & Freire, 2022, p.91).

Similarly, the Amazon Forest's ecological characteristics are crucial aspects to be considered when attempting to examine the spatial patterns of transnational organized crime and cross-border illicit markets in the rainforest. Indeed, while no rainforest is less or more important than the other, there is some clear evidence that the Amazon Forest is distinguished in ecological aspects compared to other rainforests scattered throughout the world. According to the "Amazon Assessment Report 2021" developed by the Science Panel for the Amazon, an initiative promoted by the United Nations Sustainable Development Solutions Network, its vegetation, tree diversity, and hydrographic network are unique compared to other rainforests. Besides mentioning the geological and biological characteristics of the Amazon Forest, the Report characterizes the rainforest as the home to 13% of all trees worldwide, having the richest and largest tropical wetland area globally with more than 50 Andean-Amazonian vegetation types and ecosystems, 400 billion trees from 16,000 different specimens, and 50,000 plant species.

In addition, the rainforest encompasses more than 40% of all vegetation in the world, it is "one of the biggest carbon sinks" (i.e., 90-140 billion metric tons of carbon), and it has the most extensive hydrographic network, representing the largest source of freshwater in the world (i.e., 20% of the global water supply), 15% of all fish species globally, and 85% of all fish species from South America (Abdenur et al., 2020, p.3; Moraes et al., 2022). Concerning the presence of precious stones and minerals, there are thousands of hectares throughout the Amazonian territory rich in gold, diamond, nickel, tin, coltan, zinc, iron, copper, manganese, and bauxite ore – in states such as Pará and Mato Grosso, for example, mining accounts for over 91.9% of all mining-related activities in Brazil. At last, according to the Brazilian chapter of WWF, the Amazon Forest is also home to 10% of all known species on Earth and over 47 million people, encompassing a wide range of human and non-human communities. On one side, based on official classifications, there are 427 mammals, 1,294 birds, 378 reptiles, 427 amphibians, around 3,000 fish types, and between 96,660 to 128,840 invertebrate species in the Amazonian territory (i.e., the latter only in the Legal Amazon). On the other side, there are more than 400 different indigenous groups, totaling more than 3 million people living in the Amazon Forest.<sup>76</sup>

Unfortunately, all of these ecological aspects make the Amazon Forest vulnerable to the most different types of (non-)state actors wishing to profit from criminal operations associated with transnational environmental crime and even in other illicit markets – such as organized crime groups. As we discussed in the previous chapter, the richness of its natural environment makes its territory vulnerable to illegal natural resource exploitation and all of its converging and associated crimes. Indeed, the Amazon Forest's ecological aspects turn its territory into an ideal space for the conduction of specific illicit activities, especially environmental offenses. The rainforest suffers from the "crime curse" and, to use the words of a member of the Brazilian Supreme Court, Luis Roberto Barroso, "there is a real risk of losing the sovereignty of the Amazon not to any other country, but to organized crime" (Boadle & Brito, Dec. 2022).

Amazonian timber, minerals, wildlife, and fish stocks are all particularly vulnerable to illegal exploitation by organized crime groups interested to profit along harvesting/extracting/poaching/fishing (i.e., source stage), transporting/transforming (i.e., transit stage), and commercialization (i.e., consumer stage) processes. For instance, due to the wide availability of valuable trees, estimates indicate that between 70% of all harvested timber from the Amazon Forest comes from illegal exploitation (Lawson & Macfaul, 2010, p.84). The fact that more than half of the timber trade in the Amazon Forest is illegal suggests criminal interests overlap any concern with environmental

<sup>&</sup>lt;sup>76</sup> The Yanomami, Ashaninka, Mushabo, Yora, and Mebêngôkre-Kayapó people, for example, are all indigenous communities that lives in the rainforest for thousands of years – way before the start of violent European colonization in the continent.

preservation. Especially considering that in Brazilian states, such as Pará, illicit logging increased from 158 acres to 1,720 acres between 2019 and 2021 – an increase of almost 1000% (Peixoto, Sep. 2022). Even more alarming, evidence from the Annual Deforestation Report developed by *MapBiomas* shows that the Amazon Forest lost 18 trees per second only in 2021 (Amaral, Jul. 2022). Not by chance, "as much as 99 percent of deforestation in Brazil results from illegal activities" (Abdenur et al., 2020, p.5). In this context, valuable Brazilian trees (e.g., Ipes, Cedar, Manilkara, Brazilian Peppertree, Jacaranda, and Nut trees) are frequently traded in violation of existing national regulations (Waisbich et al., 2022).

The existence of many precious stones and minerals throughout the Amazonian territory also produces a similar scenario. It has been stated recently that Brazil traded 229 tons of potentially illegal gold from the Amazon region between 2015 and 2020; this is more than half of the gold produced and exported by the country (i.e., 54%) (Instituto Escolhas, 2023). This is extremely relevant, especially considering that the historic rise in gold international prices during the 2008 financial crisis led major drug trafficking organizations to diversify their abilities and specialize in illegal mining. At the same time, this is also important because gold miners are responsible for spilling more than 30 tons of mercury in Amazonian rivers and lakes every year, which ends up poisoning different types of fish and even causes brain damage to human communities established as far as 400 km downstream (Nelleman et al., 2016, p.69).

Meanwhile, the most diverse and (un)known exotic wildlife species also suffer from the same reality. Estimates indicate that over 38,000,000 species are captured annually, while only 4,000,000 of those are sold (Destro et al., 2012, p.421). This commerce involves, for example, thousands of animals and their parts, such as birds, mammals, and reptiles, thereby submitting them to horrible transport conditions and cruel deaths, as well as disrupting or even destroying entire ecosystems. This reality becomes even more alarming when one considers that monitored wildlife populations in Latin America and the Caribbean region have dropped by 94% on average between 1970 and 2018 (World Wildlife Fund, 2022). In the case of IUU, based on seizure records of the Brazilian Institute for the Environment and Natural Renewable Resources (IBAMA), 539,36 tons of illegal fish were seized between 1992 to 2017 only in the city of Manaus (Silva et al., 2019). Similar to the wildlife trade, alarming estimates have shown that freshwater species populations have seen the "greatest overall global decline" of 83% between 1970 and 2018 (World Wildlife Fund, 2022).

## 4.1.4 The Effects of the Bolsonaro Administration (Anti-)Environmental Policy

The Amazon Forest is reaching a "tipping point" – this is, the stage where its deforestation and the effects of global warming would generate irreversible climatic consequences to global security. According to Brazil's National Institute for Space Research (INPE), nearly 20% of the Legal Amazon has already been deforested (Roy, Aug. 2022). Statistical records from the *MapBiomas* demonstrate that the Amazon Forest lost a vegetation area equivalent to Chile's territory between 1985 and 2020 – this is, 74,600,000 acres (G1, Sep. 2021). On the other hand, based on another record from *MapBiomas*, it was stated that 33% of all deforested areas in Brazil only occurred in the last 37 years, which means that deforestation rates started to increase considerably only in recent decades (Santos, Aug. 2022). Based on this scenario, it is easy to assume that environmental preservation has always been a challenge for several Brazilian federal administrations. After all, according to Abdenur et al. (2020, p.6):

(...) much deforestation in the Amazon has been proactively encouraged by the state to incorporate forested areas, and their inhabitants, into the extractivist economic model. This vision of the Amazon as a vast empty land that must be occupied in order to be developed, and that posits a hard dichotomy between development and preservation of the forest, dates back to at least the mid-20th century but has found continuity among governments of different political orientations.

This is the scenario in which one should remember how strategic opportunities for organized crime groups usually emerge based on non-physical features, such as political practices by state actors that create an opportunistic environment for engaging in types of transnational environmental crimes in the Amazon Forest. Based on this consideration, this is where it becomes important to recognize that, even if some administrations might have shared close or even controversial ties to Brazilian lobbyists involved in the country's agriculture, mining, farming, and wood sector, the Bolsonaro administration was the one whose protagonism in actively expressing and defending anti-environmental behavior stood out.

Throughout its history, Brazil has never had an executive administration so eager to dismantle the country's environmental legal framework, capture accountability and security institutions involved in environmental affairs, promote incentives for large-scale deforestation in the country, and accuse local indigenous communities of being responsible for burning down large areas of the rainforest. Similarly, never before a minister of environment, along with other employees of the IBAMA, was investigated by the Brazilian Federal Police as a participant in a transnational smuggling operation involving illicit Brazilian timber; just as never before the professionals in charge of investigating such a case were dismissed from their duties clearly due to political motivations (Fraga, Jun. 2021; Magri, May. 2021).<sup>77</sup> Never before has a Brazilian President been officially denounced in the International Criminal Court by leading advocacy and judicial institutions as a perpetrator of crimes against humanity, ecocide, and genocide – particularly against the Yanomami community (Milhorance, Jan. 2021).

Ever since his presidential campaign in 2018, the former President promoted political practices that created opportunities for criminal organizations to thrive in environmental crimes. This includes, for example, promises to undermine environmental surveillance mechanisms and end the demarcation of indigenous lands and protected conservation areas (Greenpeace Brasil, 2022). When in charge of the presidential office, several initiatives were implemented to advance these objectives while, intentionally or not, increasing the opportunities for organized crime groups (and other state and non-state actors) to profit from transnational environmental crimes and other illicit activities.

As a candidate in the 2022 General Elections, Bolsonaro hinted at the idea of extinguishing the Brazilian Ministry of Environment (Bragança, Oct. 2018). Afterward, with the help of former minister Salles, they managed to create

<sup>&</sup>lt;sup>77</sup> In this case, the Brazilian Federal Police's superintendent in Amazonas and the head of the Federal District's Office for Repression of Corruption and Financial Crimes were dismissed. During the course of his 4-year term, former President Bolsonaro fired or dismissed at least 20 police officers in leadership positions at the Brazilian Federal Police and replaced its Director-General four times – often with alleged political motivations (CartaCapital, 2021; Lima et al. 2023).

legal instruments that favored the wood, mining, and civil construction sector, allowing the commerce of Brazilian wood without requiring the disclosure of its source, the building of infrastructure on mangroves and sandbanks, and the promulgation of amnesty pardons for those responsible for deforestation (Associação Nacional de Servidores do Meio Ambiente, 2020). In addition, from leading scientists to official managers of environmental reserves and national parks, the President fired numerous representatives of environmental agencies in the country – sometimes without even adding new personnel to replace them. In fact, throughout his 4-year term, all environmental officials working to preserve the environment were simply dismissed or had their autonomy and funds cut down by the federal government (Barretto, Jul. 2022; Saringer, Aug. 2019).

Not by chance, a recent report developed by *MapBiomas* indicates that 97% of all deforestation-related alerts emitted by environmental institutions between 2019 and 2022 were not monitored properly by federal institutions (Dantas, May 2022). Recent evidence also indicates that the Bolsonaro administration only distributed 0,16% of Union funds to the Ministry of Environment during his term (Prizinbisczki, Apr. 2023). Unsurprisingly, it is also worth mentioning that, right after Bolsonaro failed to win the 2022 General Elections, data from the INPE indicated that federative units located in the Legal Amazon with the largest amount of electoral support to the former President registered an increase of 1200% in forest fires right after the elections (Sassine, Nov. 2022).

