TRIANGULAR RELATIONS: CHINA, LATIN AMERICA, AND THE UNITED STATES

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To the memory of my father, Julio

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LIST OF ABBREVIATIONS

ABAE Agencia Bolivariana para Actividades Espaciales

AFP Agence France Presse

ALBA Alternativa Bolivariana para los Pueblos de América

APTA Andean Trade Promotion and Drug Eradication Act

ASAT Anti-satellite System

ASEAN Association of Southeast Asian Nations

CAF Comunidad Andina de Fomento

CARSI Central America Regional Security Initiative

CATIC China National Aero-Technology Import and Export

CBERS China-Brazil Earth Resources Satellite

CELAC Comunidad de Estados Latinoamericanos y Caribeños

CNNC China National Nuclear Corporation

CONAE Comisión Nacional de Actividades Espaciales

DEA Drug Enforcement Administration

DPA Deutsche Presse Agency

EAI Enterprise for the Americas Initiative

EASE Evolutionary Acquisition for Space Efficiencies

ECLAC Economic Commission for Latin America and the Caribbean

EMBRAER Empresa Brasileira de Aeronáutica

ES Event Synchronization

FADEA Fábrica Argentina de Aviones

FBI Federal Bureau of Investigation

FTAA Free Trade Area of the Americas

IAEA International Atomic Energy Agency

ICSID International Centre for Settlement of Investment Disputes

IDB Inter-American Development Bank

IFI International Financial Institution

IMF International Monetary Fund

FDI Foreign Direct Investment

LAC Latin America and the Caribbean

North American Free Trade Agreement NAFTA

NDB New Development Bank

NGO Non-governmental Organization

OAS Organization of American States

OECD Organisation for Economic Co-operation and Development

Petróleos de Venezuela Sociedad Anónima **PDVSA**

SIPRI Stockholm International Peace Research Institute

STRATCOM Strategic Command

TBA Tri-Border Area

UN **United Nations**

United States of America U.S.

USAID United States Agency for International Development

USD United States Dollar

WTO World Trade Organization

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Chapter I

Introduction

As in other regions around the world, China has growing influence in Latin America and the Caribbean [...]. In my view, just as we have 'pivoted' to the Pacific, China has pivoted to the Western Hemisphere. It views good relations with the region as useful for two reasons: to gain access to natural resources and to increase its global influence (General John Kelly, Commander of the U.S. Southern Command, 2015).

In recent years, the growing economic and political presence of China in Latin America has raised concerns among officials in the United States. For instance, General Bantz J. Craddock, Commander of the U.S. Army's Southern Command, warned about the long-term goals of China in Latin America. According to him, these not only involved seeking access to natural resources, but also "... offering resources to cash-strapped militaries and security forces with no strings attached" (2006: 26-27). For her part, Hillary Clinton (2009), as Secretary of State, had also expressed her concerns on the foray of China - named by her alongside Iran - into countries such as Bolivia and Venezuela. The U.S.'s concerns are still ongoing, as General John Kelly (2015) warns that China has "pivoted" the Western Hemisphere.

The Chinese arrival in Latin America has also provoked questions in academia on its possible implications for the U.S. Ellis (2015) suggests that the presence of China in Latin America generates negative consequences, and hence undermines the strategic position of the U.S. in the Western Hemisphere. Dumbaugh and Sullivan (2005) consider that the interests of China in the region are not only economic, but also political, and diplomatic, which would entail long-term implications for U.S. interests in the region. Additionally, Hakim (2006), Pérez Le-Fort (2006), and Hsiang (2009) have argued that for Latin American countries,

China is not an alternative to U.S. predominance, but rather presents economic and political opportunities for Latin American countries that undermine U.S. predominance. Generally, however, a cross-section of academia perceives the growing Chinese involvement in the region as a threat to U.S. interests (Bachelet 2005; Mearsheimer 2005, Ellis 2004/2007/2012).

The relations of China with Latin American countries cannot be analyzed without the U.S. being considered as an important variable in this relationship. Similarly, the contemporary Latin America-U.S. relationship would be incomplete if we do not take into account China's engagement with the region. The thesis argues that the interactions between China and the Latin American countries, and the latter's encounters with the U.S. are triangular relations. Triangular relations are interactions between three states that produce complex processes of cooperation and conflicts among them. Since there are three sides interacting, the conduct of their apparent bilateral relations produces almost simultaneous effects between the three sides.

So far, little effort has been devoted by scholars to the analysis of these triangular relations comprised by China, the Latin American countries, and the U.S. One of the reasons that these relations are under investigated is due to the lack of a conceptual framework of triangular relations, since this involves an analysis of the almost simultaneous effects between the three parties. As Ellis (2012) has noted, the problem in referring to the China-U.S.-Latin America relationship as a "triangle" is that it had analytical problems that needed to be explored by scholars, e.g. there are many triangles with different Latin American actors, although the concept had intuitive validity (Ellis 2012:1). This thesis proposes a conceptual framework for triangular relations, and examines to what degree has China's advance in Latin America produced effects at the relations of Latin American countries with the U.S. This effect implies more or less conflicts, or cooperation between Latin America, and the U.S., as a consequence of the Chinese-Latin American relations.

Since the U.S. government's assertion of the Monroe Doctrine in 1823, many U.S. policymakers and academics have referred to the Latin American region as the U.S. sphere of influence (Smith 1981; Schoultz 1987; Dent 1995; Molineu 1990; Williams 2012; O'Toole 2013; Hast 2014; Dominguez and Covarrubias 2015). Today, some fear that China challenges the economic, political, and strategic interests of the U.S. There is some available evidence that supports this assessment: China has become the major trade partner in certain Latin American countries, such as Brazil, Chile, and Peru, replacing the U.S. China is also the main

investor in Brazil since 2017 and the major source of financing for Venezuela, a country that openly refers to China as an alternative partner against the U.S. The People's Republic has also established so-called "strategic partnerships" with Argentina, Brazil, Chile, Mexico, Peru, Uruguay, and Venezuela. The related bilateral treaties aim at forging close economic, political, and strategic cooperation. These strategic partnerships have been diplomatic instruments that distinguish bilateral relations as priorities, turning them into comprehensive interactions focusing on long-term objectives, such as the transformation of the global financial structure.

In the eyes of some Latin American countries, China offered an alternative to the western style of cooperation, which often required adherence to fiscal or other policy requirements as a pre-condition for providing of funds. Among other things, the increasing presence of China in Latin America is explained by the policy of negligence of the U.S. toward Latin America (Perez-Le Fort 2006; Trombly 2010), as well as a result of the strategies of Latin American countries looking to diversify their partners while simultaneously balancing the U.S. (Alternani 2004/2011; Campos de Mello 2000). According to Chávez, China seems to be the actor that enabled Latin American countries to increase their autonomy from the U.S. (2015:91).

For its part, China has had multiple motives for its involvement in Latin America. Foremost among them is Latin America's natural resource base. Latin America has provided natural resources to fuel the process of industrialization in China. At the same time, the Chinese manufactured products have found a big market in the Latin American countries. Latin America and the Caribbean is also the region in which China is concentrating its efforts to diplomatically isolate Taiwan. Also important is the fact that Latin American countries have been willing and convenient partners for expanding China's satellite diplomacy. Moreover, China has found in the Latin American countries not only strategic partners to counterbalance U.S. predominance in international organizations, but also to keep U.S. presence in Asia under check (Ellis 2013; Yu 2015).

Triangular relations consist of three vertices interacting. According to Ellis (2012), there are three interdependent vertices: "the impact of the China-Latin America relationship on the United States, the impact of the U.S.-Latin America relationships on the PRC and the impact of the U.S.-China relationship on Latin America" (Ellis, 2012:5). This thesis analyzes the cases of triangular relations between (a) Argentina, China, and the U.S.; (b) Brazil, China, and the U.S.; and (c) Venezuela, China, and the U.S., from 2000 to 2015.

This study proposes an interdisciplinary approach to triangular relations. It is based on the adaptation of the study of synchronization, in physics, in the context of International Relations. While originally developed in physics, synchronization has in the meantime been applied in medicine, meteorology, sociology, and other fields of study. The study of synchronization analyzes the interactions between two autonomous systems and an additional third one that affects the interactions of the first two. Thus, the synchronization theory offers a way of conceptualizing three-way interactions and contains in itself a method that might be applied to triangular relations between states.

This thesis defines synchronization as periods of quasi-simultaneous interactions, and influences between three states. These interactions and influences are named quasisimultaneous, and not simultaneous, because the interactions and influences are produced in the same period, yet are not immediate. The influences in this context may be understood as the more cooperative or conflictive responses among three states. One of them can have more influence over the bilateral relationship of the other two states. States synchronize on these periods where the three states' behaviors are directly affected by their triangular relations. Thus, one can observe triangular relations, but not necessarily witness synchronization between them.

For this work, the unit of analysis will be the state. Although states are not autonomous in the same sense as objects in a physical system, it is relatively accepted among scholars to treat states as independent unitary actors, even while recognizing the limits of this presumption. States can interact independently, but also have the potential to interact with periods of influences in their behavior to each other.

Synchronization as a theoretical framework is necessary for explaining triangular relations for several reasons. First, it provides guidance on the degree to which the quasisimultaneous interactions occur. It shows state behavior that is apparently not interconnected, and produces mutual effects. Second, it contributes to understanding the dynamics of the interactions in triangular relations. The dynamics of the interactions refers to the presence of cooperation, and conflicts between the three states. Third, it also has practical uses for policymaking; it is an instrument for analyzing potential effects of decisions on bilateral relations that may have for third states. Additionally, this thesis applies event synchronization as a

method. At this point, it is pertinent to highlight that synchronization is the theoretical framework and event synchronization is one of the methods that this thesis uses.

This chapter is divided into nine sections. The first section is a briefing of China's advances in Latin America, and its strategic partnerships in the region. Section 2 then moves on to consider the U.S.'s engagement in Latin America. Section 3 goes on to discuss the bilateral relations between China, and the U.S. Section 4 introduces the triangular relations between China, Latin American Countries, and the U.S. The idea is to have an overview of what we will analyze in detail in every one of the following chapters. Section 5 assesses the research questions. Section 6 provides an explanation of the research design. Section 7 goes on to present the variables. Section 8 presents the methodology for understanding triangular relations between states through synchronization. The last section outlines what this thesis does and what it does not.

1. China's Advance in Latin America

The beginning of the new millennium saw an acceleration and amplification in Chinese-Latin American relations, not just in commercial, but also in political terms. The visit of the president of China, Jiang Zemin, in 2001 to Argentina, Brazil, Chile, Cuba, Uruguay, and Venezuela, is considered to herald the beginning of the strong Chinese presence in Latin America (Zheng 2009; Zhu 2010; Adams 2015; Paladini 2016; Shoujun 2016). For instance, nobody at that time could have predicted the Chinese approach to Venezuela within 15 years; Venezuela would become the most important recipient of loans in Latin America (Ray, Gallagher, and Sarmiento, 2016).