Investments in environmental programs also decreased substantially and political actions were undertaken by the Bolsonaro administration in the National Congress to open specific indigenous lands for mineral and energy exploration.<sup>78</sup> Political allies were placed into the management of specific environmental institutions to advance the government's objectives, such as the Indigenous National Foundation (FUNAI), the IBAMA, and the Chico Mendes Institute for Biodiversity Conservation (ICMBio). The monitoring and reporting

<sup>&</sup>lt;sup>78</sup> E.g., the bill of law no. 191/2020. See: <<u>https://g1.globo.com/politica/noticia/2020/02/05/bolsonaro-assina-projeto-de-lei-para-regulamentar-mineracao-e-geracao-de-energia-em-terras-indigenas.ghtml</u>>. Accessed: April 15. 2023.

activities usually carried out by environmental agencies were constrained due to political motivations. And, at last, military personnel with close ties to the Bolsonaro administration even started to intentionally avoid the monitoring and reporting of illegal mining activities in indigenous lands (Greenpeace Brasil, 2022).

It is worth mentioning that, on the international level, foreign investors and countries preoccupied with climate change mitigation efforts, environmental preservation, sustainable development, and human rights have all denounced how Brazilian environmental policy was responsible for increasing deforestation rates globally during 2019 and 2022. For example, deforestation in Brazil represented 40% of all deforested areas in the world only in 2021 (i.e., more than 1,5 million acres – ten times the size of São Paulo city).<sup>79</sup> Some countries, such as Germany and Norway, withdrew millions of euros from funding programs dedicated to preserving the Amazon Forest (i.e., the "Fundo Amazônia") during this period. European nations even attempted to stall and renegotiate the terms of the EU-Mercosur Association Agreement after the former Brazilian administration demonstrated its tolerance and support toward deforestation. During the World Economic Forum meeting in 2020, the former Minister of Economy even suggested that poor and indigenous communities were responsible for environmental degradation and defended an orthodox model of agriculture. Last but not least, the Bolsonaro administration did not advance the goals established by the Paris Agreement, nor ratify the Escazú Agreement (Alencar, Apr. 2021; Freitas, Apr. 2021).

Indeed, according to Greenpeace Brasil (2022), the country was "the victim of a destruction project". Other relevant trends correlating to this assertion also deserve to be highlighted here. For example, evidence suggests that the Amazon Forest's deforestation increased by 73% during the Bolsonaro government. The level of greenhouse emissions generated in Brazil reached its highest point in 2021 (i.e., 2,42 tons of billions in carbonic gas) (G1, Nov. 2022). Over three hundred unauthorized boats and rafts were positioned in a huge part of Rio Madeira to perform illicit mining without any law enforcement resistance

<sup>&</sup>lt;sup>79</sup> For more detailed information, see more in the World Resources Institute's Global Forest Review from 2022: <<u>https://research.wri.org/gfr/latest-analysis-deforestation-trends</u>>. Accessed: April 15. 2023.

– at least until the media denounced their practices (G1, Nov. 2021). Illicit mining suffered an increase of 787% in indigenous land between 2016 and 2022 (Stabile & Casemiro, Feb. 2023), with routine reports of sexual abuse and rapes performed by criminals engaged in mining activities toward starving indigenous women and children in exchange for food – especially in the Yanomami territory (Biasetto, Apr. 2022). Considering that mining-related activities lived its "Golden Age" during the Bolsonaro administration and that 94% of the area impacted by illicit mining in Brazil is located inside the Amazon Forest, "with half this area overlapping protected area – in flagrant violation of the law" (Observatório da Mineração & Sinal de Fumaça; Waisbich et al., 2022, p.37), it is important to highlight that there was an increase of 331% in the number of deaths related to the Yanomami community under Bolsonaro (Fellet & Prazeres, Feb. 2023).

Last but not least, in August 2022, before members of a criminal organization involved in IUU inside the Amazonian territory (i.e., more specifically, in Vale do Javari) were arrested for their involvement in the assassination of British journalist, Dom Phillips, and environmental activist, Bruno Pereira, former President Bolsonaro spared no effort to downplay the situation (Talento & Abbud, Aug. 2022). Also, considering how environmental institutions and frameworks were dismantled during the Bolsonaro administration, some known organized criminals involved in drug trafficking operations received formal authorizations from the federal government to perform mining-related activities in Amazonian areas as big as 800 soccer fields (Gonçalves, Nov. 2021).<sup>80</sup> In fact, like other major transnational criminal organizations throughout the world and in South America, the Red Command and the First Capital Command started to specialize in the illegal mining and timber sector (Machado, Mar. 2023).

Indeed, in summary, it is clear that the Bolsonaro administration's antienvironmental policies and rhetoric, characterized by weakened environmental protections, political interference and reduced autonomy in environmental agencies, disregard for indigenous rights, and an emphasis on economic

<sup>&</sup>lt;sup>80</sup> Surprisingly, one of the suspects investigated in the so-called operation "Narcos Gold" became known in the 2000s for being the private pilot of the famous narcotrafficker, Luiz Fernando da Costa (i.e., "*Fernandinho Beira-Mar*"), one of the main leaders of the Red Command.

development over conservation, have arguably created a permissive environment that indirectly facilitates transnational environmental crimes and increases the strategic relevance of the Amazon Forest for transnational criminal organizations. After all, the Bolsonaro administration's policies created opportunities for greater resource exploitation, invasion of protected areas and indigenous land, political interference in monitoring and reporting institutions, reduced risk through weakened enforcement and legislation, and a perfect scenario to attend the global demand for natural resources in a deregulated environment highly susceptible to environmental crimes.

In this part of this chapter, we have discussed and analyzed four arguments that explain why we should analyze the geopolitical rationale of criminal non-state actors in the Amazonian case. Indeed, whether in inquiries involving the crime-geopolitics nexus or even in other intellectual initiatives, these arguments contribute to explaining why this specific rainforest ought to be further analyzed. Now that we have explored each of these arguments, we can move forward to examine the strategic hubs for transnational environmental crimes in the Amazon Forest.

#### 4.2 Strategic Hubs

As the term suggests, a "strategic hub" is simply interpreted here as a location composed of tactical advantages for organized crime in the conduction of one or more illicit markets. This study provided several insights into how criminal organizations perceive the strategic relevance of certain territories for their operations, as well as how different territories become increasingly intertwined with several types of organized crime groups and illicit markets in the international system (see Chapter 2). Drawing on the contributions of Naím (2006), Costa (2018), Farah (2012), Galeotti (2018, 2019), Varese (2013), Gayraud (2010), Labrousse (2010), Emmerich (2015), Paula (2015), Brown and Hermann (2020), Keefe (2013), Sansó-Rubert (2016), Carbajal-Glass (2021), Hall (2012a, b), Aranega (2020), and Brombacher et al. (2022), we can reach important considerations about the strategic hubs for transnational environmental crimes in the Amazon Forest based on a transdisciplinary perspective.

First and foremost, irrespective of the alignment of state and organized criminal intentions towards a shared strategic objective, first it is important to underscore that strategic hubs for transnational environmental crimes in the Amazon Forest are, to a great extent, defined by unique physical features. This includes the region's remoteness, limited state presence, challenging physical terrain, and porous borders as attractive features for criminal networks to operate with relative impunity since it provides a natural cover for environmental crimes. Nevertheless, as we have explored throughout this study, it is important to also acknowledge the role of non-physical features of these strategic hubs in the geopolitical rationale of criminal non-state actors.

From a non-physical perspective, however, it becomes crucial to understand the emergence of strategic hubs. Besides the emerging "partnerships" between state authorities and criminal organizations in these strategic hubs, which may arise from corruption, direct involvement, or simply from inadequate governance and insufficient state regulation, the overlapping between the licit and illicit spheres is constantly fostering the second along with the activities of the former. Within these hubs, numerous criminal organizations function more as decentralized networks than rigidly structured entities, while others exhibit varying degrees of organizational sophistication, ranging from loosely connected networks to meticulously organized structures. Additionally, preexisting or emerging alliances *de facto* or alliances of convenience between several legal and illegal actors are also defining characteristics of strategic hubs.

Given that the cross-border illicit activities occurring within these hubs frequently defy traditional principles associated with the Westphalian system of states, it is essential to scrutinize these hubs while considering the relationships between micro and macro levels of analysis. This consideration extends to the intersections of various forms of criminal organizations and illicit markets. Equally significant is the recognition of the role political, economic, social, and legal contexts play in facilitating the emergence of these hubs for international environmental crimes in the Amazon Forest. Last but not least, considering the interrelated nature of micro and macro levels of analysis, especially in the context of organized crime and illicit markets, strategic hubs for transnational environmental crimes exist within the connections among local and global contexts. Considering the spatial dynamics of criminal organizations and illicit trade, these hubs are inherently situated within a complex matrix of interrelationships linking specific territories, criminal organizations, and illicit activities across various stages of illicit environmental supply chains, from the local to the global level.

Based on these insights and several evidence-based studies produced by state and non-state institutions, including official operations and seizures by law enforcement and military agencies, as well as investigative journalism, numerous strategic hubs for transnational environmental crimes can be identified in all jurisdictions sharing borders with the Amazon Forest.

#### 4.2.1 Identifying Strategic Hubs

According to the literature on organized crime and illicit markets in the Amazon Forest, there are specific strategic hubs for transnational environmental crimes in the rainforest. With a vast territory encompassing diverse ecosystems, including the Cerrado savanna, the Pantanal wetlands, the Atlantic Forest, and the Amazon Forest, Brazil is home to several strategic hubs for transnational environmental crimes. This includes, for example, the infamous "Arc of Deforestation." This region stretches from the states of Maranhão to Rondônia and has become a notorious center for illegal deforestation, land grabbing, and illegal logging. The rapid expansion of agriculture and infrastructure development in this area has also attracted criminal networks and created opportunities for environmental crimes. Similarly, the "Triple Border," where Brazil, Colombia, and Peru converge, is a hub for illegal mining, drug trafficking, and wildlife smuggling. The "Madeira River Basin," located in the western Amazon and encompassing the Brazilian states of Amazonas, Rondônia, and Mato Grosso, serves primarily as a transportation route for illegal timber and other illicit goods, such as illicit gold. This particular strategic hub connects the region to international consumer markets. In contrast, the "Tapajós River Basin" in the state of Pará is characterized by illegal logging, land grabbing, and illicit gold mining. This hub serves as a key transportation corridor for illegal goods, facilitating the expansion of criminal networks into remote areas. Similarly, the "Xingu River Basin" in the eastern Amazon is known for illegal logging, land grabbing, and illicit mining activities. This strategic hub provides access to

remote areas and serves as a transportation route for illegal goods, connecting the region to national and international markets (Insight Crime & Igarapé Institute, 2022b; Waisbich et al, 2022a).