In areas such as lending, trade, and investment, China has notoriously advanced its presence in Latin America. The bulk of this lending has been directed towards four countries: Argentina, Brazil, Ecuador, and particularly, Venezuela. Sino-Latin American trade increased twentyfold from 2001 to 2015, making China the leading trading partner for countries such as Brazil, Chile, Peru, and Uruguay. Since 2010, China has emerged as a key source of new investments in the region. At the same time, U.S. exchanges with Latin America are still bigger sources of investments and aid; these have also declined in recent years. The Chinese Foreign direct investment (FDI) in Latin America has grown significantly, invested mainly in mining, hydrocarbons, and services such as telecommunications, financial services, energy

distribution, and retail sectors. Besides, Brazil and Peru were the main beneficiaries of Chinese investment in infrastructure projects in the region (OECD/ECLAC/CAF 2015:154).

In Latin America, the Chinese advances in lending, trade, and investments in the region have been accompanied by its renewed diplomatic and political overtures. China argues that the multipolarization is irreversible and with it come not only new challenges, but also new opportunities. As Xi argues, the world trends to global multipolarity and therefore "China has actively developed global partnerships and expanded the convergence of interests with other countries" (2017). China recognized that Latin America and the Caribbean as developing countries have an important presence in the international arena. China admitted that strengthening cooperation with developing countries is an essential part of Chinese foreign policy (White Book 2008; China's Policy Paper on Latin America and the Caribbean, 2016).

China has also increased its participation in multilateral regional forums. Until 2004, in the Americas, China only participated as a formal observer in the Organization of American States (OAS). In the Caribbean, China was part of the Caribbean Development Bank. But since 2008, China became a member of the Inter-American Development Bank (IDB), thus enabling China to invest in large regional infrastructure projects. In addition, China has looked to strengthen relations with the Comunidad de Estados de América Latina y el Caribe (CELAC) in 2015. According to Niu, CELAC is an inclusive platform and a good opportunity for China's strategy among Latin American countries (2015: 44).

1.2. Introducing China's Bilateral Strategic Partnerships in Latin America

This section discusses strategic partnerships as an important tool for engagement in Chinese Foreign Policy. It then introduces the characteristics of the Chinese bilateral comprehensive strategic partnerships with Argentina, Brazil, and Venezuela respectively. The intensity of these bilateral relations between China and its strategic partners differ from those of other countries in the region. The strategic partnerships distinguish bilateral relations as priority. Bilateral strategic partnerships are diplomatic instruments that strengthen economic relations, and political cooperation with strategic goals.

Academics understand strategic partnerships in general as emphasizing different characteristics. According to Kay (2000), strategic partnerships are a form of cooperation intended to establish influential spheres; to Ko (2006), strategic partnerships are a unique way of negotiating in a unipolar system; Cameron and Yongnian (2007) see strategic partnerships as bilateral close relations in several arenas; Nadkarni (2010) believes that strategic partnerships are unique diplomatic instruments to pursue multidimensional bilateral, regional, and global issue agendas; and finally, Ellis (2009) views strategic partnerships as a tool of recognition, a mechanism for coordination, and a way to resolve disputes.

Strategic Partnerships are also alternatively understood as a new development in the practice of bilateralism in the post-Cold War era (Goldstein 2001; Nadkarni 2010). According to Nadkarni (2010), military alliances are not the most desirable approach at the global level for two main reasons: (1) the superior military capability of the U.S. and (2) the everincreasing economic globalization. However, and contrary to Nadkarni, if we look at the current international system dynamic, we observe that the military alliances still have an important role. Thus, the strategic partnerships could be seen as a new strategic-diplomatic approach that does not replace military alliances.

The establishment of this kind of bilateral relations with some Latin American countries implies the Chinese recognition that these partners are key in the region and that they can play an important role in the national interests of each partner. The Chinese strategic partners have at least two of the following aspects in common: they are emerging powers, they are important suppliers of natural resources to China, and they are China's partners in international forums. The strategic partnerships include some elements, such as pragmatic state behavior, institutionalization of the bilateral relationship, as well as the recognition of mutual regional and global interests.

Political coordination in international forums does not necessarily imply that the partners agree on all issues, but is a central element for all strategic partnerships. They are motivated by a common objective that is to transform global governance for mutual benefit and multipolarization, which has a direct impact on the influence that the U.S. exercises in the international system. The Chinese strategies show that there are at least two complementary routes to transform global governance, both of them realizable with its strategic partners. One way is to transform the current international institutions and the other is to replace existing institutions with new ones. Therefore, China and its partners do not have permanently adapt themselves to international institutions, but international institutions can be adapted by and for them. Thus, there is a connection between the strategic partnerships as a bilateral engagement tool, and its use by China to transform multilateral institutions.

This thesis studies the comprehensive strategic partnerships of China with Argentina, Brazil, and Venezuela. This is an important part of the interactions between China and those countries, in understanding the triangular relationships of each with the U.S. Every one of these strategic partnerships shares some characteristics such as the presence of high level of economic activity, political cooperation, investment, and coordinating mechanisms. The Chinese bilateral strategic partnerships with countries such as Argentina, Brazil, and Venezuela show that their contents are similar, but the intensity among sectors are different among the three cases. The strategic partnership also reflects that the China's interactions with its partners is not only about trade and gaining access to natural resources – there is evidence of political-strategic structure too. These strategic partnerships are analyzed extensively in Chapter IV.

2. The U.S. engagement in Latin America

There are several forms to characterize the U.S. engagement in Latin America. This thesis focuses on the "sphere of influence" as the main characteristic, in order to better explain the U.S.'s reactions to China-Latin American relations. The Latin American region has been seen as the U.S.'s sphere of influence (Smith 1981; Schoultz 1987; Dent 1995; Molineu 1995; Williams 2012; O'Toole 2013; Hast 2014; Dominguez and Covarrubias 2015). Despite the increasing autonomy among Latin American countries, China's engagement in Latin America has raised concerns among officials in the U.S., reviving the idea that the great power in its own region with some apprehension, the presence and potential influences of an extraregional power.

The concept of the "sphere of influence" recognizes a country that plays a significant role in influencing the alliances and bilateral relations that other countries in this region may have. "A "sphere of influence" can be best described then as a geographic region characterized by the high penetration of one superpower to the exclusion of other powers and particularly of the rival superpower" (Kaufman 1976: 11). According to Hast, the "sphere of influence" has two main elements to it: "exclusion of other powers and limitation of the independence or sovereignty of the influenced state" (2014: 6). The element of freedom of

action was also included in the concept by Keal: "A sphere of influence is a determinate region within which a single external power exerts a predominant influence, which limits the independence or freedom of action of political entities within it" (1983: 15).

The following paragraphs illustrate the U.S. engagement in Latin America in areas, such as the U.S. military presence in the region, financial aspects, democratic support, and trade treaties with Latin American countries.

In the post-Cold War era, the U.S. military presence in Latin America has been effectively almost zero, with the exception of the network of "quasi-military" bases (Bitar, 2016) installed in Central and South America as a part of the U.S.'s support for anti-drug operations. According to Bitar, there is a persistent policy of the U.S. in the region installing "quasi-bases" in the Americas, especially in the Pacific coast, in order to combat drug trafficking and counter security threats. According to this author, the "quasi-bases" are "informal and secretive base-like arrangements that supports U.S. military operations in the Latin American Region" (2016: 1).

An icon of the U.S. presence in Latin America has been the "Plan Colombia". The size of the U.S. AID influenced Colombia and interests in its foreign affairs. The Plan Colombia was implemented in 2000 as a counter-narcotics and military strengthening strategy, a partnership in order to combat narcotics, train law enforcement agencies, and promote economic growth. The U.S. supported the program for fifteen years with approximately USD 10 billion, directed mainly to military-police assistance and economic-institutional assistance. Moreover, in 2010, Colombia and the U.S. signed the "U.S.-Colombia Defense Cooperation Agreement", under which Colombia would permit the installation of seven U.S. military bases. The agreement drew strong reactions from a number of important public figures. It was immediately and strongly questioned by the president of Venezuela, Hugo Chávez, and also by the president of Brazil, Lula da Silva, who saw the agreement as an instrument that threated Venezuelan national security and undermined Brazil's regional leadership. Eventually, Colombia's highest court ruled against the Agreement. But there are still more U.S. initiatives in the region like the Central America Regional Security Initiative (CARSI), and the Plan Merida.

In addition to security engagement, U.S. activities in the region include areas, such as institution building, development assistance, and trade promotion. In South America, the Andean countries such as Bolivia, Colombia, Ecuador, and Peru have received the highest amounts of U.S. foreign aid under programs that support governance, health and population, agriculture, and that are directly related to the drug war (USAID). Aid to Haiti, which is the second-largest recipient of U.S. aid in the Latin American and Caribbean region has also focused on governance, but has received it mainly through humanitarian programs. However, the efforts of the U.S. to maintain its predominant influence in the Latin American region in the post-Cold War era have actually been exercised mainly through engagement with the region on economic issues.

In 1990, the George H. W. Bush administration proposed the Enterprise for the Americas Initiative (EAI). This was an attempt at trade liberalization, one that offered a reduction in official debt and was a measure to increase U.S. investment in Latin America. The EAI involved the idea that economic prosperity could also ensure democracy. It had three main components: "(T)he development of free trade agreements, including the North American Free Trade Agreement (NAFTA); a USD 1.5 billion grant fund to support the implementation of investment reform programs; and, a program of official debt relief".1 . Of all these programs, only the NAFTA ultimately materialized.

However, the enthusiasm from the U.S. side to expand the liberalization of trade and investments with the Americas still persisted. During the First Summit of the Americas held in Miami in 1994, President Clinton proposed the Free Trade Area of the Americas (FTAA). The attendees, mainly heads of state, approved a Plan of Action, which first installed 12 working groups at the ministerial levels in order to identify possible approaches for further negotiations. Nine ministerial meetings took place from 1995 to 2005. During the presidential summits in Quebec, Miami, and finally in Mar del Plata, demonstrators staged protests in the streets against globalization and the hostile public opinion against the U.S. was high (Wainwright and Ortiz 2006; Jiang 2006). The FTAA met its demise in 2005 during the last summit held in Mar del Plata, Argentina, partially, as a result of Brazilian and Venezuelan opposition.

¹ https://www.usaid.gov/biodiversity/TFCA/enterprise-for-the-americas-initiative

The demise of the FTAA in 2005 was accompanied by anti-American rhetoric in several Latin American governments. The FTAA failed, partially, as a result of the ideological divisions in the region. Two models of regional integration in the Americas were in open confrontation, liberalization and protectionism. The impossibility of establishing a free trade area in the Americas the U.S. to sign bilateral free trade agreements (FTAs) with some countries in the region. The U.S. has by now signed bilateral FTAs with Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, Panama, and Peru. However, the U.S. could not sign this kind of agreement with bigger economies in the region, such as Brazil, and Argentina, because of their political orientation and to some degree their structural competition.

During the Obama administration, the approach was officially led by the policy of "equal partnerships". The concept of "equal partners" invites Latin America to share responsibilities with the U.S., such as institution building, development, and trade promotion. It also includes the proposal to engage the Latin American countries for working together on regional and global issues, and not just focus on domestic aspects. While the Obama approach to Latin America seemed novel to some, the Chinese had used a similar tone in engaging the region, emphasizing on the concept of South-South cooperation. Even though, China and the U.S. characterize differently "equality", China has successfully managed to reduce threat perceptions among the Latin American countries and, as such, has a clear advantage over the U.S. in its relations with the region.

3. China-U.S. Relations

The emergence of China as a global power poses questions about its possible impact on the U.S. as the current superpower. The continued rise in the importance of China within the international system has been identified as the single most important geopolitical challenge that the U.S. will face in the coming decades (Fukuyama, Ikenberry, and Wright 2005; Rudolf 2006). It is also expected that the China-U.S. relationship will dominate the future of international politics and will produce an eventual transition from a unipolar to a multipolar order (Bergsten 2008; Gu, Humphrey, and Messner 2007).

Some academics expect future confrontations between the U.S.—as the current hegemonic power, albeit one in decline—and China—the rising power (Layne 2008; Breslin 2013; Mearsheimer 2014). As a result, academic analyses include likely scenarios ranging from military confrontation between China and the U.S. (Brzezinski and Mearsheimer 2005) to intermediate conflicts between China and the West over economic and geopolitical concerns (Kupchan 2001). Alternatively, institutionalists have mainly proposed cooperative behavior in international institutions, with the predicted cultivation of cooperative relationships alongside peaceful transitions (Xintian 2009).

A number of authors who place a stronger focus on the security dimension of IR emphasize the potential for conflict occurring due to: the uncertainties stemming from the shift to a multipolar order (Waltz 1987); shifting cost-benefit patterns that incentivize revisionist action in the course of a power transition (Organski 1968; Organski and Kugler 1980; Gilpin 1981; Tammen et al. 2000; Kim and Gate, 2015); balancing (Ikenberry 2002; Paul, Wirtz, and Fortmann 2004; Lieber and Alexander 2005) and the military overstretch of the incumbent power (Kennedy 1987).

Liberal-institutionalists, who place a stronger focus on political-economic issues, suggest that growing interdependencies and processes of institutionalization at both the global and regional levels reduce the probability of conflicts occurring (Keohane and Nye 1977; Keohane 1984; Russet and O'Neal 2001). More recent scholarship, from the neoclassical realists indicates the era of unipolarity as being far from over, and hence estimate the possibility of direct conflict breaking out in the near future to be relatively low (Ikenberry, Mastanduno, and Wohlforth 2009; Pape 2005; Paul 2005).

The thesis argues that there is no doubt that China's growing power presents a geopolitical and geo-economic challenge for the U.S. This challenge has to be studied at the global and regional levels. One of the regional levels is Latin America, as the U.S.'s sphere of influence. Therefore, it is necessary to include in the analysis indicators that reveal more about China–U.S. interactions in Latin America and also in a general perspective.

4. Triangular Relations between China, Latin American Countries, and the U.S.

This thesis argues that the relationship between China, the U.S., and the individual nations of Latin America may be characterized as "triangular" (Tokatlian 2007; Stallings 2008; Woodrow Wilson Center 2011; Ellis 2012). This means that these countries interacting

apparently only in bilateral relations (China-Latin American countries, Latin American countries-U.S., and China-U.S. relations) produce mutual effects between them. Thus, the relation between two of these countries affects the third one, or vice-versa. According to Ellis (2012), the meeting between Thomas Shannon and Zeng Gang in 2006, provided an "...implicit recognition both of a 'triangular' relationship among China, the United States and Latin America in which the interests and actions of each party in the region were acknowledged to potentially affect the others" (Ellis 2012: 1). Ellis criticizes the "triangle" concept insofar as it does not consider other important actors; it treats Latin America as a unitary actor; and, it "...is a subtly neocolonialist way of approaching Latin America and its external relations." (2012: 3).

In response to the three main limitations that the triangle concept has, this study argues, first, that to figure out a triangle of relations between countries, one need not deny the pre-existence of other important actors, but that at the least the triangular relations approach offers a comprehensive analysis of complex interactions among the three states. So, it brings a focused approach to three countries' relations that one should be especially interested in understanding by measuring implications for each party. Actually, states can interact in a parallel fashion inside several other triangles. So, it is a conceptual framework that facilitates empirical measurement for analytic goals. Second, and as Ellis (2012) noted, Latin America cannot be considered as a unitary actor. The thesis strongly agrees with Ellis (2012), that the triangle has to be studied by including each Latin American country as one of the vertices, and not the entire region. Third, in order to avoid falling into the trap of a "neocolonialist presumption", the thesis will study triangular relationships in a plural, non-exclusive fashion, considering a subset of the many possible triangular relationships that potentially exist, without implying that the relations of Latin America as a whole are bounded by China and the US

The concept of triangular relations implies the possibility of a cooperative relationship between all sides, as suggested by Tokatlian (2007), but is not exclusively limited to this construct. Tokatlian (2007) used the term "triangular relationship" proposing a "new linkage interconnecting China, the United States and Latin America". He sees this triangle with positive potential construction of a three-way cooperative geopolitics, arguing that the U.S. has no reason to fear the increasing presence of China in Latin America. However, time has shown that a three-way cooperation has not been achieved. Indeed, intentionally or not, by offering an alternative economic relationship, China has been driving a wedge through Latin

America, with the result that the southern part is increasingly drifting away from the U.S.'s sphere of influence. Moreover, the negative effects on the U.S., not only in commercial terms, but also in geopolitical matters, will be analyzed in this thesis.

According to Stallings (2008), the U.S., China, and Latin America formed a triangle, where China does not want to challenge the U.S. and, therefore, has not aggressively sought an alliance against the U.S. However, on the Latin American side, she observes some governments that were looking for changing the status quo and China would be useful to support their project. Due to this, Stallings calls upon the U.S. government to "find a way to treat China as a partner in the endeavor" (2008: 257). In 2011, the Woodrow Wilson Center published a report titled: "China, Latin America, and the United States: The New Triangle?" (Arnson and Davidow 2011). Unfortunately, in this report, one cannot find an analysis on the "triangle"; the term is only used in the title and the two big focuses are the meaning of a growing China for Latin America's economics, and the political and economic challenges between China and Latin America, which specially mentions the implications for the U.S.

So far, little effort has been devoted to consistently define triangular relations, to scientifically prove how the triangular relations works between China, the U.S., and Latin American countries, and to demonstrate to what extent China has affected the U.S.-Latin American relations. As Ellis has noted, the problem in referring to the China-U.S.-Latin America interaction as a triangle is that there are few studies establishing what the dynamics of such a triangle are, even though the term has a certain level of intuitive validity (2012: 1). Therefore, this thesis introduces a conceptual framework for triangular relations, and it presents a systematic study of the triangular relations China, Latin American countries, and the U.S.

5. Research Questions

Academic literature and empirical evidences suggest that China's growing presence in Latin America has influenced the U.S.-Latin America relations in the economic, commercial, political, and strategic fields. However, as mentioned above, there are no studies that analyze exactly to what degree this influence is produced. Therefore, this thesis addresses the following research question:

To what degree has China's advance in Latin America produced effects on the relations of Latin American countries with the U.S.?

For answering this question, it is imperative to study the three vertices of these triangular relations. In this case, the thesis analyzes (1) the bilateral relations of China with the Latin American countries, (2) the relations of Latin American countries with the U.S., (3) the China-U.S. relations. Then, synchronization shows the effects: cooperation, and conflicts among the three states in every of the three vertices. The degree refers to how long or how many times the states are synchronized in our period of study from 2000 to 2015. Despite the fact that we have to study the three vertices of a triangular relationship, we focus specifically on the influences of China's emergence in Latin America on Latin America-U.S. relations.

China's emergence in Latin America refers to the increasing economic, political, technological, and cultural exchanges between China and Latin American countries during the last fifteen years. Over this period of time, China has become the main trading partner of Brazil, the main investor in Venezuela and the second main partner of Argentina, among others. Besides, China has established bilateral strategic partnerships with long term political and strategic goals, not only to alleviate bilateral relations, but also with regional and global aims in mind. This Chinese emergence in Latin America has been accompanied by the active foreign policies of China in the region, namely the South-South cooperation.

Historically, the U.S. pre-eminence in the region has characterized the relations of Latin American countries with the U.S. The U.S. has been the main trade partner, investor, and aid sponsor in the region. It has influenced Latin America in economic, political, and cultural aspects. Evidences of alterations in the Latin America-U.S. relations as a result of the Chinese advancement in the region, make it necessary to study this evolution in order to find out to what extent it occurs.

6. Research Design

The thesis is divided into two main parts. First, it develops a conceptual framework for triangular relations, based on the synchronization theory. Second and more extensively, it analyzes the cases of triangular relations and tests empirically what the thesis calls the synchronization between China, Latin American countries, and the U.S. The empirical study

includes three cases: Argentina-China-U.S. relations, Brazil-China-U.S. relations, and Venezuela-China-U.S. relations.

6.1. Cases

This thesis selected its cases with a focus on the Latin American countries that have established bilateral comprehensive strategic partnerships with China. The comprehensive strategic partners are the countries that are priority partners for Chinese vis-à-vis the bilateral interactions in the region. In the post-Cold War era, China has at the bilateral level, included in its foreign policy a stratification of partners, thus creating several types of relations where the comprehensive strategic partnerships are the most relevant forms of interactions. Comprehensive strategic partnerships tend to be among the strongest in economic and political terms, coordinating through high-level commissions that often planning activities for exerting influence. The thesis focuses specifically on the Chinese bilateral comprehensive strategic partnerships with Argentina, Brazil, and Venezuela.

Another criterion that supports the selections is that the mentioned Latin American countries had closer relations with the U.S. prior to the Chinese engagement with the region. In several aspects, the U.S. was the main partner of Argentina, Brazil, and Venezuela, until it was replaced by China. The cases selected are similar in their geographical position in South America, they all run a positive trade balance with China, there is a presence of leftist governments during the period of study, and all three countries exhibit an increasingly anti-U.S. official discourse. However, the same cases show diverse and dissimilar interests in their relations, as well as, contrasting outcomes in all of the analyzed categories.