Brazilian states most affected by transnational environmental crimes include Amazonas, Pará, Rondônia, Roraima, Acre, Mato Grosso, and Maranhão. Key municipalities within these states are Manaus, Belém, Porto Velho, Santarém, Boa Vista, Rio Branco, Cuiabá, Santana, São Luís, Itaituba, Ourilândia do Norte, Oiapoque, São Félix do Xingu, Ji-Paraná, Tartarugalzinho, Centro Novo do Maranhão, Cacoal, Jacareancanga, Santa Helena, Altamira, Novo Repartimento, Novo Progresso, Pacajá, Colniza, Bom Jardim, Lábrea, Apuí, and even São Paulo – despite being located in the southeast part of the country. The state of Pará is a hub for illegal logging, deforestation, cattle ranching, and illicit mining, with various types of criminal groups operating jointly or separately – including militias and drug trafficking organizations (Insight Crime & Igarapé Institute, 2022b). Santarém, Itaituba, Belém, São Félix do Xingu, and Altamira are major logistics hubs for various environmental crimes, such as illegal logging, wildlife trafficking, illicit mining, and drug trafficking, connecting source sites for these crimes to urban centers, and ports (Insight Crime & Igarapé Institute, 2022b; Waisbich et al., 2022b).

In the state of Amazonas, there are important municipalities, such as Manaus and Apuí, serving as vital centers for organized crime groups involved in illegal logging, illicit gold mining, wildlife trafficking, land grabbing, and deforestation, whereby the use of waterways to transport illicit timber and other products became widely known for authorities (Insight Crime & Igarapé Institute, 2022b; Waisbich et al., 2022b). Mato Grosso is a hub for deforestation driven by soybean and cattle production (Radwin, 2022), while Rondônia is a significant hub for illegal logging, deforestation, and land grabbing particularly close to relevant federal highways (e.g., the BR-174, BR-364, BR-421, and BR-435) that serves as a key infrastructure that facilitates, for example, illicit logging by connecting different logging sites to the city of Porto Velho (Pereira et al., 2019). On its end, Porto Velho, along with Manaus, is an essential distribution point for illicit goods and bases for criminal networks (Insight Crime & Igarapé Institute, 2022b; Waisbich et al., 2022b). Lastly, Acre is also a center for deforestation, illegal logging, and land grabbing (Bourscheit, 2021).

Located on the Western coast of South America, with a diverse landscape that included the Andes mountains, the arid coastal region, and the Amazon Forest, Peru has several regions emerging as critical hubs for various types of environmental offenses in recent years, including Loreto, Ucayali, Madre de Dios, La Libertad, Cusco, Huánuco, Puno, and San Martín. Major municipalities like Iquitos, Pucallpa, and Puerto Maldonado serve as key logistics and distribution hubs for illegal goods such as gold, timber, and wildlife. The Department of Madre de Dios is particularly associated with illegal gold mining, illicit logging, and wildlife trafficking, particularly in the town of La Pampa and Puerto Maldonado, whereby the Interoceanic Highway facilitates the transport of illicit goods, the Inambari and Malinowski Rivers serves as key routes for criminals, and the Tambopata National Reserve protected area is used as a hotspot for different environmental offenses (Centro de Innovación Científica Amazónica, 2018; Insight Crime & Igarapé Institute, 2022a, b), while Ucayali Province is a hub for deforestation linked to palm oil production, charcoal production, illegal logging, and drug trafficking, particularly in the city of Pucallpa, where criminals use rivers such as the Ucayali River to transport illicit timber (Environmental Investigation Agency, 2012; Insight Crime & Igarapé Institute, 2022a, b).

Loreto is a hub for illegal logging, deforestation, wildlife trafficking, and IUU fishing, while the Department of San Martín deals with deforestation for coca cultivation and plantation (Environmental Investigation Agency, 2018a; Insight Crime & Igarapé Institute, 2022a, b). Also, the Department of La Libertad suffers from illegal gold mining and water pollution (Organization of American States, 2021), Additionally, in the region of San Martín, the city of Tarapoto is a hub for deforestation associated with illicit coca cultivation, while the region of Huánuco is a known hub for coca cultivation, cocaine production, and illicit logging (Insight Crime & Igarapé Institute, 2022a, b). Puno, located in southern Peru, is a hub for illegal mining, deforestation, and water pollution. Finally, the Department of Cusco is a strategic hub for illegal mining and deforestation for agricultural purposes (Insight Crime & Igarapé Institute, 2022a, b).

Located in the Northwest of South America, Colombia is the "second most biologically diverse country in the world" and has a diverse topography, with the Andes mountains, the Pacific and Caribbean coasts, vast grasslands, and the Amazon Forest itself (Insight Crime & Igarapé Institute, 2022b). Departments like Amazonas, Caquetá, Guainía, Guaviare, Putumayo, Nariño, Chocó, Meta, Taraira, Vichada, and Vaupés, all of which are regions with large areas of rainforest and high levels of biodiversity, are considered major strategic hubs for environmental offenses, while municipalities such as Leticia, Florencia, Inírida, San José del Guaviare, Puerto Asís, Medellín, and Mitú are increasingly important locations connected to transnational environmental crimes. Colombia's Department of Caquetá, particularly Cartagena del Chairá, is known to be a hub for deforestation, illicit logging, illegal agriculture, land grabbing, and even drug trafficking (Lizcano, Sep. 2018; Insight Crime & Igarapé Institute, 2022b). The Department of Vaupés is a hub for wildlife trafficking and illicit logging, with Mitú being a key node for the transportation of illegal products and Taraira a strategic hub for the trade of wildlife and wild meat (Lizcano, Sep. 2018; Waisbich et al., 2022b). The Department of Nariño faces issues related to illegal gold mining and oil extraction, which result in water pollution and deforestation (Lizcano, Sep. 2018; Waisbich et al., 2022b). In addition, the Departments of Guainía and Vichada, which are located on the border with Venezuela, are identified as important hubs for illegal mining and wildlife trafficking (Lizcano, Sep. 2018; Waisbich et al., 2022b).

In the Department of Guaviare, municipalities such as San José del Guaviare operate as key hubs for illegal gold mining, illicit logging, and land grabbing, whereby its airport and river connections facilitate the transport of illicit goods (Insight Crime & Igarapé Institute, 2022b; Waisbich et al., 2022b). Also, the Department of Chocó is a hub for illegal gold mining, deforestation, wildlife trafficking, and drug trafficking, particularly due to its Pacific coastline which makes it vulnerable to both national and foreign criminal organizations (Lizcano, Sep. 2018; Insight Crime, 2016), and the Department of Meta is a hub for deforestation for agriculture, land grabbing, cattle ranching, and illegal logging (Reina et al, 2021). In the Putumayo region, located in the southern part of the country where Peruvian borders meet Ecuadorian borders, Puerto Asís is a key hub for illegal mining and logging, with connections to criminal groups involved in drug trafficking (Waisbich et al., 2022b). Last but not least, the city of Medellín is mentioned as a key hub for the illegal trade of wildlife and as a

transit point for illegal goods, including drugs and weapons, due to its strategic location in the country, while the famous Chiribiquete National Park is also a strategic hub for illicit mining, illicit logging, and wildlife trafficking (Waisbich et al., 2022b).

Meanwhile, located on the northern coast of South America, Venezuela is known for its diverse landscapes, including the Andes mountains, the Caribbean coast, the Amazon Basin, the Orinoco River, and the so-called "Orinoco Mining Arc" – a region spanning over 110,000 square kilometers that have seen a rise in illicit mining, deforestation, and pollution due to the involvement of different organized crime groups and other armed groups in these activities. States such as Amazonas, Bolívar, and Delta Amacuro, along with municipalities like Puerto Ayacucho and Ciudad Bolívar, serve as significant strategic hubs for criminal non-state actors. The state of Amazonas in Venezuela is a relevant strategic hub for illegal gold and coltan mining, deforestation, and wildlife trafficking, with a range of actors involved in these activities like criminal organizations and Colombian guerrillas. Furthermore, the state of Bolívar and Delta Amacuro are hubs for illegal logging, illicit mining, wildlife trafficking, and deforestation (International Crisis Group, 2019; Insight Crime & Igarapé Institute, 2022b).

While Ecuador does not share a direct border with the Amazon Forest, parts of its territory lie within the Amazon Basin and other parts of the country account for its coastal region along the Pacific coast and the Andean Highlands with deep valleys and high plateaus. Ecuador's provinces, including Sucumbíos, Orellana, Pastaza, Morona Santiago, and Zamora Chinchipe, as well as municipalities like Nueva Loja, Coca, Puyo, Macas, and Zamora, are recognized as strategic hubs for environmental offenses. The Province of Sucumbíos is a hub for illegal logging, wildlife trafficking, illicit mining, and deforestation promoted both by criminal organizations and dissident FARC groups operating in the region, with Lago Agrio being a key hub for these activities and the Napo, Aguarico, and Santiago Rivers serving as primary routes for transporting illicit goods (Mestanza-Ramón et al., 2022; Insight Crime & Igarapé Institute, 2022b). Additionally, oil extraction in the province has led to water pollution and damage to local ecosystems, with some companies engaging in environmentally harmful

practices (Mestanza-Ramón et al., 2022; Insight Crime & Igarapé Institute, 2022b).

In the Province of Orellana, the conversion of forested areas into agricultural land for palm oil cultivation has caused deforestation and the displacement of indigenous communities, while illegal gold mining activities contribute to water pollution and the destruction of ecosystems. The Province of Morona-Santiago has been identified as a hub for wildlife trafficking and illicit mining (particularly gold), illicit logging, and deforestation (Mestanza-Ramón et al., 2022; Insight Crime & Igarapé Institute, 2022b). Located in the southern region of Ecuador, the Pastaza and Zamora Chinchipe provinces are part of the Amazon Basin and face significant environmental challenges. In the Province of Pastaza, illegal logging activities and land grabbing for agriculture, as well as oil extraction activities lead to deforestation, habitat loss, and water pollution (Mestanza-Ramón et al., 2022; Insight Crime & Igarapé Institute, 2022b). The Province of Zamora Chinchipe is also affected by wildlife trafficking and illegal mining activities, particularly for gold extraction, which also causes deforestation, habitat loss, and water pollution (Mestanza-Ramón et al., 2022; Insight Crime & Igarapé Institute, 2022b).

Landlocked in South America, Bolivia has diverse geographical landscapes that influence the coordination of illicit activities, including the Andes mountains, the Altiplano plateau, and the Amazon Forest itself. In Bolivia, departments such as Santa Cruz, Pando, Beni, and La Paz, and municipalities like Cobija, Trinidad, and Riberalta are similarly affected (Insight Crime & Igarapé Institute, 2022b). Known for its dense rainforests, the Department of Pando is a strategic hub for illegal logging, wildlife trafficking, and deforestation for agriculture, with its proximity to Brazil and Peru being used by organized criminals for cross-border movement (Insight Crime & Igarapé Institute, 2022b). The Department of Santa Cruz is another hub characterized by deforestation for soybean production and cattle ranching, while the Department of Beni is a strategic hub for deforestation for agriculture and cattle ranching, as well as wildlife trafficking, illicit logging, and land grabbing conducted by criminal networks exploiting weak enforcement capabilities and corruption (Insight Crime & Igarapé Institute, 2022b). Located on the northeastern coast of South America, Suriname is the smallest country in the continent yet it is still one of the most forested countries in the world and home to a rich biodiversity. Environmental crimes in Suriname are diverse and significant, encompassing illegal logging, which leads to deforestation and habitat destruction, and illegal wildlife trade that exploits the country's rich biodiversity. The region's substantial mineral resources also invite illegal mining, notably gold, causing extensive environmental harm including waterway pollution. Water pollution is further compounded by illicit waste disposal, while overfishing presents another challenge to the country's marine ecosystems. Among its districts, the districts of Sipaliwini and Brokopondo, are important strategic hubs for transnational environmental crimes. The District of Sipaliwini and Brokopondo are highly affected by illegal gold mining, illicit logging, and wildlife trafficking (Laan, 2021; Playfair, 2007; Verheij, 2019).