The thesis choses the "strongest" cases, meaning the longstanding strategic partners who have strong relationship with China. A criteria for why the thesis rejects others potential cases which are also strategic partners of China in the region until 2015, such as Mexico, Chile, and Peru, is because they did not have the status of being comprehensive, as well as the relative short time of their strategic partnerships with China. Mexico, as a strategic partner of China, is not included due to its relatively small interactions with China through the medium of the strategic partnership, and its geographical proximity with the U.S. and its participation in the NAFTA, with the result that the U.S. is still its main trade and political partner and investor. The cases of Peru and Chile are not suited to the study because of the relatively short

span of time that these two have been interacting with China through the medium of strategic partnerships. They are thus, omitted from this analysis.

In addition, this dissertation seeks to include only those cases that contain trends that can be traced over more extended periods of time, at least ten years, because synchronization is a time-related process. The period of analysis for the cases runs from 2000 until 2015. The period coincides with the exponential rise of China in Latin America. The cut-off point being set at 2015 is related to the availability of relevant data.

6.2. Interdisciplinary Approach

This thesis proposes using an interdisciplinary approach to study triangular relations, based on the synchronization theory from physics and IR theories, with special application of realism. Taking an interdisciplinary approach is necessary due to the current limitations of IR theories and methods for addressing all the factors involved in triangular interactions, such as the effects of the third state on a bilateral relation.

An interdisciplinary approach involves drawing on different areas of knowledge or study. Such an approach is resourceful when the area of study of a certain field of science is not able to answer certain key questions or when the phenomenon to be studied involves a number of different dimensions, specifically the ones covered by a range of fields of study. As noted previously, triangular interactions between states have not yet been adequately addressed in IR literature. The term "triangular" has in fact been used without a sound theoretical or methodological framework for it. Due to the complexity of triangular interactions and the absence of a suitable framework for studying them in IR, it is necessary to seek answers from other sciences, specifically physics.

An interdisciplinary approach is also a way to advance knowledge: "Interdisciplinary represents an innovation in knowledge production—making knowledge more relevant, balancing incommensurable claims and perspectives, and raising questions concerning the nature and viability of expertise" (Frodeman, Thopson Klein, Mitcham, and Holbrook, 2010). In this case, this innovation arises out of the existing gap in IR that limits the study of triangular relations between states. The inclusion of the synchronization theory will improve the way to understand these relations and will offer a suitable method as well.

a) IR Theories and Triangular Relations

Realism, liberalism, and also constructivism could explain triangular relations between states, but the evidence shows that it is only partially applicable. However, this thesis considers mainly in structural realism. The structural realism suggests that states are "...forming a structure by their interactions and then being strongly affected by the structure their interactions have formed" (Waltz 2003: 49). By these criteria, we would expect that bilateral relations interacting in the international system also has the potential to be affected by the structure, as well as to affect the structure, meaning affecting others states' interactions. According to structural realism, balance of power and bandwagoning are the two main strategies that states use for protecting themselves and for interacting with other states (Waltz 1979: 69, 77). The choice of one of these strategies is directly influenced by the international structure. However, it is difficult to explain why states decide to use one of these two main strategies.

According to realism, the possibilities of alliance forming are related to major powers. Minor powers are only able to join an alliance in one of the two ways: to balance the rising power or to bandwagon with the established powerful states. In principle, according to the balance of power approach, the role of Latin American states is to join the established power to bandwagon with the U.S. coalition, or to try to balance the equation by joining China. The problem is that this presumes a conflict hypothesis involving the two coalitions. The reality shows that there is not a clear conflict hypothesis involving the two coalitions. Thus, the concept of state behavior being either balancing or bandwagoning is too simplistic.

If we observe states, especially in the post-Cold War era, their behaviors and interactions are much more complex than mere competition and two sides confronting each other. Competition as well as cooperation is regularly present in the interactions between states. For structural realism and realism in general, cooperation is only present in the face of relative gains—and this cooperation is difficult to maintain in the long run (Grieco, Powell, and Snidal 1993). However, it is a challenge to calculate relative gains. Moreover, if we observe cooperation over time, we see that it is a regular practice between states as well.

Nonetheless, there are several important insights that structural realism provides us in context of the behavior between states and their interactions, such as the survival principle and the role of the international structure. The idea of Waltz's international structure suggests that states' interactions affect other states and the states in question themselves, and not just in direct and linear ways. Thus, a bilateral relationship between two states interacting in the international system also has the potential to affect itself by the structure, as well as the potential to affect the structure, meaning others states. In this manner, an apparent initial bilateral relation is not completely a bilateral one. This principle provides a relevant basis for the study of triangular relations because it recognizes the fact that bilateral relations have the potential to affect other states through the structure and be affected themselves.

Liberal institutionalism is another possibility from theory for understanding triangular relations. The framework of interaction between states creates incentives for cooperation not recognized by realism. However, there is no evidence that China interacts with the U.S. and the countries in Latin America within institutions sufficiently enduring and relevant so as to create incentives for cooperation. Moreover, liberal institutionalism—with its strong focus on economic interdependence—is not able to satisfactorily address the issue of a persistent level of competition between states. And as the cases to be studied in this thesis suggest, the interactions are not only economic, but also have political and strategic aims.

Theoretical approaches to triangular relations are as such, almost nonexistent in IR. A balance of power approach is useful as a starting point in order to understand the preferences of states to build alliances. The study of triangular relations is fundamental to analyze the formation of any kind of alliances; because this shows how a third state decides to join any one of the two sides. There exists no more a permanent balancing or bandwagoning choice; relations are not static, but they are mainly dynamic.

There are few empirical studies of "strategic triangles", which are one kind of triangular relations. The concept of strategic triangle refers to three states of comparable power. As elaborated by Dittmer (1981), who proposed the concept of strategic triangle, the concept has been developed through an analysis of the interactions between China, the Soviet Union, and the U.S. during the Cold War era. Dittmer (1981) elaborated a conceptual framework for strategic triangles and made a classification system for them. Dittmer (1981) classified triangular interactions into three possible static triangles. However, Dittmer's strategic triangle misses the analysis of triangular relations between states as dynamic processes. On the other hand, ten years later, the empirical findings of Goldstein and Freeman (1991) made the classification system proposed by Dittmer redundant².

² The contributions of Dittmer (1981), and Goldstein and Freeman (1991) are analysed extensively in Chapter II.

Goldstein and Freeman (1991) analyzed the behavior of great powers. These authors used three sets of time series events related to the behavior of China, the Soviet Union, and the U.S. during the Cold War era. In the process, they sought to measure the different behaviors of states, which they catalogued as cooperative, competitive, or neutral. They found that while the states were behaving in a mixture of competitive, cooperative, and neutral ways, they were doing so more in an asymmetric fashion. The results of the study of Goldstein and Freeman (1991), proved that the existence of triangular relations between great powers is an important base to approach the subject of triangular relations. Ever since the empirical findings of Goldstein and Freeman (1991) were published, there has been no conceptual or theoretical improvement in our understanding of triangular relations, except to validate (Osgood 1962; Jervis 1976; Larson 1988) or discard (Snidal 1985; Wagner 1983) some theories on great power behaviors.

b) Triangular Relations as a Challenge for International Relations: The turn to Physics

As mentioned above, this thesis proposes an interdisciplinary approach to triangular relations that is based on the adaptation of the study of synchronization in physics, to International Relations. In physics, synchronization is understood as "an adjustment of [the] rhythms of oscillating objects due to their weak interaction" (Pikovsky, Rosenblum, and Kurths, 2001: 8). In this definition, the oscillating objects are the two autonomous systems that start to behave similarly in a simultaneous period. The interactions can be weak, but the third mechanism makes possible the communications or adjustments between these two autonomous systems. Boccaletti et al. define the synchronization of chaotic systems as "a process wherein two (or many) chaotic systems (either equivalent or nonequivalent) adjust a given property of their motion to a common behavior, due to coupling or forcing" (2002: 3). However, it is important to highlight that even in physics, "...the word synchronization will not always be taken as having the same colloquial meaning and that we will need to specify what synchrony means in all particular contexts in which we will describe its emergence" (Boccaletti et al. 2002: 3).

The etymology of the word synchronization is from Ancient Greek, meaning "to share the common time". Thus, the word synchronization used to be associated with the idea that phenomena occur more or less simultaneously. Synchronization as a physical phenomenon has been studied since the 17th century. The Dutch mathematician Christiaan Haygens described the phenomenon of synchronization by observing how a pair of clocks reacted together and influenced each other through a third mechanism, one which was apparently not interconnected with the other two. He arrived at the conclusion that an external mechanism (wall) was interacting with two independent systems (clocks). In other words, both clocks were informing each other through the medium of the wall.

Haygens's apparently simply verification led to the construction of a synchronization theory in physics. Subsequent studies of synchronization applied this phenomenon to several examples of synchronization between different objects. For instance, the synchronization in humans and different animals groups (Strogatz 2003; Koukkari and Sothern 2006), synchronization of the climate system (Rial, Oh, and Reischmann 2013), as the South America rainfall dipole (Boers, Bookhagen, Marwan, and Kurths 2016), synchronization of terrestrial processes with the Earth-Moon-Sun system (Sidorenkov 2015; Salazar, McInnes, and Winter 2016), synchronization of collective behaviors (Nèda, Ravasz, Brechet, Vicsek, and A.L., 2000), among others.

This thesis assumes that states in triangular relations interact with each other under the tendency to be synchronized. There are no current studies that measure these kinds of interactions on triangular relations among states. Synchronization might be observable in several different areas of triangular relations between states. The inclusion of the synchronization theory will improve the ways to understand these relations because it shows to what degree three states affect each other, producing quasi-simultaneous processes of maximal cooperation and conflicts.

7. Variables

In a triangular relation there are three bilateral relationships interacting and influencing each other. The thesis makes pared comparisons of the bilateral events and their frequencies or occurrences, of all bilateral relations formed by the three states in triangular relations. Thus, we analyze the interaction effects between the bilateral relations of different pairs of countries.

We test simultaneously the frequency or occurrences of the cooperative and conflictive bilateral events between China, the three Latin American countries Argentina, Brazil, and Venezuela, respectively, and the U.S., from 2000 to 2015. This thesis considers every bilateral action or interaction between the countries as an event. The events are cooperative when they act together for a common purpose or benefit. The events are conflictive when there is a

discord in actions and opposition of interests (see Appendix 1). The dichotomously cooperative or conflictive is analytically viable for theoretical parsimony, despite there being more complex shades. However, it captures the basic space of the dynamics, meaning more cooperative or conflictive.

For sure, there are other influences on bilateral relations. Synchronization does not negate the possibility that a bilateral relationship should have no other influences. However, synchronization makes pared comparisons across time for explaining the potential influences that the events and its frequency of one of the bilateral relations has over the events and its frequency of the second bilateral relation. The finding demonstrates and explains the periods of strong, quasi-simultaneous interactions and influences between the three states.

Table I.1: Variables

Interactions effects between the bilateral relations		Time Frame
Frequency of the Cooperative	Argentina and China	
and Conflictive Bilateral	Brazil and China	
Events between	Venezuela and China	
Frequency of the Cooperative	Argentina and the U.S.	
and Conflictive Bilateral	Brazil and the U.S.	1990-2015
Events between	Venezuela and the U.S.	
Frequency of the Cooperative		
and Conflictive Bilateral		
Events between	China and the U.S.	

8. Methods

This thesis applies event synchronization as a method. The approach is based in the analysis of event synchronization. First, it operationalizes the relevant indicators using a quantitative analysis. This analysis included reliability, validity, replicability, and generalization. This research codified as an event, every bilateral action and interaction between the countries that appeared in the international media as news. The media content analysis enables us to find patterns in the relations between states. The main sources are newspapers. A majority of the

interactions between the states that are accessible to the public are in the news media. The study has examined thousands of news items from the international media that explore the bilateral relations between the states. In this thesis, the coding system has been achieved by two coder checking in order to ensure that it produces the same results in different tests. The variables and categories are sufficiently broad for them to be applied to different cases.

This thesis collected data from the news in Factiva Data Base. The Factiva Data Basis includes news from the main news agencies and newspapers, such as Agence France Presse (AFP), Deutsche Presse Agency (DPA), EFE Agency, Reuters, the Wall Street Journal Americas, Deutsche Welle, as well as from the main Latin American newspapers.

According to Earl, Martin, McCarthy, and Soule, newspapers are standard sources for building event databases, "Though they are authoritative and provide detailed event information, they remain problematic, particularly regarding selections bias (which subset of events are covered) and description bias (the veracity of the coverage)" (2004: 65). This thesis avoids a bias in the selection of the range of media sources by identifying and selecting the most representative international newswires and newspapers in China, the U.S., Argentina, Brazil, and Venezuela. This selection allows the inclusion of a large number of the events, and compares the coverage among the countries.

In order to find the indicators and codify every event, first, the thesis carried out a qualitative analysis of the news items. The codification has been done manually without the use of a computational program, mainly because of the need to examine the content of every news item and not merely the quantification of words that some computational programs do. It is important to emphasize that this thesis is not a media content analysis that examines how the media presents the events. It is the quantification and valuation as positive or negative the events of the bilateral relations between states (see Appendix 1).

After building the database from the content analysis of the events, we proceed to test synchronization of the triangular relations. First, ES looks for the event rate in each time series. Second, it defines the symmetrical and anti-symmetrical combinations, which measure the synchronization of the events and their delay behavior, respectively. There is a Q=1 if and only if the events of the signals are fully synchronized.

Events that are fully synchronized and their frequency are interpreted as the quasisimultaneous interactions between three states, when one of them has produced a positive or negative response to the bilateral relations of the other two states. By doing so, it finally sheds light on how and to what extent China's emergence in Argentina, Brazil, and Venezuela has altered the relations of these Latin American countries with the U.S.

It is important to highlight that even in physics, the synchronization methods are diverse, from simple visual data to more complex measures. These methods can be classified into three big groups: (1) methods based on similarities of trajectories in phase space (Schiff, So, Chang, Burke, and Sauer 1996; Le Van Quyen, Martinerie, Adam, and Varela 1999; Arnhold, Grassberger, Lehnertz, and Elger 1999; Quiroga, Arnhold, and Grassberger 2000; Quiroga, Kraskov, Kreuz, and Grassberger 2002); (2) methods based on phase differences between the signals (Rosenblum, Pikovsky, and Kurths 1996; Tasss, et al. 1998; Mormann, Lehnertz, David, and Elger 2000; Rodriguez, et al. 1999); and (3) methods more used, such as cross correlations, coherence function, mutual information, and also simple visual tracing (Quiroga, Kreuz, and Grassberger 2002).

This thesis applies Event Synchronization. Event synchronization "is based on the relative timings of events in a time series, defined, e.g. as local maxima. The degree of synchronization is obtained from the number of quasi-simultaneous appearances of events and the delay is calculated from the precedence of events in one signal with respect to the other" (Quian Quiroga, Kreuz, & Grassberger, 2002: 1). One of the most significant advantages of ES is that it scrutinizes the triangular relations as dynamic processes and not as constant or static relations.

Event synchronization can quantify not only the quasi-simultaneous events between states, but also the delay among them. Meaning that not only the presence of events or relations between states is considered, but also the later actions and/or absence of periods of interrelations are looked at. The absence of events between states is also a part of the analysis since these are important to analyze as a part of the dynamic of triangular relations as processes. So, it is an instrument that offers the possibility to analyze how and to what extent states respond in a three-way interaction, besides allowing us also to observe the periods when they stop doing so, as a part of their dynamical processes of triangular relations.

9. What does this thesis not do?

At this point, it is pertinent to summarize the aims of this work; and what this thesis does not do. First, this thesis proposes a conceptual framework for triangular relations between states based on the synchronization theory. This work is also an invitation to enrich the dialog among sciences; it is not looking for a new theory that can shadow the preexisting IR theories. It is not an empirical testing of balancing.

The thesis argues that triangular relations are important in international relations, and an interdisciplinary approach, such as synchronization, offers a useful way of studying triangular relations. Synchronization takes into account all the main elements present in triangular relations. The more or less simultaneous interactions among three states, and to what degree two states can adopt similar behaviors in their interactions with a third state, and vice versa.

This thesis also does not argue that there is a unique method of synchronization. As in physics, there exist multiples methods to prove synchronization. This thesis uses event synchronization as one of the many available, legitimate methods. Nevertheless, further researches should apply other methods of synchronization according to their data.

The following Chapter covers the analysis on the gaps in IR theory with regard to triangular relations. It analyses the specialized academic literature on this topic and puts forward the proposals for the aforementioned interdisciplinary approach.

Chapter II

IR Theories, Empirical Studies on Triangular Relations, and the Synchronization Approach

This chapter justifies the requirement to adopt a new approach for the analysis of triangular relations. Thus, the aim of this chapter is to evince the gaps in IR theory regarding triangular relations, as well as the contributions and limitations of specialized academic literature on this topic. This study proposes and defends an interdisciplinary approach that offers a comprehensive theoretical framework on triangular relations, namely synchronization.

In academia, most previous research has been limited to studying empirical cases of triangular relations, such as the empirical studies of the China–Japan–U.S. relationship (Park 1986; Soeya, Wang, and Welch, 2003; Curtis, 2011; Dreyer, 2012), the China–Taiwan–U.S. (Wu, 2005; Womack, 2004, 2010), the China–Middle East–U.S. (Alterman and Garver 2008), the China-Europe-U.S. (Shambaugh 2005; Rahim 2005; Cabestan 2006), and the China-Latin America-U.S. triangular relations (Ellis 2005, 2007, 2012, 2013, 2015, 2016; Domínguez, 2006; Stallings, 2008; Tokatlian, 2007; Roett and Paz 2008). However, until now little effort has been devoted to develop a proper theoretical framework for studying triangular relations

This chapter is divided into three sections. The first section analyzes traditional IR theories, focusing on the failure to include triangular relations in their studies. This part mainly contains a discussion on the arguments of structural realism (Waltz 1979, 2003), liberalism, interdependence theory (Keohane 1984; Keohane and Nye 1987), and constructivism (Wendt 1992, 1994). The second section addresses the literature specifically on triangular relations. It analyzes the "strategic triangle" concept proposed by Dittmer (1981), with the subsequent corrections and complementarities put forward in the work of Womanck (2004), who added the concept of an "asymmetric triangle", and the work of Goldstein and Freeman (1991) and their contribution to test the China-Soviet Union-U.S. strategic triangle. Finally, this chapter ends with the proposal for a new approach to triangular relations. This includes the principles of synchronization from physics.

1. IR Theories on Triangular Relations

The following section contains a general analysis of IR theories' principles. It does not attempt to be a study of IR theories in general. It only discusses the deficiencies of IR theories for the analysis of triangular relations.

1.1. Realism and Structural Realism

Realism, as well as structural realism, focus on states as the main actors interacting in the international system. According to this theory, the survival principle explains state behavior. States can opt for balancing or bandwagoning as possible strategies. Balancing implies to form alliances against any powerful state, whereas bandwagoning indicates the building of alliance with the powerful state. Thus in a system where survival is the key interest, states have to seek one of these strategies because they have to protect their national interests constantly threatened by other states (Burchill, 2005). Hence, states are perpetually in competition and conflict with each other.

According to Waltz, power is "a possibly useful means"—but at the end of the day, states seek security (1988). In other words, "survival is the goal of states and power is one of the means to that end" (Waltz 2003: 49). Thus, states need power, and they strive to achieve power because it allows them to protect themselves and, as a consequence, survive. However, state behavior in triangular relations shows that states also cooperate, and there are complex interactions between cooperation and conflicts. Therefore, balancing and bandwagoning do not provide sufficient insight into such interactions between three states.

There is a key difference between realism and the structural realism proposed by Waltz (2003). According to Waltz, "Old Realism sees causes as running directly from states to the outcomes that their actions produce. New Realism sees states forming a structure by their interactions and then being strongly affected by the structure their interactions have formed" (2003: 49). If we understand the structure built by the interactions of states, then the state's own actions and those of other states influence each other. The difference, in the end,

is that "old realists" refer to "actions" and "new realists" refer to "interactions". This is a fundamental principle that can shed light on the analysis of triangular relations.

The idea of the Waltz's international structure suggests that states' interactions affect other states and the states in question themselves not just in direct and linear ways. Thus, a bilateral relationship between two states interacting in the international system also has the potential to affect itself by the structure, as well as the potential to affect the structure, meaning others states. In this manner, an apparent initial bilateral relation is not completely a bilateral one. This principle provides a relevant basis for the study of triangular relations because it recognizes that bilateral relations have the potential to affect other states through the structure and be affected themselves.

The effects that interactions or the structure produce on the behavior of states is that states are always balancing each other. According to Waltz, balancing and bandwagoning are the two main strategies that states use for protecting themselves and for interacting (1979: 69, 77). As Waltz (1979) has noted, the international structure directly influences the state's choice of one of these strategies. The logic herein is still balancing between two states or sides—one who is rising against the other made up of powerful states responsible for the status quo. According to this approach, major powers have the possibilities of alliance formation. This perspective plays down the role of other emerging, and minor powers. And as such, these emerging and minor powers are only able to join an alliance in one of the two ways: to balance the rising power or to bandwagon with the established powerful states. It overlooks the significance of third states, and consequently, the interactions that they have, and their potential influences.

Another limitation of the balancing or bandwagoning approach is that it represents an explanation of static relations among states. If we observe state relations, especially in the post-Cold War era, their behaviors and interactions are much more complex than being either in a balancing or bandwagoning position. Competitions, as well as cooperation, are both regularly present in the interactions between states. An approach to pure balancing or bandwagoning limits our understanding of state interactions. This thesis argues that states mainly behave pragmatically. If we agree that state's priority is to survive in order to protect their national interests, then it could be appropriate to refer to pragmatic behavior that the states have to adopt to achieve this goal. States are similar and share several characteristics, but they are not identical. Therefore, all states cannot be expected to display similar behavior

as regards the international system. A pragmatic state obeys only its national interest, and it may bring the state to cooperate, too, if such cooperation is possible and necessary in order to protect its national interests. Pragmatism includes cooperation in a more expanded meaning that just the "relative gains" of cooperation.