Situated on the northern coast of South America, Guyana is characterized by its dense rainforests, vast savannas, and coastal plains. In the country, regions like Barima-Waini, Cuyuni-Mazaruni, Potaro-Siparuni, and Upper Takutu-Upper Essequibo suffer from the same reality, with municipalities like Mabaruma, Bartica, Mahdia, and Lethern being particularly vulnerable. Region Nine (Upper Takutu-Upper Essequibo) suffers from illegal gold mining and deforestation, while Region One (Barima-Waini) faces illegal logging and wildlife trafficking. Guyana's Region Seven (Cuyuni-Mazaruni) and Region Eight (Potaro-Siparuni) are also affected by illegal gold mining, deforestation, and wildlife trafficking (Ebus, 2019; Ellis, 2019; Global Americans, 2022; Owen & Grigsby, 2012).

Located on the northeastern coast of South America, the French Guiana is an overseas territory with tropical rainforests and coastal mangroves with several strategic hubs for transnational environmental crimes, especially illegal gold mining. From bordering regions with Suriname and Brazil to many coastal areas, including the Maroni River Basin, and major municipalities, such as Apatou, Cayenne, Maripasoula, Saint-Georges, and Saint-Laurent-du-Maroni, function as significant strategic hubs in the region (Jébrak et al., 2021).

Now that we have identified some of the major strategic hubs for transnational environmental crimes in the Amazon Forest, it is time to apply this study's indicators in each jurisdiction sharing borders with the Amazon Forest. This is crucial to understand how criminal non-state actors involved in transnational environmental crimes perceive the geopolitical role of the Amazon Forest in illicit environmental supply chains.

### 4.2.2 Applying Indicators in Each Country

While some of the countries sharing borders with the Amazon Forest do have their exceptionalities in some aspects, it is possible to identify some remarkable similarities and differences between all nine jurisdictions analyzed – Brazil, Peru, Colombia, Bolivia, Ecuador, Venezuela, Guyana, French Guiana, and Suriname – when drawing from this study's interdependent and multi-level indicators. These similarities and differences contribute to explaining most of the factors influencing the geopolitical rationale of criminal non-state actors involved in transnational environmental crimes in the Amazon Forest.

Starting with the first indicator, "physical particularities". All nine jurisdictions are marked by the richness of their biodiversity and exhibit intricate physical characteristics, such as dense tropical forests, wetlands, savannas, formidable terrain, and expansive rivers, which offer an ideal cover for illicit activities and render monitoring and enforcement challenging. The often isolated and inaccessible areas, highlands, lowlands, plateaus, and an extensive hydrographic network in these regions, contribute to the natural concealment of criminal networks and their operations, thus enabling criminal non-state actors to exploit these natural features. Nevertheless, while each country has unique geographical challenges (e.g., Brazil's extensive road networks, Colombia's mountainous terrain, and Peru's isolated river systems), it is reasonably impossible to deny that the Amazon region, Andes mountains, Caribbean coasts, and vast grasslands of South America provide rich and diverse environments that allow for an array of illegal markets to flourish, such as in the case of transnational environmental crimes. Not by chance, several states, departments, provinces, and municipalities marked by the Amazon's dense forestation and its extensive river systems are strategic hubs for illicit logging, wildlife trafficking, and the movement of other illicit goods. River streams and coastal regions, like those in Venezuela, Colombia, Suriname, and French Guiana, on the other hand, are vulnerable to overfishing and waste disposal, facilitating the transportation of illicit goods, while the mountains and grasslands offer concealment for illegal mining and even unregulated agriculture, cattle ranching, and land grabbing.

The second indicator, "political practices", also capture relevant issues. While the political context varies significantly among these countries, there are similar political practices in them often contributing to the emergence of strategic hubs for transnational environmental crimes in the Amazon Forest. Widespread corruption, frequent lack of political will, weak governance, law enforcement capabilities, and instability prevail across all these jurisdictions. In some cases, for example, political agendas may prioritize private interests and short-term economic gains over public interests and long-term environmental sustainability, further exacerbating environmental degradation. Not by chance, in all these countries, criminal organizations, guerrilla groups, compromised companies, and rogue government officials often exploit weaknesses in law enforcement and border security to conduct transnational environmental crimes. Likewise, even mismanagement and corrupt practices in specific commercial sectors contribute to the emergence of strategic hubs for environmental offenses, such as in the case of the agricultural, forestry, fishery, and mining sector. On the other hand, insufficient resources allocated to environmental protection agencies and law enforcement, combined with corruption and political interests, further weaken the enforcement capabilities. There are several cases in these jurisdictions where state agents and institutions are largely used in favor of criminal non-state actors, whereby the line between states and organized crime is becoming increasingly "blurred". In summary, the political practices promoted within their landscape play a crucial role in facilitating environmental crimes, with limited state presence and possibly corrupt political practices in these regions allowing environmental crimes to go unchecked, while political disputes over land rights and deforestation policies may inadvertently encourage illegal activities.

The third indicator, "socioeconomic conditions", capture important similarities and differences between them. Indeed, while these countries have different levels of development and even economic dependency on natural resources, there are similar socioeconomic conditions in them that influence transnational environmental crimes, including high levels of poverty, limited
access to education, and scarce economic opportunities in rural communities. These, in turn, often drive local communities to participate in illegal activities as a means of subsistence and survival in these countries, without even knowing they are crucial segments of an illicit supply chain with complex operations and players scattered from the local to the global level. Similarly, insufficient economic infrastructure and access to public services in rural areas exacerbate these issues, leaving communities vulnerable to exploitation by organized crime in all of these jurisdictions. In this context, there is also the fact that the profits generated by illicit activities often surpass the income generated by legal alternatives, making them attractive options for both locals and criminal organizations. Especially considering how the low risk of detection renders these activities appealing options for numerous traditional organized crime groups and criminal networks seeking to prosper financially by plundering their natural resources.

The fourth indicator, "legal frameworks", is undoubtedly important in this context. While all nine countries have their specific laws and regulations related to environmental protection, penalties for environmental crimes, and criminal procedures, they have limited to weak legal frameworks that could inadvertently facilitate environmental crimes and create an opportunistic environment for organized crime to elaborate its geopolitical strategies. Additionally, legal gaps, ambiguous regulations, inadequate enforcement mechanisms, and changes in environmental or land rights laws contribute to a lack of compliance with environmental laws and hinder their effectiveness against transnational environmental crimes. In some cases, considering how all jurisdictions suffer political pressure from powerful interest groups or economic ambitions to deregulate environmental laws, organized crime finds relatively attractive hubs to coordinate illicit activities. Therefore, in these countries, common legal challenges involve weak enforcement mechanisms and a lack of comprehensive laws to address all aspects of environmental conservation. Many countries struggle with unclear land tenure laws, leading to disputes that facilitate illegal activities. Agricultural and mining activities are often inadequately regulated, leading to environmental harm. Finally, unique situations such as political crises, armed conflicts, and distinct ecological contexts pose additional challenges to enforcing legal frameworks against environmental offenses and those criminals involved in them.

At last, the ability of the fifth indicator, "relationships among legal and illegal actors", to capture important issues cannot be underestimated. While the nature of the relationships among legal and illegal actors can differ considerably across these countries, there are common patterns worth noticing, especially due to their significant role in the resilience and proliferation of environmental crimes. In many instances, legally registered companies may engage in overextraction beyond permitted limits or in protected areas, often facilitated by corruption. Similarly, criminal actors may operate under the banner of legal entities to transport and trade illicit goods. Indeed, besides the convergence between licit and illicit actors in commercial sectors, as legitimate activities can create opportunities for illegal activities, close ties among various actors, such as traditional organized crime groups, criminal networks, corrupt state agents, brokers, large land-owners, land-grabbers, poachers, loggers, fishermen, "river pirates", miners, prospectors, "rainforest militias", "timber mafias", small gangs, patrones, guerrillas, local communities and elites, and compromised corporations, create a complex and interconnected web of associations that facilitate the emergence and coordination of both transnational environmental crimes and their associated offenses locally and globally. These are the relationships that provide a comfortable environment for the persistence of different illicit markets, allowing them to proliferate with relative impunity and linking numerous territories, entities, and activities along illicit supply chains.

Brazil, for example, is home to the largest portion of the Amazon Forest, which is characterized by vast and remote landscapes with dense vegetation and extensive waterways. These physical features make policing difficult and provide natural cover for criminal networks to operate, hide, and move across their territory. The Amazon Basin, for instance, has numerous waterways serving as critical transportation routes for both licit and illicit goods. On the other hand, land-based transportation routes such as roads and highways (both regular and clandestine) also provide the same strategical features as waterways. Concerning the role of political practices, corruption fosters a scenario that allows environmental crimes to flourish. As for socioeconomic conditions, high levels of poverty and unemployment in the region drive locals to participate in illegal activities for economic survival and the substantial profits associated with transnational environmental crimes also contribute to why strategic hubs emerge for environmental offenses in Brazil. On the other hand, while Brazil has enacted legal frameworks to protect the environment, legal gaps, weak enforcement, inadequate resources, political deregulation of its provisions, and lack of political will hinder its effectiveness and create an opportunistic environment for those involved in transnational environmental crimes. At last, close ties between various traditional organized crime groups and criminal networks, local communities, compromised corporations, and leading public officials from different state agencies contribute extensively to making certain locations strategically attractive to those involved in transnational environmental crimes without significant interference.

Similar to Brazil, from the perspective of physical particularities, Peru's Amazon Forest is marked by complex terrain, dense forests, and vast rivers that provide cover and key logistical hubs for illegal activities – such as in the case of the so-called "Valley of the Apurímac, Ene, and Mantaro rivers". Conversely, considering the role of political practices, the issue of political instability and corruption weaken the government's capacity to enforce environmental laws and investigate organized criminals involved in transnational environmental crimes in strategic hubs. The influence of socioeconomic conditions is also important in the geopolitical rationale of criminal non-state actors in Peru since rural communities in the Peruvian Amazon struggle with poverty and a lack of economic opportunities, making illegal activities attractive options. Likewise, despite implementing various environmental protection laws, legal gaps, lack of political will to enforce them, limited resources, political interests, and widespread corruption hinder their effectiveness. Similar to Brazil, some public officials and politicians in Peru have ties to criminal networks, providing protection and facilitating illegal operations.

While the Andes mountains and the Pacific and Caribbean coasts influenced extensively the conduction of several types of illicit activities, it is Colombia's Amazon region that features dense forests and complex river systems that make monitoring and control of illegal activities challenging, just like in Brazil and Peru. In the case of political practices, the country has a history of political violence and systemic corruption, which contribute to the growth of transnational environmental crimes in its Amazonian region, particularly in rural areas. While rural communities in Colombia suffer from poverty and lack of basic services, leading to internal displacement due to historical armed conflicts or participation in illegal activities for income, the same issues presented in the previous countries are present in Colombia: a substantial portion of profits and low risk of detection for those involved. Unsurprisingly, Colombia also established environmental laws to counter environmental offenses, but its enforcement remains weak due to legal gaps, limited resources, political instability, and corruption. At last, many criminal networks in Colombia maintain connections with politicians and security forces, enabling environmental crimes to persist with relative impunity.

Covered by the Andes mountains and the Altiplano plateau, Bolivia's Amazon region is remote and difficult to access, providing cover for illegal activities. Corruption and political instability hinder the effective enforcement of environmental laws. Poverty and a lack of economic opportunities in rural areas contribute to engagement in illegal activities for survival. Bolivia has enacted environmental protection laws, but weak enforcement, limited resources, and political instability undermine their effectiveness. Ties between criminal networks and some public officials facilitate the continuation of environmental crimes in the Bolivian Amazon.

Marked by the Andean Highlands and its shared territorial boundaries with the Pacific coast, Ecuador is a country whose part of the Amazon Forest is also characterized by dense forests, challenging terrain, and complex river systems, making monitoring and enforcement difficult. Corruption and political instability undermine the effective enforcement of environmental laws. Limited economic opportunities and poverty in rural areas drive locals to participate in illegal activities. Ecuador has established environmental protection laws, but weak enforcement, limited resources, and corruption hinder their effectiveness. Criminal networks in Ecuador maintain connections with public officials, allowing environmental crimes to continue with limited interference.

Known for its diverse landscapes, which include the Andes mountains, the Caribbean coast, the Orinoco River, and the extensive "Orinoco Mining Arc", Venezuela, with a small portion of the Amazon Forest, is characterized by dense forests and remote, difficult-to-reach areas conducive to illegal activities. The country has experienced political instability, economic crisis, and widespread corruption, which have hindered effective governance and enforcement of environmental laws. The ongoing economic crisis has resulted in high levels of poverty and unemployment, making illegal activities an attractive option for survival. Although Venezuela has enacted environmental protection laws, weak enforcement due to limited resources, corruption, and political instability undermines their effectiveness. The relationship between legal and illegal actors in Venezuela is complex, with ties between criminal networks and public officials allowing environmental crimes to continue with limited interference.

Guyana's landscape, part of the Guiana Shield, consists of dense tropical rainforests, coastal plains, vast savannas, and extensive rivers, providing opportunities for illicit activities such as illegal logging and wildlife trafficking. Corruption and a lack of political will have contributed to weak governance and enforcement of environmental laws in Guyana. High levels of poverty and limited economic opportunities in rural areas lead to participation in illegal activities as a means of survival. Guyana has enacted environmental protection laws, but weak enforcement due to limited resources, corruption, and a lack of political will hinders its effectiveness. Ties between criminal networks and public officials in Guyana enable environmental crimes to continue with limited interference.

French Guiana, an overseas department of France and part of the Guiana Shield is covered by dense tropical rainforests, coastal mangroves, savannahs, and complex river systems, providing natural cover for illegal activities such as illegal logging and wildlife trafficking. While French Guiana is subject to French laws and regulations, enforcement of environmental laws is often weakened by the remoteness of the region and limited resources. Economic disparities and limited opportunities in rural areas can lead locals to participate in illegal activities for income. French Guiana, as a part of France, follows French environmental laws and regulations. However, enforcement is often weak due to limited resources and the region's remoteness. Criminal networks in French Guiana have connections with some local authorities, enabling environmental crimes to persist with relative impunity.

Suriname, also part of the Guiana Shield, is characterized by dense tropical rainforests, coastal plains, and extensive river systems, providing opportunities for illicit activities like illegal logging and wildlife trafficking. Corruption and a lack of political will in Suriname contribute to weak governance and enforcement of environmental laws. Poverty and limited economic opportunities in rural areas drive locals to participate in illegal activities as a means of survival. Suriname has implemented environmental protection laws.

Finally, after applying this study's indicators to examine the many factors turning the aforementioned locations into "strategic hubs" for transnational environmental crimes, we can now redirect our attention to the highly fragmented criminal cycle of comprised illicit flows that link different strategic territories, criminal organizations, and illicit activities in each stage of illicit supply chains. This is a necessary step if one wishes to understand what is the geopolitical role of the Amazon Forest in illicit environmental supply chains, especially concerning other famous locations for transnational environmental crimes throughout the world.

## 4. 3 Networked Dynamics

Illicit supply chains are, by nature, the product of nothing more than a conglomerate of interconnected logistical stages that, together, form a network of a wide range of territories, actors, and activities with a simple objective: to produce, transport, and distribute illicit goods and services. As we have discussed in the case of transnational environmental crimes (see Chapter 3), there are several processes, types of crimes, and criminal actors involved in these stages. From the specific locations where environmental commodities are extracted, harvested, or hunted, to those intermediary checkpoints where they are concealed from authorities or transformed into new products until they are transported to their destination in consumer zones, networked dynamics are at play all the time, making it almost impossible to conceive life within the international system without paying attention to how everything is interconnected. The same is, indeed, true concerning the illicit global economy.

Accordingly, the same logic applies to the case of transnational organized crime and illicit markets in the international context. After all, as we have explored throughout this study, it is difficult to conceive an illicit global economy without acknowledging its numerous transnational ramifications that connect the local to the global level. Whether we are speaking of a highly violent neighborhood located in Rio de Janeiro, a rural community located deep into the Amazon Forest, a wealthy European avenue in Brussels, a crowded street in New Delhi, an isolated village in Tanzania, or a remote island next to the Maldives when the subject under analysis is the networked dynamics of illicit supply chains, it does not matter: if you start anywhere, you can reach anywhere. If International Relations scholars redirect their attention toward the networked dynamics of illicit supply chains and how both state and non-state actors behave in their different stages, they will learn important lessons about the international system, especially about the geopolitical rationale of criminal non-state actors.

This subsection analyzes the networked dynamics of illicit environmental flows crossing source, transit, and consumer stages involving the case of the Amazon Forest. In other words, it focuses specifically on the different territories, entities, and activities connecting highly localized contexts in the Amazon Forest to extremely distant (or relatively close) nations scattered in the international system. Drawing on previous reflections about how interconnected our globalized world has become, the contributions of several authors about the connections between "crime" and "geopolitics", and strategic hubs for transnational environmental crimes in the Amazon Forest, this subsection encapsulates some of the final insights of this study's contribution on how to approach the geopolitical rationale of criminal non-state actors, to evaluate the prospects of consolidating the crime-geopolitics nexus as a research agenda, and to verify the credibility of its initial hypothesis.

In all countries "sharing" the entire Amazonian territory, the networked dynamics associated with transnational environmental crime are multifaceted but often similar in some aspects, For example, like in other parts of the international system, in South America, the criminal landscape is composed of different traditional organized crime groups and criminal networks with ties to other states and non-state actors in the region and beyond, while methods and routes utilized by them are usually the same ones being used in other conventional illicit markets, such as drug trafficking (Ellis, 2018; Malone & Malone-Rowe, 2014; Manso & Dias, 2018). In addition, considering how traditional organized crime groups and criminal networks in the region are becoming specialized in transnational environmental crimes in recent years, the illicit environmental supply chains often connecting remote areas of the Amazon Forest with global markets account for the collaboration between distinct organized crime groups, local communities, small-scale operators, public officials, brokers, corporations, and others actors that, together, compose a complex web of relationships that forms illicit supply chains, (Waisbich et al., 2022b). At last, although this is not a general rule for the many types of cross-border illicit logging, illicit mining, wildlife trafficking, or IUU fishing, a similar operational pattern emerges in all countries sharing a part of the Amazon Forest.

Firstly, consider the illicit environmental supply chains involved in illicit logging and timber trafficking. In the source stage, timber is harvested in strategic hubs scattered through the Amazon Forest, such as Pará and Mato Grosso in Brazil, Madre de Dios in Peru, and those departments and provinces located in the Ecuadorian and Colombian Amazon regions. Once the logs are harvested, they are transported to processing centers where they are transformed and prepared for export during the transit stage. As we have discussed previously, different rivers from the Amazon Basin facilitate transport from remote areas to transit countries. For example, in Brazil, the logs often transit through ports such as Santarém and Belém, while, in Peru, logs might transit through Iquitos and Pucallpa. Once the processed logs are then shipped to consumer markets around the world during the consumer stage, the product made out of illicit timber reaches major consumer destinations in North America, European Union, and China, where they are often mixed with legally sourced timber to obscure their origins. In summary, timber is usually illegally harvested from protected areas, indigenous lands, and often remote areas of the Amazon Forest and transported through river systems and roads to a transit country, only to be processed and later transported to consumer countries in some of the wealthiest parts of the world. During these stages, several state and non-state actors operate in particular operation functions to guarantee that the timber being smuggled out of the Amazon Forest reaches its final consumers in many parts of the world.

Secondly, consider the illicit environmental supply chains involved in the case of illicit mining and trafficking of precious minerals. Similar to the case of illicit logging and timber trafficking, in the source stage, illicit mining and trafficking in precious minerals is conducted in several regions of the Amazon Forest due to the vast reserves of gold and other precious minerals, with strategic hubs for this environmental offense being, for example, the Madre de Dios region in Peru, the "Orinoco Mining Arc" in Venezuela, Sipaliwini in Suriname, and the Brazilian states of Pará and Mato Grosso. In the transit stage, the illegally mined minerals are typically smuggled across borders to evade authorities. For example, minerals from the Orinoco Mining Arc in Venezuela are often trafficked across the border into Colombia or Brazil, with river systems, porous borders, and corrupt officials facilitating these operations. At last, from the transit countries, the minerals are shipped worldwide, often mixed with legal supplies to hide their illicit origin, to key consumer countries (e.g., the United States, China, and the United Arab Emirates) to be used in various commercial industries, from electronics to luxury jewelry. In summary, different transnational criminal networks, with the support of poor local communities, extract gold illegally and smuggle it through hidden and clandestine airstrips in remote areas located in source countries like Brazil, Peru, and Colombia to transit countries, such as, for example, Suriname and Guyana, and later transported to consumer countries in North America, Europe, and Asia.

Thirdly, consider the illicit environmental supply chains involving the case of wildlife trafficking. Unsurprisingly, as in the case of illicit logging and illicit mining, the same patterns repeat in the case of wildlife trafficking. In the source stage, exotic and (un)known species are hunted, poached, and skinned alive in strategic hubs highly characterized by their high biodiversity. This includes those Brazilian states that are part of the "Arc of Deforestation", the Madre de Dios region in Peru, and departments and provinces of the Colombian and Ecuadorian Amazon. During the transit stage, the captured species or their parts are often transported through a series of intermediary locations before reaching their final destination in consumer countries. These include regional markets, such as Belém and Manaus in Brazil, Leticia in Colombia, and Iquitos

in Peru, where they are kept before being smuggled out of the country in land, air, and river routes. Finally, despite the cases in which illicit environmental supply chains related to wildlife trafficking end up in consumer countries located inside South America, the final destinations for trafficked wildlife are often international pet and medicine markets in the United States, Europe, and Asia, especially China. In summary, exotic animals, plants, and insects are hunted down, captured, and often killed or skinned alive in one source country and smuggled through existing transportation networks (e.g., roads, waterways, and air routes) to transit countries using concealment techniques to avoid detection before being sold in consumer countries. In the Legal Amazon, for example, rare and exotic wildlife is captured and generally transported to transit countries like Colombia and Peru before reaching their final destination in North America, Western Europe, or consumer countries located in South America itself. In the majority of cases, just like in other illicit markets, the high demand from North America, Europe, and Asia is one of the major forces driving the growth of these illegal supply chains.