Pragmatism is the state behavior that undertakes the protection of national interests in their interactions with other states, considering their regional and global interests in this context. This reference to regional and global interests is important because states also consider their positions in the international system and are not only focused on their domestic interests. The pragmatism of states is more evident in the post-Cold War era because of the absence of clear ideological confrontations. This, however, does not mean that pragmatic state behavior did not exist during the Cold War, but rather only suggests that political ideologies overshadowed them. Pragmatism also implies that what constitutes national interests can vary from state to state. The principle of survival is basic for all states, and all other national interests are derived from this basic principle.

For its part, neoclassical realism argues that it is necessary to include an analysis of domestic realities in order to understand state's behaviors in the international system (Brawley 2009). Neoclassical realists affirm that the material capabilities of states are still important, but they do not determine the behavior of the latter. According to neoclassical realism, perceptions that the leaders have about their state's material capabilities determines the behavior of states. Thus, the positioning of states in the international system is not about the distribution of power itself, but rather about leaders' perceptions of the distribution of power (Lobell, Ripsman, and Taliaferro 2009). One critique of neoclassical realism, however, is the difficulty in determining what leaders' perceptions are. It is difficult to empirically determine the distribution of power, more so difficult is to determine the exact perception of this distribution of power.

Despite the criticism to structural realism, this thesis considers this theoretical approach as a valid basis of the theoretical framework for triangular relations. The thesis, in general, adheres to the principles of structural realism, such as the surviving principle and the role of the international structure. The idea of the structure interacting with states is basic then to understand triangular relations. However, this thesis also argues that triangular relations show that survival principle does not automatically produce conflicts because states behave pragmatically. States do not have to have only balancing and bandwagoning as strategies

because there are others strategies that permit more cooperation. The strategy to use depends on the pragmatism of states' behavior to protect their national interests.

1.2. Neoliberalism and Interdependence Theory

As a theoretical framework, neoliberalism argues that states cooperate inside institutions. According to Keohane (1993), the institutionalization of global politics has had effects on the behavior of states. These institutions are spaces of cooperation wherein states can effectively articulate their demands (Martin, 2007:110). Therefore, institutions are instruments that avoid permanent conflicts between states. Accordingly, the structure influences the states' behavior mainly through international institutions.

Neoliberalism analyzes states interactions by taking into account a more multilateral approach. According to neoliberalism, states interact in a more multilateral way because these interactions are mainly inside or accompanied by international institutions. Such interactions in international institutions support cooperation between states and consequently avoid conflicts.

Neoliberalism shares some principles with structural realism, such as that states are the main actors in international systems, states are rational actors and that the international system is anarchic. There are also important differences between their postulates. According to neoliberalism, cooperation in the anarchical system is possible, especially considering its economic aspects. Meanwhile, to structural realism, states cooperate but are limited by the relative gains that make it favorable to maintain the balance. In both approaches, the presence of cooperation between states is explained in a very restricted sense, namely economic cooperation and relative gains cooperation. Triangular relations show that states behave in cooperative and conflictive behave in a more broad sense than what neoliberalism and structural realism are able to explain.

One main criticism again of these classical IR theories is that they consider the relationships between states as static (Florini, 1996). Characterizing state relationships just as cooperative or conflictive is conducive. But, state relationships are processes, which are in permanent flux with periods of more or less cooperation and conflict, or cooperation and conflict at the same time on different issues. In such processes, cooperation loses the idea of relative gains because there are a lot of medium to long-term decisions that make it difficult to calculate the possible immediate relative gains. The concept of triangular relations grasps this

dynamic nature of state relationships as processes in permanent flux where different periods are marked by cooperation or conflict, or even both.

Neoliberalism and interdependence theories provide other possibilities for understanding the relationship between three states. However, as mentioned in Chapter I, this thesis does not consider them due to that there is no evidence that China interacts with the U.S. and the countries in Latin America within institutions sufficiently enduring and relevant to create incentives for cooperation. The institutional support and the economic interdependence that helps avoid conflicts are not clearly present.

1.3. Constructivism

Constructivism is a completely different approach to comprehend the international system when compared with structural realism and neoliberalism. Perception is the key element to study constructivism. Perceptions that states have of themselves, perceptions and beliefs of national interests, the perception of capabilities, perceptions of other states, and perceptions that other states have of them. The mediation of reality, or social construction of perceived reality, that is determining non-conflict.

According to constructivism, the international system is anarchic. However, unlike the anarchic view of the realists and the neoliberals, the anarchy of the international system does not affect states, because this anarchy is not an independent variable. Furthermore, this anarchy is modeled according to the perceptions that states have about the international system. Wendt argues that "there is no "logic" of anarchy apart from the practices that create and instantiate one structure of identities and interests rather than another; structure has no existence or causal powers apart from process... Anarchy is what states make of it" (1992: 394–395).

As opposed to structural realism and neoliberalism, constructivists argue that states do not have any unique national interest (Weldes, 1996) because according to Wendt (1994), national interests are only what the states believe they are. Therefore, every state can have its national interest that may not necessarily be its security. The distribution of knowledge constitutes their self-interest. According to Wendt, this distribution of knowledge affects states' calculations, and it is what determines the concepts of self and other that they hold. Thus, he argues that when two states decide that the other is no longer an enemy, then this brings about the end of their conflict. Using the same example that Wendt cited, "if the United States and Soviet Union decide that they are no longer enemies, 'the cold war is over." (1992: 397). However, this constructivist example is doubtful because the end of the Cold War era cannot be explained by this decision on the part of the two countries per se. This decision is the last step in a series of facts that lead the two states to make that choice, and where other factors and other states were also involved. The series of facts includes more than just the distribution of knowledge; it is also about the distribution of material capabilities. However, national belief systems, discourses, among others, affect how states perceive whether the interaction they find themselves in is a competition or complementarity, and also the ways to respond in that context are similarly socially constructed.

Wendt (1992) also argues that states construct their identities with the perceptions of other states over their own ones in mind. Therefore, there are three ways to transform identities and interests under anarchy: "by the institution of sovereignty, by an evolution of cooperation, and by intentional efforts to transform egoistic identities into collective identities" (1992: 395). From this perspective, and contrary to what Wendt suggests, this interpretation coincides with the viewpoint of structural realism that the structure affects the behavior of states. In this case, a state's self-identity is affected from outside. Despite this, the difference between the two is the impact of actual structure, versus the impact of perceived structure, through perceptions of identity and the other, practices, etc. According to constructivism, "such structures are often codified in formal rules and norms, but these have motivational force only in virtue of actors' socialization to and participation in collective knowledge" (Wendt 1992: 399).

In some sense, constructivism conflates the state with the individual. Wendt's approach not only seeks the identities of the actors involved but also confuses a state with a person. "Each person has many identities linked to institutional roles, such as brother, son, teacher, and citizen. Similarly, a state has multiple identities as "sovereign," "leader of the free world," "imperial power," and so on. (Wendt 1992: 398). A state, however, is not a human being. In psychology, one can perhaps identify the self-view of every person, especially when an individual decides to discuss it. In international politics, on the other hand, this is just not possible.

This thesis does not discard constructivism completely. Synchronization does not pretend in any case to be a study of perceptions in triangular relations. Triangular relations involve complex interactions between states that cannot be explained only by perceptions.

However, discourses and perceptions are part of the analysis of the bilateral events between states.

2. Literature and Empirical Studies on Triangular Relations

The following section discusses more extended some of the most relevant analyses on triangular relations. They are mainly studies on the "strategic triangle", which is only one view of triangular relations. Strategic triangle studies the interactions between great powers with similar capacities. Meanwhile, states acting in triangular relations do not have to have the same capacity, because triangular relations are at first and foremost interactions between three states, who can affect each other in different issue-areas, as well as in intensity. This gap in the specialized literature on triangular relations makes this thesis more pertinent as an attempt to expand the study of triangular relations.

There are critics of the concept of the strategic triangle, too. Lo (2010) argues that the strategic triangle is an exaggeration as a concept and real interaction. Lo (2010) refutes the notion of any strategic triangle existing, essentially due to the lack of three sufficiently powerful states currently interacting with each other: "An effective triangle requires three sides that are, if not equal, at least sufficiently powerful and engaged to exert a significant influence on the interactions within it. There is no such example in the contemporary international system" (2010: 10). Moreover, Lo (2010) signals that the Chinese pragmatism in looking for economic growth rather than geopolitical balancing rules out the possibility of a strategic triangle with the U.S. and Russia. In contrast to Lo, this thesis argues that states regularly interact in triangular relations without an initial agreement to play in. Therefore, it does not matter whether China is looking for balancing or not. What is important, in this case, is that China may be part of a triangular relation with the U.S. and Russia, because they affect each other.

2.1. Dittmer's "Strategic Triangle"

Dittmer (1981) has written about the "strategic triangle" made up of China, the Soviet Union, and the U.S. Before Dittmer, the concept of strategic triangle has been used in empirical analysis during the Cold War era but without being comprehensively developed as a concept (Tatu, 1970; Brown, 1976; Pillsbury, 1975; 1977; Gottlieb, 1977; Garrett, 1979, 1983;

Lieber, Oye, & Rothchild, 1979). Dittmer proposed a comprehensible conceptual framework. Dittmer claimed that a strategic triangle "may be understood as a sort of transactional game among three players" (1981: 485). Despite this definition, he did not apply game theory to analyze this announced game among three players. Instead, he just included terms from game theory without formally applying its logic to his study. According to Dittmer, he seeks "(...) an exploratory venture designed to generate hypotheses and perhaps to stimulate more systematic strategic thinking" (1981: 485).

The main question that Dittmer poses is: "Why do states fall into patterned relationships with one another in the first place, and of what do such relationships consist?" Dittmer proposed three independent variables that may affect the type of exchange between states: value (positive/negative); symmetry (strong/weak); and how "both value and symmetry of any bilateral relationship are marginally affected by each player's relationship with the third player" (1981: 487). Dittmer hypothesizes that "states (representing their constituent members, of course) experience needs that cannot be adequately satisfied at the domestic level, leading them to enter into contact with those countries that dispose of the pertinent values" (1981: 486).

The necessities of states include several kinds of requirements: to exchange goods and services, but also information, propaganda, and/or espionage. He distinguished between the inter-state exchange of benefits (positive) and the exchange of sanctions (negative) as trade and warfare, respectively. Dittmer also clarified that the exchange between states can be reciprocal in the sense that for both players there can be benefits or sanctions, but that these exchanges are not necessarily symmetrical. The lack of symmetry can produce conflicts. Dittmer also argues for the essentiality of maintaining symmetries between states in order to preserve a balance between them. Balance means that there are no winners or losers. For him, state relations are more durable in a position of balance.