Fourthly, consider the illicit environmental supply chains related to IUU fishing. In the source stage, IUU fishing often occurs off the coasts of countries sharing the Amazon Forest but also in its diverse river systems. During the source stage, strategic hubs for IUU fishing are particularly prevalent in coastal or river areas with abundant marine biodiversity. In the transit stage, illegally caught fish are typically mixed with legal catches and processed on the high seas or at ports, making it difficult to distinguish their origin. An example of processing centers and ports that serve as transit hubs are Paramaribo in Suriname and Cayenne in French Guiana. At last, in the consumer stage, the final destinations of these illegal catches usually are international markets located primarily in the Global North and where there is a high demand for seafood, especially in the European Union, the United States, and Asia. In summary, just like in the other types of environmental offenses, all kinds of exotic fishes are captured in source countries and then smuggled through existing transit hubs and routes using concealment methods to evade law enforcement interventions right before it is sold in consumer countries from the Global North.

Now that we have provided a clear picture of the networked dynamics of illicit environmental supply chains connecting different territories from the Amazon Forest and other locations throughout the globe, it is important to highlight the organized criminals (as well as other relevant state and non-state actors) involved in this stage, as well as its methods to avoid detection. This includes illegal loggers, land-grabbers, gold miners, drug trafficking groups, local gangs, and criminal networks. illegal armed groups (e.g., National Liberation Army and dissident factions of the FARC), land-grabbers, militias, or corrupt public officials (e.g., policemen, military personnel, border patrols, customs agents, and politicians).

In transit countries, criminal networks, corrupt officials, or armed groups often demand payment in exchange for safe passage. They are all deeply involved in the process of transforming illegally harvested timber into lumber, furniture, or charcoal, while, in the case of illegally mined gold, they may be involved in their refinement and transformation into bars or jewelry. This transformation often occurs at clandestine facilities or in areas with weak governance and enforcement, where criminal networks can operate with relative impunity. In addition, since transportation to consumer countries often involves a complex web of logistical networks, routes, and methods, which may overlap with those used for other forms of organized crime, such as drug or human trafficking, organized criminals may employ various concealment techniques, use fraudulent documents, undeclare goods, or exploit legal loopholes, corrupt public officials, or weak border controls to move goods across states and evade detection during the transit stage.

Finally, in consumer countries, where it occurs the distribution and sale of illegal goods to consumers often unaware (or not) of the environmental and social costs associated with their purchases, either through legal markets and channels, illegal timber or gold may be mixed with legally sourced products and sold as legitimate goods and trafficked wildlife may be sold as pets, traditional medicine, or luxury items. This process involves retailers, wholesalers, brokers, or corrupt officials who facilitate the sale of illegal goods and launder the proceeds of these crimes. With the help of accountants, financial advisors, bankers, and even businessmen, the profits generated from transnational environmental crimes are then laundered through complex financial networks and schemes (e.g., the use of shell companies, offshore accounts, trade-based schemes, the complicity of corrupt financial institutions and professionals, and frauds), to disguise their illegal origin and fund future criminal activities – starting all over again.

In light of this context, it becomes clear that, in different stages of illicit environmental supply chains, specific strategic hubs (e.g., those cited in the previous section), state and non-state actors, and licit/illicit markets become intertwined with other many territories, actors, and activities that play various logistical roles in a highly interconnected supply chain. Throughout the international system, while they might converge due to several aspects, there is no denying that very particular strategic reasons for the emergence of these "networked dynamics" do exist. And transnational criminal organizations are aware of this fact. If we understand the roles played by key territories, actors, and activities, as well as the relationships and interactions between them from a micro and macro perspective, we would then grasp interesting conclusions about the geopolitical rationale of those involved in cross-border illicit markets, including what makes specific territories strategically attractive to criminal nonstate actors in the international system. Likewise, we would be able to properly detect vulnerabilities and intervention points to promote future research or policy initiatives targeting the key nodes and links maintaining their connections not only in illicit environmental supply chains but also in other chains involving illicit markets.

## 4.4 The Geopolitical Role of the Amazon Forest

Throughout this study, we explored how several factors contribute to the geopolitical rationale of criminal non-state actors. We also examined how International Relations theories might be improved to understand these issues, as well as evaluated and compared the work of twenty authors dealing with the connections between "crime" and "geopolitics". Based on our discussions about the strategic hubs for transnational environmental crimes in the Amazon Forest and the networked dynamics of their illicit supply chains, we can now finally delve deeper into the geopolitical role of the Amazon Forest in illicit supply chains.

There are several factors suggesting why the Amazon Forest has a distinct geopolitical role in illicit environmental supply chains compared to other

relevant locations for transnational environmental crimes. In this chapter, we explored how a particular set of these factors contribute to the strategic planning of criminal non-state actors in the Amazonian case. This included natural, geographical, and territorial advantages (i.e., physical particularities); economic circumstances and financial incentives (i.e., socioeconomic conditions); corruption, lack of political will, political priorities, weak governance, law enforcement, and state capacity (i.e., political practices); weak to limited legal frameworks (i.e., legislation); and existing associations among different types of criminal non-state actors, state agents, legitimate corporations, and even local communities (i.e., relationships among legal and illegal actors).

Using this study's approach, the geopolitical role of the Amazon Forest in illicit environmental supply chains can be interpreted as complex and multifaceted. Considering our analysis of the strategic hubs for transnational environmental crimes in the Amazon Forest and the related networked dynamics of illicit environmental supply chains, we can achieve promising remarks about what makes specific territories strategically attractive to criminal non-state actors and interconnected to different types of criminal organizations and illicit markets along source, transit, and consumer stages.

In the source stage, the Amazon Forest acts as a crucial source hub for a variety of illicit goods. Throughout Brazil, Brazil, Peru, Colombia, Bolivia, Ecuador, Venezuela, Guyana, French Guiana, and Suriname, vast reserves of timber, precious minerals, wildlife, and fish turn the rainforest into a global supplier for transnational environmental crimes. In the transit stage, the extensive river system of the Amazon, along with porous borders and the collaboration of corrupt state officials, facilitates the transport and trafficking of illicit goods, whereby rivers serve as major trafficking routes that enable the movement of illegal goods from remote areas to transit countries. Not to mention that Forest's vastness and remote areas provide cover for these activities related to the transit stage. Finally, in the Consumer stage, illicit environmental commodities from the Amazon Forest ultimately reach consumer markets around the globe, such as consumer countries in North America, European Union, and Asia, where they are often mixed with legal supplies to conceal their illicit origin from authorities and customers. Indeed, precisely as the "crime curse" suggests, the richness of its natural environment makes the Amazonian territory vulnerable to illegal natural resource exploitation and all of its converging and associated crimes. It is the home to an extensive array of natural resources whose financial worth in illicit markets can easily convince organized crime groups to specialize in transnational environmental crimes. Indeed, if we could just try to think of an organized criminal, then there can be only one conclusion: the Amazon Forest's geographical, territorial, and ecological characteristics turn its territory into an ideal space for the conduct of environmental offenses.

The unparalleled biodiversity present in the Amazon Forest, unfortunately, turns its territory into a "natural magnet" for transnational environmental crimes. Especially considering its strategic location, its capacity to satisfy the global demand for natural resources, and the often blurred "line" between states and organized crime groups inside the rainforest. First, the region's extensive network of rivers, roads, and airfields provides easy access to global markets, as well as the forest's proximity to major ports and airports makes it a valuable location for the cross-border transfer of illegal goods and services. Similarly, while there are logistical challenges involved in transporting illicit cargo without raising the attention of non-compromised state agencies, the fact that the Amazon Forest is a considerable distance from major urban centers in the region makes it an ideal location for organized crime. The physical imperatives of its territory provide the logistical conditions to coordinate operations and hide laboratories, plantations, or clandestine runaways. Not to mention the tactical advantages given by the most extensive hydrographic network globally, such as several routes which organized criminals could use to escape interventions from law enforcement or move their products into very different areas located in the heart of the continent and beyond.

Secondly, driven largely by consumer countries located in the Global North, the Amazon Forest can satisfy a high demand for natural resources globally that will surely increase in the next decades as our world is marching toward environmental degradation. This historical and growing global demand for natural resources cannot and should not be disconnected from the geopolitical role of the Amazon Forest in illicit environmental supply chains. Thirdly, when states are not directly profiting from their involvement in illicit activities, they are often using organized crime as geopolitical tools, collaborating with criminal organizations, and, at times, fighting back. While corruption, lack of resources, and inadequate law enforcement are factors that contribute to turning other locations in the world into strategically important locations for criminal organizations to operate with impunity, South America appears to have a dangerous "political-criminal" context. From electoral support to the infiltration of police and criminal justice systems, and partnerships between states and organized crime in economic and governing-related affairs, in different degrees, the region has faced several cases in which the government, state institutions, political parties, public and private corporations, social elites, and criminal organizations were part of the most diverse forms of corruption schemes. Since these regional trends are present in the Amazon Forest, levels of corruption, weak governance, lack of political will, and political instability makes the Amazon Forest a unique territory where the conventional Westphalian notions that dictate the foundations of the contemporary international system seem to be constantly challenged – along with it, the inadequate premises of mainstream International Relations theories to understand the geopolitical rationale of criminal non-state actors in the international context. These previous remarks indicate that the geopolitical role of the Amazon Forest in illicit environmental supply chains is not only dictated by its physical particularities but also by a constellation of non-physical factors. This includes structural asymmetries between states from the Global North and Global South, weak governance, corruption, lack of political will, private interests, poor socioeconomic conditions, low risk of state interception compared to other illicit markets, high financial returns for those interested in engaging in transnational environmental crimes, global economic dynamics, limited enforcement structures, and legal frameworks, and the often collusive relationship between legal and illegal actors in different stages of illicit environmental supply chains.

All these remarks suggest that the Amazon Forest plays a key geopolitical role in illicit environmental supply chains as a global hotspot for multiple modalities of transnational environmental crimes, reflecting its rich biodiversity, abundant natural resources, geographic, territorial, and ecological characteristics, global consumption patterns, political, socioeconomic and legal contexts, intricate relationships between legal and illegal actors, and structural asymmetries between states from the Global North and Global South. As a global hotspot for transnational environmental crimes, its role is at the intersection of local, regional, and global dynamics, illustrating the transnational and interrelated nature of organized crime and illicit markets. It is a complex and multifaceted role influenced by many interconnected factors within a complex web of relationships linking specific territories, criminal organizations, and illicit activities along different stages of illicit environmental supply chains, from the local to the global level. It is a unique territory whereby conventional Westphalian notions that dictate the foundations of the contemporary international system seem to be constantly challenged, located in a regional context where the "line" separating states and organized crime is often blurred, capable of satisfying the global demand for natural resources in many parts of the world (at least as long as the rainforest keeps existing), marked by advantageous logistical standards for criminal non-state actors, and constrained by the strategic logics of the so-called "crime curse".

## Conclusion

Grounded in an extensive literature review of scientific material (e.g., institutional reports, scientific articles, and academic books and chapters) produced in the last two to three decades, this study demonstrated the prospects of consolidating the crime-geopolitics nexus as a research agenda and indicated that investigating the interstice between international relations, organized crime, and geopolitics is a path worth exploring. In addition, it also generated plausible inferences supporting its initial hypothesis – indeed, the Amazon Forest has a significant geopolitical role in illicit environmental supply chains and mainstream International Relations theories are inadequate to investigate the factors influencing the geopolitical rationale of criminal non-state actors.

To achieve these objectives, this research explored the complex and multifaceted geopolitical role of the Amazon Forest in illicit environmental supply chains, revealing the influence of both physical and non-physical attributes to understand strategic hubs for transnational environmental crimes in the Amazon Forest and to examine the related networked dynamics of illicit environmental supply chains. Firstly, this study delved into the transnationalist and relationalist foundations guiding this research, whereby it was argued that the academic field of International Relations must adopt a transnationalist and relationalist perspective if it wishes to properly study the geopolitical rationale of criminal non-state actors in the international system. Considering the interrelation of transnational phenomena in a globalized world, the study underscored the transformative potential of transnational organized crime and cross-border illicit markets on both state and non-state actors, demanding the adoption of a broader view that transcends state-centric assumptions, and focusing on the agency of non-state actors. Similarly, this study argued that the geopolitical rationale of criminal non-state actors can (and should) be understood in terms of transnationality and relationality among territories, criminal organizations, and illicit activities.

In contrast with Methodological Nationalism, this study adopted Methodological Transnationalism and Methodological Relationalism as its major methodological orientations. It also combined their insights with those of International Practice Theory. They are combined to allow for the focus and close attention to the interrelationships among the strategic hubs, criminal organizations, and illicit activities that, together, contribute to the existence and functioning of distinct illicit supply chains in the international system. Afterward, this study presented details about its method and research design. While recognizing the disadvantages and limitations of following particular methodological paths to investigate organized crime, the study adhered to a qualitative analysis framework, substantiated by quantitative data related to organized crime and illicit markets. This research drew heavily on secondary sources, relying on an exhaustive literature review of empirical evidence published over the past two to three decades (e.g., books, book chapters, scientific articles, institutional reports, theoretical collectanea, theses, and journalistic evidence).

Secondly, assuming that academic fields should not be confined to their disciplinary boundaries, this research explored how a transdisciplinary dialogue among International Relations, Criminology, and Geography might advance the necessary intellectual efforts to consolidate the crime-geopolitics nexus as a research agenda. In encouraging pluralistic engagement across disciplines as a path to generate future collaborative research projects and policy-oriented research combining the strengths of each field, it also identified some of the gaps in Mainstream International Relations theories and improvements that its scholars should address to understand the geopolitical rationale of criminal nonstate actors. Accordingly, mainstream International Relations theories (i.e., (neo)realism, liberalism, and constructivism) were characterized as inadequate to properly address how criminal non-state actors perceive the geopolitical role of the rainforest in the international system. The study highlighted these theories' inability to appropriately analyze the interconnected web of strategic hubs, transnational criminal organizations, and illicit markets in a globally diverse context, as well as indicated how International Practice Theory can be used to build a particular research methodology oriented toward the theory of practice of organized crime in geopolitical terms.

These intellectual exercises were promoted as a call for rethinking International Relations theories to enhance our understanding of what makes specific territories strategically attractive to criminal non-state actors and interconnected to other territories, different types of criminal organizations, and multiple illicit markets in the international system. To improve International Relations theories, this study proposed to characterize organized crime groups as state-determined "criminal enterprises" and transnational organized crime as "illicit multinationals" influenced by the structural asymmetries between the Global North and Global South. After all, the transnationalization of organized crime and illicit markets is only possible due to the existence of an international system.

Similarly, this study engaged directly with insights coming from debates associated with the relationship between "crime" and "place", as well as those discussions involving geopolitical thought. On one hand, patterns of transnational crime were considered to be deeply interrelated to networked dynamics that connect crimes to specific places in a multiscale way, from local communities to distant regions of the world and vice-versa. In this sense, this study argued for the expansion of our notions of "crime" to encompass those offenses with cross-border nature, as well as investigate the networked dynamics that link different illicit markets and criminal organizations to strategic hubs around the international system. On the other hand, while each one of the versions of geopolitical thought provided relevant insights about how interstate interactions, geographical imperatives, and geopolitical strategies are interrelated, they also can provide relevant insights into the interconnections between international relations, organized crime, and geopolitics. In summary, while this study does not make use of discourse analysis to investigate these interconnections, Critical Geopolitics opens the door for the characterization of organized crime groups as "non-state geopolitical actors", the inclusion of criminal organizations and illicit markets in geopolitical analysis, and the identification of the (non-)physical forces in the shaping of territories as "strategic hubs" for them. Classical Geopolitics, on the other hand, reminds us that geographical locations with specific physical particularities, access to resources, and routes are used by criminals throughout the world as "strategic hubs" in the management of their operations. Geoeconomics contributes to our understanding of the role of resources, supply chains, and economic dynamics involved in the planning of illicit activities.

Finally, the study evaluated and compared the work of twenty authors dealing with the relationship between "crime" and "geopolitics". Although these

scholars produced different contributions with often distinct and similar arguments, they were described here as different parts of the same research agenda – the crime-geopolitics nexus. In summary, after examining their similarities and differences, this study reached a clear and inescapable reality: there is a deep transdisciplinary bond between them that can turn what this study labels as the "crime-geopolitics nexus" into an eclectic space for producing scientific studies concerned with the interstice between international relations, organized crime, and geopolitics.

Considering their contributions, this study built its framework for analysis of the crime-geopolitics nexus. It argues that states and organized crime groups operate within the same complex geopolitical landscape and should both be considered "geopolitical actors". The text emphasizes that these actors utilize transnational crime as a means to achieve their geopolitical objectives, and they plan strategically within the international system. Importantly, the ambitions of states and crime groups can align or differ, but both groups operate in the same geopolitical context. This research also explores the role of strategically important global territories for criminal operations, often with strong localglobal connections. It notes that such "strategic hubs" challenge traditional notions of the state-based Westphalian system and are particularly attractive for criminal non-state actors. These hubs are deeply interconnected with transnational criminal organizations and cross-border illicit markets at all stages of illicit supply chains. Last but not least, its assessments of the crime-geopolitics nexus end by acknowledging that the geopolitical rationale of criminal non-state actors cannot be fully understood without considering the influence of nonphysical factors. Hence, the study's approach was grounded on the idea that we should adopt a broader conception of the role of geography and geopolitics in the manifestation and operationalization of organized crime and illicit markets. An understanding that pays attention to how both physical and non-physical features of a territory (i.e., physical particularities, political practices, socioeconomic conditions, regulatory policies, and relationships between legal and illegal actors) turn it into a "strategic hub" for organized crime groups involved in a single or more illicit market, influences the geopolitical rationale of criminal non-state actors and determines the networked dynamics of illicit supply chains connecting different territories, criminal organizations, and illicit markets in the international context.

In this sense, the study employs a specific set of interdependent and multi-level indicators for analyzing strategic hubs, including physical particularities, political practices, socioeconomic conditions, legal frameworks, and relationships among legal and illegal actors. From geographical locations marked by their border areas with easy access to other countries, strategic routes, and locations suffering from the absence or weak law enforcement and governance to conflict settings, high levels of corruption, inequality, financial returns, regulatory frameworks, and alliances between different types of (non-)state actors, together these indicators are capable of identifying the relevant features that enable the operationalization of organized crime and illicit markets in particular strategic hubs. Similarly, these indicators are multi-level in the sense that they are capable of capturing the ties and interactions that connect these hubs at local contexts and source sites to broader global contexts and transit/consumer sites. They allow for the evaluation of the networked dynamics connecting "nodes" and establishing "links" between different strategic hubs for organized crime groups to other locations, criminal organizations, and illicit markets. In other words, they are capable of identifying the complex web of associations between territories, criminal organizations, and illicit markets involved in different stages of an illicit supply chain.

These indicators were further operationalized into two interrelated variables: the physical and non-physical features of a location for organized crime groups involved in a single or more illicit market and the networked dynamics of illicit supply chains, from the local to the global level. In recognizing the role of criminal non-state actors as non-state geopolitical actors, the connections between the Global North and the Global South in illicit supply chains, and the existing context of a highly fragmented criminal cycle characterized by transnational illicit flows that link different strategic hubs, criminal organizations, and illicit activities in each stage of illicit supply chains, these indicators are capable of capturing relevant factors usually addressed by the literature in an integrated manner. Based on these indicators and the many insights gathered in the previous pages, this study investigates the geopolitical role of the Amazon Forest in illicit environmental supply chains through an examination of the physical and non-physical features of the strategic hubs for transnational environmental crimes in the Amazonian territory and the networked dynamics of illicit environmental supply chains, from the local to the global level. Last but not least, this research even indicated possible paths for future research involving the crime-geopolitics nexus.

Thirdly, this research has illuminated the complexity of transnational environmental crimes from a local, regional, and global perspective. On one hand, it discussed definitions of "environmental crimes" and "transnational environmental crimes" and identified their modalities. These include illicit logging, timber trafficking, illicit mining, trafficking in precious metals, wildlife trafficking, illegal fishing, waste disposal, and trafficking, and the illegal trade in ozone-depleting substances. On the other hand, it identified how transnational environmental crimes can be acknowledged as an "enterprise crime" that has similar attributes to other more conventional cross-border illicit markets, whereby criminal organizations see in environmental crimes the opportunity to meet the demand for the provision of an illicit product or service. Concurrently, this study also demonstrated how the dynamics of global illicit environment flows point to a specific direction: consumer zones for transnational environmental crimes are largely located in the Global North, whereas source zones are mostly present in the Global South and transit zones take on alternative shapes depending on the case. In this context, it also analyzed some of the major dynamics of transnational environmental crimes by exploring the different illicit activities and criminal actors involved in each stage of illicit environmental supply chains, as well as the major source, transit, and consumer countries for transnational environmental crime based on a regional and global perspective. At last, after exploring many of the deadly consequences created by transnational environmental crimes, this research forecasts the continued existence and evolution of transnational environmental crimes, with criminals exploiting the earth's resources for substantial profits.

Finally, the study delves deeper into demonstrating how the Amazonian case is a strong indicator of all the theoretical discussions promoted in this research. After all, the Amazonian case provided insightful considerations as to how cross-border illicit markets, transnational criminal organizations, and territories become intertwined in the international system. It begins by explaining why the Amazon Forest is a case worth analyzing based on four arguments: the limitations of mainstream International Relations theories in South America, Brazil, and the Amazon Forest; the context of insecurity in these locations; the geographical, territorial, and ecological distinctiveness of the Amazon Forest; and the effects of the Bolsonaro administration's (anti-)environmental policy [2019-2022].