According to Dittmer, there are two necessary conditions for a strategic triangle to exist, "First, all participants must recognize the strategic salience of the three principals. Second, although the three players need not be of equal strategic weight, each must be accepted by the other two as a legitimate autonomous player. Thus, the relationship between any two participants will be influenced by each player's relationship to the third" (Dittmer 1981: 490–491). Here, it is important to highlight the elements of recognition between states. Dittmer emphasizes the role of perceptions that the three players have of each other. Then, this perception of every player creates a unique kind of triangle. The symmetry for Dittmer is achieved according to the perceptions that each of the players has about the relationship(s), which do not consider the material capabilities that each state has. According to Dittmer, the symmetry between two players is not necessarily given by equal power; rather it is present in an "ideal-typical patron-client relationship, in which each player accepts a different (but equally necessary) role in a shared division of labor" (1981: 488).

Thus, it is possible in the case that a great power provides security to a small one and the latter compensates the former through its strategic policymaking (Japan and the U.S., and Cuba and the Soviet Union for example). The great power will not try to establish an asymmetric relation because it can be contra-productive. The small power can feel threatened by the asymmetry and can seek relations with another great power instead. Therefore, it is possible to establish a strategic triangle between different powerful states and smaller ones regarding material capabilities.

Dittmer claims that there are different kinds of relationships in these possible strategic triangles. He characterizes the strategic triangle in three different types: "Ménage à trois," "romantic triangle," and "stable marriage". In a Ménage à trois triangle, there are symmetrical amities among all the three players. In a romantic triangle, amity between one pivot player and two wing players, but with the existence of enmity between each of the latter. Dittmer suggests that the pivot state has the most advantageous position in a romantic triangle. In a stable marriage triangle, the amity between two of the players is observed, along with the enmity between each and the third state.

The pivot player can maximize benefits and minimize expenditures for sanctions. It is because he maintains positive relations with both players and because he attends to manage the level of tensions between them (Dittmer 1981: 510). One of the advantages of the pivot is to play with the "threat of asymmetry" with the other two states. It means that the pivot state can threaten the possibility of "getting married" to one of them. Moreover, the pivot state has a key role to elevate or defuse conflicts between the other two states "based on the inescapable triangularity of bilateral relationships: the pivot has the capability to exacerbate tension by shifting its weight to one side or the other in the dispute, or to assuage the conflict by declining to take sides" (Dittmer 1981: 512).

Dittmer identifies the U.S. as the pivot state during the Cold War era. Dittmer quoted Kissinger to exemplify how the U.S. was utilizing its position for interacting with both countries, China and the Soviet Union. "We would make these agreements with the Soviet Union which we considered in our national interest. Nevertheless, we would give no encouragement to visions of condominium, and we would resist any attempt by Moscow to achieve hegemony over China or elsewhere. We would keep China informed of our negotiations with the Soviet Union in considerable detail; we would take account of Peking's views. But we would not give Peking a veto over our actions" (Kissinger, 1979: 836–37).

According to Dittmer, in a triangle where a state holds the position of enemy to the two other players of the triangle in a stable marriage, it has the possibility to seek alliances, as one of the most feasible strategies it can follow. The author uses as an example the situation of the U.S. during the 1950s when the country was looking for support from NATO, CNETO, and SEATO, or of China in the 1960s when it was looking for support from the nonaligned movement. Thus, the state that finds itself in this position must assume an alliance-seeking stance. Dittmer posits that the main resource of this state is to seek a more substantial defense burden in order to maintain the strategic balance (two-to-one) between the different sides.

One of the limitations of the Dittmer approach to strategic triangles, however, is that the author does not explain how to recognize each triangle nor does he mention how to isolate a given triangle from the other possible ones that it might be. Another limitation of Dittmer's work is that he analyzes the relations only from the perspective of this kind of triangular relations being static, and not as relations in the permanent process of interactions. Most controversial that the empirical findings of Goldstein and Freeman (1991) rejected the classification of strategic triangles proposed by Dittmer.

2.2. Asymmetry Theory of Womack and Asymmetric Triangles

Womack (2004) proposes the asymmetry theory as a new approach to study state behavior, where asymmetry is defined by disparities between states. He also offers the concept of "asymmetric triangle". Womack (2004) adapts Dittmer's strategic triangle concept to the post-Cold War era. He criticizes the bilateral level of analysis of Dittmer in the context of explaining triangular relations.

According to Womack, "Asymmetry theory is a new paradigm that addresses the effects of national disparities on international relations. It argues that asymmetry inevitable creates differences in risk perception, attention, and interactive behavior between states and that it can lead to a vicious circle of systemic misperception" (2004: 351). Consequently, misperceptions produce conflicts between states. Womack argues that the disparities between states produce an asymmetric relationship that configures the structure of this relationship. He affirms, "Disparity implies that the larger side (A) has less to gain or lose in the relationship than does the smaller side (B)" (Womack 2010: 322). Womack's approach explains that the asymmetry is not of material capabilities, but primarily an asymmetry of knowledge: "[the] theory of asymmetry acknowledges that a disparity of capacity and power between states creates real differences of perception and relative interest" (2004: 359).

Womack (2010) criticizes realism and neo-realism because he believes that powerful countries cannot impose their will on other states. According to him, a smaller country cannot challenge a greater state, but if powerful states want to maintain their preeminence in the long term, they cannot always impose their will on others. Powerful states have the advantage of opportunities and responsibilities as compared with smaller countries, but these exist inside a stable matrix of international relations. The system is multipolar, where the relationships are asymmetric. Womack disagrees with multipolarity theory because of its focus on "expanding the circle of powers" but not on analyzing why the expansion of power is important (2004: 356). Asymmetry theory argues that the system was multipolar, based on the strategic triangle formed by China, the Soviet Union, and the U.S. during the Cold War era. After the end of the Cold War, the presence now of at least five poles, namely the three countries mentioned above plus Japan and Europe, makes the system multipolar.

Womack further claims that between two states there exist more than only one common relationship. They simultaneously have two sub-relations between them: of A with B and B with A. He explains how for the smaller state B these relationships are more important than they are for state A. Here it is not important what are the actual material or symbolic exchanges that the interaction includes; what matters is what perceptions the states have about it. Misperceptions are frequently present in these relationships. However, when the differences of attentions between states are continual, then eventually the misperception becomes systemic in nature, leading to conflicts (Womack 2004). Notwithstanding Womack's argument, the different perceptions that the actors have in a relationship do not mean that there are at least two different relations in existence. For any relationship to exist it is necessary to have two actors, two states that interact, and of course each of them has their own perceptions—nevertheless, there can still be only one relationship. Perceptions might also be more numerous if we observe a relationship at a different point in time because relationships are dynamics processes and as such, there will be more than just two perceptions, as Womack himself argues.

According to Womack, bilateralism is still at the heart of the analysis. "Asymmetry theory assumes that the basic building blocks of international relations are bilateral relationships, and that most of these relationships are between countries with considerably different capacities" (Womack 2010: 82). In an asymmetric relation, "the smaller side is more exposed to interactions than the larger side" (Womack 2010: 82). In this sense, the smaller is also the one who has more interest in nurturing the bilateral relationship: "the difference in interest and attention produces a difference in perspective between the two sides" (Womack 2010: 82). According to Womack (2010), the greater and the smaller side of the relationship have different perceptions. Thus, the greater one will associate with the smaller one only in times of crisis. For its part, the smaller one will tend to feel at risk in the relationship, because of the disparities in capabilities. The smaller state in a bilateral relationship seeks closer relations with the greater one, but at the same time feels threatened by the latter. In such a situation of perception about the asymmetries with the bilateral partner, what happens it that states look for a third partner, forming triangular relations.

Womack (2010) expanded the concept of the strategic triangle, introducing therein the concepts of an "asymmetric triangle", and Womack and Hao (2016) examine the Washington-Beijing-Taipei triangle. He accurately affirms that: "The key feature of triangular relationships in contrast to bilateral ones is the indeterminacy of simultaneous interactions" (2010: 402). Womack (2010) classifies triangular interactions according to the positions that the states have as players. One state is the most powerful player (X), the second state with an intermediate power position (Y), and finally the least powerful player of the three states (Z). There are four kinds of triangles: symmetrical; single head dual asymmetrical; twin head dual asymmetrical; and, triple asymmetrical (Womack 2010). However, from our understanding, the classification of triangular relations by considering only their perceptions of asymmetries is not so easy and it does not have a methodological approach.

X=Y=ZSymmetrical triangle Dual X>Y=ZSingle head asymmetrical triangle Twin head dual X=Y>Zasymmetrical triangle Triple asymmetrical triangle X>Y>Z

Table II.2: Womack's Asymmetric Triangles

Womack's study is a valuable contribution to the literature on triangular relations, especially because he includes them in his analysis. Nevertheless, the approach of his study is unfinished. It explains the triangular relations only as a resource that states use in order to better its position in its asymmetrical bilateral relations. He refers to the indeterminacy of simultaneous interactions in triangular relations, without offering an approach to study the mentioned indeterminacy. Moreover, the problem of a constructivist approach and the understanding and classification of triangular relations from perceptions do not offer a suitable way to understand triangular relations.

2.3. The "Three-Way Street" of Goldstein and Freeman

Goldstein and Freeman (1991) presented an empirical advancement on the strategic triangle formed by China, the Soviet Union, and the U.S. They used some techniques of time-series analysis, concluding that during the Cold War era the three countries had some kind of interdependency on each other. The central research question that Goldstein and Freeman addressed is: "To what extent and how do great powers respond to each other's behavior?" (Goldstein and Freeman 1991: 17). Therefore, initially, it is not a question directly addressed to triangular interactions, but to the bilateral relations between the two great powers, the U.S. and the Soviet Union.

The question looked to test which theoretical approach has been more assertive in explaining state interactions. They seek evidence whether Chinese-Soviet-U.S. relations responded to routine, reciprocal, or rational expectations. The bureaucratic routine refers to the condition when states behave according to their own interests. Reciprocity indicates the

similar responses between states because they influence each other. The rational expectations signalize states that behave according to rational expectations where reciprocity is not immediately evident. The problem was that empirical results were contradictory and the states did not show any clear tendency to follow one of the three mentioned behaviors (Goldstein and Freeman 1991: 17).

Goldstein and Freeman (1991) recognized the potential effects of Chinese behavior on the complex and asymmetrical connections of U.S.-Soviet relations, but they also found mutual influences on U.S.-Chinese and Soviet-Chinese relations. This reciprocal connection is the evidence of the existence of a strategic triangle between the mentioned countries (Goldstein and Freeman 1991:18). Goldstein and Freeman conservatively explained the empirical evidence the bilateral great powers behavior according to traditional descriptions as being a combination of bureaucratic, routine, and reciprocal.