In summary, while mainstream International Relations theories are useful for understanding some aspects of South American international relations, they often miss significant complexities. Therefore, there is a need for a theory that is contextually embedded for a more accurate understanding of the region's dynamics. The study further asserted that the issues of insecurity in South America, Brazil, and the Amazon Forest involve a complex array of non-military factors and violent (non-)state actors, which means they go beyond traditional interstate conflicts and are thus relevant subjects for analysis. This research also emphasized the need to consider the geographical, territorial, and ecological distinctiveness of the Amazon Forest due to its role in shaping patterns of organized criminal activity. Lastly, it highlighted the relevance of considering the effects of the Bolsonaro administration's anti-environmental policy, which has created an environment conducive to transnational environmental crimes.

Afterward, drawing on the many contributions evaluated and compared in this study, relevant considerations about the strategic hubs for transnational environmental crimes in the Amazon Forest were achieved based on a transdisciplinary perspective. Initially, it was stated that strategic hubs for transnational environmental crimes in the Amazon Forest are largely defined by unique physical features, such as remoteness, limited state presence, challenging terrain, and porous borders, since these attributes create an environment for criminal networks to operate with relative impunity, providing a natural cover for environmental crimes. However, this study also demonstrated that it is equally crucial to acknowledge the role of non-physical features of these strategic hubs in the geopolitical rationale of criminal non-state actors, such as, for example, emerging "partnerships" between state authorities and criminal organizations, inadequate governance, insufficient state regulation, and overlap between licit and illicit spheres. Additionally, it was also asserted that criminal organizations operating within these hubs exhibit varying degrees of organizational sophistication (i.e., ranging from loosely connected networks to meticulously organized structures) and that some of these strategic hubs are often characterized by pre-existing or emerging alliances, either *de facto* or of convenience, between legal and illegal actors.

Given how cross-border illicit activities within these hubs often defy traditional principles associated with the Westphalian system of states, this research argued that it is important to analyze these hubs considering relationships between micro and macro levels of analysis. After all, these strategic hubs for transnational environmental crimes exist within the connections between local and global contexts. They are inherently situated within a complex matrix of interrelationships linking specific territories, criminal organizations, and illicit activities across various stages of illicit environmental supply chains, from the local to the global level.

When examining the nine jurisdictions of the Amazon Forest, this study applied its set of interdependent and multi-level indicators to identify similarities and differences between them. In summary, the first indicator, "physical particularities", recognized that all nine jurisdictions are marked by biodiversity and intricate physical characteristics, such as dense tropical forests, expansive rivers, formidable terrains, and diverse landscapes. These unique features often provide an ideal cover for illicit activities and make monitoring and enforcement challenging. While each country presents unique geographical challenges, the diverse environments of the Amazon region, Andes mountains, Caribbean coasts, and vast grasslands provide fertile grounds for illegal markets, including transnational environmental crimes. The second indicator, "political practices" captured other relevant issues, such as widespread corruption, lack of political will, weak governance, and law enforcement capabilities are common features. Additionally, the use of this same indicator has demonstrated that political agendas often prioritize private interests and short-term economic gains, exacerbating environmental degradation. The blurred lines between states and organized crime due to corrupt practices within commercial sectors and law enforcement were also identified as significant factors facilitating environmental crimes.

The third indicator, "socioeconomic conditions", highlights similar conditions across these countries that influence transnational environmental crimes. High levels of poverty, limited access to education, and scarce economic opportunities in rural communities often compel locals to participate in illegal activities. Likewise, the profits generated by these activities often surpass income from legal alternatives, making them appealing to locals and criminal organizations. The low risk of detection and high profitability of these activities also render them attractive options for numerous traditional organized crime groups and criminal networks looking to prosper by exploiting these regions' natural resources.

The fourth indicator underlines that despite having specific environmental protection laws and regulations, the nine jurisdictions have limited or weak legal frameworks that may inadvertently facilitate environmental crimes. Legal gaps, ambiguous regulations, weak enforcement mechanisms, and political pressures to deregulate environmental laws contribute to a lack of compliance with environmental regulations. Additionally, unique challenges such as political crises, armed conflicts, and varying ecological contexts further complicate enforcement efforts against environmental offenders. The fifth indicator focuses on the complex network of associations between legal and illegal actors. Legitimate companies may overstep boundaries by exploiting resources beyond permitted limits, or illegal actors may operate under the guise of legal entities. Moreover, numerous actors, including organized crime groups, corrupt state agents, large landowners, local communities, and compromised corporations, form an interconnected web that enables the proliferation of transnational environmental crimes. The collaboration between these actors allows illicit markets to persist and flourish, and their role in strategic hubs for transnational environmental crimes is extremely important.

After identifying the major strategic hubs for transnational environmental crimes in the Amazon Forest, the study delved deeper into the networked dynamics of illicit environmental supply chains, revealing that they follow similar patterns across different countries and modalities of transnational environmental crimes. Initially, in the case of illicit logging and timber trafficking, this study indicated a typical operational pattern that begins with the harvesting of timber in strategic hubs scattered throughout the Amazon Forest. The logs are then transported to processing centers, facilitated by river systems and roads. From there, they are shipped to consumer markets in North America, the European Union, and China. At these destinations, the illegally sourced timber is often mixed with legal timber to obscure its origins. The entire process highlights how the illicit environmental supply chain connects remote areas of the Amazon Forest with global markets, reflecting the interconnected nature of transnational environmental crimes.

In the case of illicit mining and trafficking of precious minerals, hotspots like the Madre de Dios region in Peru, the "Orinoco Mining Arc" in Venezuela, Sipaliwini in Suriname, and the Brazilian states of Pará and Mato Grosso serve as primary locations for sourcing. Illegally mined minerals are then smuggled across borders, often mixed with legal supplies to mask their origin, and are ultimately shipped to consumer countries like the United States, China, and the United Arab Emirates. Concerning wildlife trafficking, various animal, plant, and insect species are captured from regions with high biodiversity such as Brazilian states forming the "Arc of Deforestation", the Madre de Dios region in Peru, and areas within the Colombian and Ecuadorian Amazon. These captured species or their parts are transported through regional markets and smuggled out to international pet and medicine markets, primarily in the United States, Europe, and Asia. At last, in the case of IUU fishing, the source areas are typically located in coastal or river areas with abundant marine biodiversity. Illegally caught fish are mixed with legal catches and processed either on high seas or at ports, thus making their origins difficult to determine. The final destinations are usually international markets with high seafood demand, especially in the European Union, the United States, and Asia.

Across all these activities, several actors, including illegal loggers, land-grabbers, gold miners, drug trafficking groups, local gangs, criminal networks, illegal armed groups, and corrupt public officials, play crucial roles in the process. They employ various methods to evade detection, thus perpetuating these environmental crimes. After all, transnational environmental crimes often involve collaboration between distinct organized crime groups, local communities, small-scale operators, public officials, corporations, and other actors, creating a complex network of relationships that form these illicit supply chains. Meanwhile, after elucidating the networked dynamics of these different environmental supply chains, it becomes clear the strong interconnectedness between local contexts in the Amazon Forest and global contexts in other parts of the world for transnational environmental crimes.

The Amazon Forest, due to its extensive natural resources and geographical features, becomes a primary target for such illicit activities. In the source stage, the rainforest serves as a major hub for the illegal extraction of resources like timber, precious minerals, wildlife, and fish. During the transit stage, the vast river system, porous borders, and extensive remote areas facilitate the trafficking of these resources, often through the aid of corrupt officials. In the consumer stage, these illegal goods reach international markets, often getting mixed with legally sourced items, thereby evading detection and tricking unaware consumers. These activities are part of a complex cycle, in which the proceeds from these illicit trades are laundered through intricate financial schemes and channels, funding future criminal activities.

Finally, using this study's approach, the geopolitical role of the Amazon Forest in illicit environmental supply chains can be interpreted as complex and multifaceted. The Amazon Forest, due to its extensive natural resources and geographical features, becomes a primary target for such illicit activities. In the source stage, the rainforest serves as a major hub for the illegal extraction of resources like timber, precious minerals, wildlife, and fish. During the transit stage, the vast river system, porous borders, and extensive remote areas facilitate the trafficking of these resources, often through the aid of corrupt officials. In the consumer stage, these illegal goods reach international markets, often getting mixed with legally sourced items, thereby evading detection and tricking unaware consumers. These activities are part of a complex cycle, in which the proceeds from these illicit trades are laundered through intricate financial schemes and channels, funding future criminal activities.

From a physical perspective, the Amazon Forest's biodiversity, extensive river networks, remoteness from major urban centers, and proximity to major ports make it a logistical hub for illegal activities. These physical features facilitate the extraction, transportation, and trafficking of illicit goods, from raw materials to transformed products, offering strategic advantages for criminals to evade law enforcement interventions. However, from a nonphysical perspective, the Amazon Forest's vulnerability to environmental crimes is deeply embedded in socioeconomic, political, legal, and relational contexts. Factors such as high global demand for natural resources, driven largely by consumer countries in the Global North, combined with regional and national corruption, political instability, weak governance, socioeconomic disparities, and the blurred lines between legal and illegal actors all contribute to the forest's strategic importance in transnational environmental crimes. This dynamic highlights how these crimes, while having a local origin, are fueled by international demand and facilitated by global economic systems and power structures, which further indicates that the Amazon Forest's geopolitical role is also reflective of the inherent asymmetries between the Global North and Global South.

In summary, all these remarks suggest that the Amazon Forest plays a key geopolitical role in illicit environmental supply chains as a global hotspot for multiple modalities of transnational environmental crimes, reflecting its rich biodiversity, abundant natural resources, geographic, territorial, and ecological characteristics, global consumption patterns, political, socioeconomic and legal contexts, intricate relationships between legal and illegal actors, and structural asymmetries between states from the Global North and Global South. As a global hotspot for transnational environmental crimes, its role is at the intersection of local, regional, and global dynamics, illustrating the transnational and interrelated nature of organized crime and illicit markets. It is a complex and multifaceted role influenced by many interconnected factors within a complex web of relationships linking specific territories, criminal organizations, and illicit activities along different stages of illicit environmental supply chains, from the local to the global level. It is a unique territory whereby conventional Westphalian notions that dictate the foundations of the contemporary international system seem to be constantly challenged, located in a regional context where the "line" separating states and organized crime is often blurred, capable of satisfying the global demand for natural resources in many parts of the world (at least as long as the rainforest keeps existing), marked by advantageous logistical standards for criminal non-state actors, and constrained by the strategic logics of the so-called "crime curse".

By providing a comprehensive assessment of an often-underestimated feature of our world, I hope the reflections gathered within this work contribute to advancing discussions interested in enhancing our knowledge of the strategic logic influencing the illicit activities certainly being planned and conducted at this very moment. Also, as our common future might depend on this type of initiative, this study is an indication that we need to further develop evidence-based research dedicated to understanding how those engaged in cross-border illicit markets see the international system in geopolitical terms. After all, the devastation wrought by transnational organized crime, cross-border illicit markets, and, more specifically, transnational environmental crimes is a security threat to us all – states and (non-)human communities. The time is now for initiatives promoted to safeguard our planet for future generations, especially considering how many criminal entrepreneurs are attempting to gain substantial profits by plundering and destroying the Earth's flora and fauna. Indeed, if organized crime and illicit markets are often at the center of this scenario, along with other state and non-state actors), scholars and practitioners should consider redirecting their attention, efforts, and resources to the study of the crime-geopolitics nexus.

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