The main contribution of Goldstein and Freeman (1991) is the evidence of the threeway interactions between states. However, their work is limited, in three senses: (1) they only validate or negate the routine, reciprocal, or rational expectations in the behavior of great powers; (2) they concentrated their study on great powers responses and underestimated the role of emerging powers, and/or minor states; and (3) they did not advance on a theoretical framework to study triangular relations.

3. Interdisciplinary Approaches in IR

The existing gaps in IR theories when considering triangular relations lead us to seek for a more comprehensive conceptual framework to understand the simultaneous interactions between three states and the extent to which they influence each other. Hence, physics seems to be a useful collaborator. The principles of physics can help explain and measure phenomena in IR. Physical science includes in its studies elements such as matter, energy, space, time, and focuses on their interactions. Physics is not only a theoretical science but also an experimental one. As a central science, it can contribute by explaining theoretically some facts of the relations among states and also offer instruments to measure different aspects of their interactions. This dissertation proposes to include the synchronization theory of physics into IR.

Interdisciplinary approaches in International Relations are no new; there are already some approaches combining IR with mathematical resources. The dialog among sciences has enriched the discipline. For instance, the cybernetics approach is an interesting example of interdisciplinary dialog among sciences (Deutsch 1963; Kaplan 2005). One of the limitations of cybernetics is its too lineal analysis. Lineal means that there is a bilateral process of communication, with communication in two directions only. Thus, one state communicates something, and the other one responds, producing the feedback. This is not an appropriate approach to triangular relations for two main reasons: (1) the lineal analysis of the interactions; (2) inability to measure the quasi-simultaneous interactions between three states.

The following section contains the existing dialog between physics and philosophy, and the main principle of synchronization theory in physics.

3.1. Physics and Philosophy

Physics is an elemental science that includes the study of nature, the origin of objects, as well as their behavior, and interactions. Physics brings all principles together, researching from incomprehensible phenomena to understanding comprehensive interactions. Physics observes not only the nature of objects but also the interactions between them. Physics can rationally explain phenomena.

The philosophy of sciences studies the interactions between physics and philosophy. The literature on philosophy of sciences mainly aims to understand the areas where physics and philosophy collaborate and complement each other (Papineau 1996; Bird 2006; Friedman 1983; Hatcher 1982). Even though there is no apparent link between physics and philosophy. However, both focus on similar questions, as Eddington (1933) observed that the "...questions which concern the general interpretation of the physical universe and the significance of physical law are claimed by both parties," (Eddington 1933:30). According to Eddington (1933), there is space for cooperation between philosophy and physics due to their mutual interests to answer fundamental questions. "The fact is that, in approaching the more fundamental problems of science, the physicist finds it necessary to adopt a more philosophical outlook than is habitual to him; and if the philosopher wishes to handle results ascertained scientifically, he must enter to some extent into the scientific outlook." (1933: 30).

It is not the aim of this thesis to enter into a discussion of the philosophy of sciences. However, the brief mention of this topic is helpful to show the interests of dialog between different sciences and disciplines, including physics.

Synchronization Theory in Physics

This part presents a brief introduction to synchronization in physics. It contents the definitions of synchronization and some relevant specifications on it. The following Chapter III focuses exclusively on synchronization and its adaptation for studying triangular relations.

Synchronization theory explains the interactions between two main autonomous systems and a third mechanism, which affects the interactions of the two first ones. In physics, an autonomous system is an independent system. This means that it is a selfoscillatory system. It can be isolated and will continue with its own rhythms (Pikovsky, Rosenblum, & Kurths, 2001:28). However, two autonomous systems can adjust or have a common behavior, because of their interaction with a third mechanism.

Synchronization implies "an adjustment of [the] rhythms of oscillating objects due to their weak interaction" (Pikovsky; Rosenblum; Kurths 2001:8). In this definition, the oscillating objects are the two autonomous systems that start to behave similarly in a simultaneous period. The interactions can be weak, but the third mechanism makes the communications or adjustment between these two autonomous systems possible.

In physics, autonomous systems are chaotic, too. Chaotic systems are systems that no one can entirely predict their behavior; therefore, they are systems with some degree of uncertainty and predicting their responses is a challenge. Nevertheless, when these chaotic systems synchronize, meaning that when a third mechanism adjusts the behavior of the two systems, a prediction is possible. It is because they start to behave similarly and it produces a total systemic order. Boccaletti et al. define the synchronization of chaotic systems as "a process wherein two (or many) chaotic systems (either equivalent or nonequivalent) adjust a given property of their motion to a common behavior, due to coupling or forcing" (2002: 3).

Thus, the word synchronization used to be associated with the idea that phenomena occur more or less simultaneously; in this case, it refers to the fact that the two autonomous chaotic systems adjust their behavior. Following the same concept of the example of the two clocks on the wall of Huygens (1665), the presence of a third mechanism and two

independent systems is not enough for synchronizing. For instance, the stimulus may be not so strong or extremely weak that the third mechanism determines the functions of the independent systems, thereby not permitting the communication between the two clocks. The degree of the third mechanism's stimulus is a condition for producing synchronization and therefore determinant.

Synchronization theory can be adapted to triangular relations between three states, because, firstly, three actors are interacting, one of them influences over the other two states in a bilateral relationship. Secondly, the uncertainty between three states can be resolved because synchronization can explain to what degree a third state affects the other two. Thirdly, it explains how states in triangular relations decide to adopt one or another behavior.

4. Concluding remarks

Traditional IR theories do not offer a comprehensive understanding of state interactions in triangular relations. Triangular relations pose a challenge to traditional IR theories because these traditional approaches tend to ignore the quasi-simultaneous interactions and the influences that interactions between three states have on their own responses. There is also a deficiency in traditional IR theories to analyze state relations as dynamic phenomena in constant interactions, where phases of cooperation and conflicts are present. Interdisciplinary and new approaches are needed to expand the understanding of these interactions.

This chapter briefly discussed the three main IR approaches, namely structural realism, interdependence theory, and constructivism. Structural realism focuses mainly on great power behavior and still maintains its understanding of states' interactions in a bipolar system. The analysis of the role of the third state, thus, overlooks the significance of the third state interacting with the two powerful states.

For their part, neoliberalism and interdependence theories multiply the number of actors interacting in the international system. State interactions are part of interconnected behaviors. Despite the worthy contribution of the interdependence theory to the analysis of the current interactions taking place in the international system, there is lack of evidence that China sufficiently interacts within institutions with the U.S. and the countries in Latin America to create incentives for cooperation. Constructivism, on the other hand, analyzes state interactions in relation to perceptions. As such, states interact according to the

perceptions that they have about themselves and others. One of the main problems of Wendt and constructivism is the conflation of the state with a person.

The contributions of Dittmer (1981), Goldstein & Freeman (1991), and Womack (2004/2010) towards the analysis of the "strategic triangle" formed by China, the former USSR and the U.S., use the concept of triangular relations. However, it is pertinent to highlight that the strategic triangle is one kind of triangular relations. Dittmer seeks to theorize the strategic triangle, but without clearly defining it. The empirical findings of Goldstein & Freeman (1991) invalidated the classification of the strategic triangle of Dittmer. Goldstein & Freeman's work is an empirical study of the strategic triangle formed by China, the former USSR, and the U.S. They tested the theories that defended the notion of states behaving either in routine, reciprocity, or rational expectations. Nevertheless, they do not propose any contribution to the theoretical understanding of triangular relations. Finally, Womack (2004/2010/2015) studies not only the strategic triangle, but also looks to explain the formation and classification of triangular relations. Womack based his work in the constructivist paradigm and limited his study to the world of perception.

One of the main gaps in the analysis of triangular relations in standard IR approaches is the lack to study the indeterminacy of simultaneous interactions in triangular relations. This thesis proposes a more extensive approach to understanding three state interactions, namely synchronization. This adaptation of the synchronization theory seems to be a reasonable way to approach triangular relations between states. Physics as a basic science offers universal principles. This universality facilitates the use of its principles in other sciences, which in this case is to explain state interactions in IR. Dialog between disciplines such as physics and IR, which at first glance is not apparently interconnected, is possible; like the one this thesis adopts, they can mutually benefit each other.

The following chapter presents the theoretical framework of synchronization and defends its applicability to explain triangular relations.

Chapter III

Synchronization in Triangular Relations

"The tendency to synchronize may be the most mysterious and pervasive drive in all the nature. It has intrigued some of the most brilliant minds of the 20th century, including Albert Einstein, Richard Feynman, Norvert Wiener, Brian Josephson, and Arthur Winfree" (Strogatz, 2003)

Triangular relations are qualitatively different from the triangular relations that were prevalent during the Cold War era. While there are similar dynamics within the non-aligned movement, the Cold War was more an attempt to move states into one power's camp or the other, and interpret relations dichotomously. With the beginning of the new millennium, triangular interactions have taken on a new impulse in International Relations (IR) due to: (1) the rise of China in the international system; (2) the U.S. efforts to maintain its global influence and avoid potential negative effects of Chinese rise for U.S. interests; and (3) the role of third states that seek to play a role in the international system and gain advantages from their respective relationships with China and the U.S.

There is an obvious academic interest in understanding to what degree they are mutually affected in triangular relations. Most of the literature on triangular relations is composed of empirical studies (Park 1986; Soeya, Wang, and Welch, 2003; Womack, 2004, 2010; Shambaugh 2005; Rahim 2005; Ellis 2005, 2007, 2012, 2013, 2015, 2016; Wu, 2005; Cabestan 2006; Domínguez, 2006; Tokatlian, 2007; Alterman and Garver 2008; Stallings, 2008; Roett and Paz 2008; Curtis, 2011; Dreyer, 2012). However, in view of the differing dynamics among countries in the international system, there is no adequate theoretical framework in place with which to approach the complex interactions of triangular relations. This chapter presents the synchronization approach to triangular relations, based on the synchronization theory of physics.

Triangular relations are interactions between three states, which interact in complex processes. We argue that the complexity of the triangular relations can be explained by applying synchronization, whereupon the complexity becomes understandable and organized. Synchronization is a process where states interact constantly and mutually influence each other. The constant or permanent interactions also include the apparent absence of interactions. The apparent interactions are recognizable only because they are correlated with the interactions preceding and succeeding them. The mutual influences among the interactions are the responses between cooperative and conflictive behavior.

As noted before, this study defines synchronization as periods of strong, quasisimultaneous interactions and effects between three states, where one of them plays the role of the "third mechanism" or third state. These interactions and influences are named quasisimultaneous and not simultaneous because the interactions and influences are produced in the same period, yet are not immediate. We have to remember that state interactions are the result of actions and responses to the actions of other states. The influences in this context may be understood as the cooperative or conflictive responses between three states.

The present chapter contains five sections. The first section introduces the understanding of triangular relations. Section two presents the concept of synchronization in IR and explains how states are systems that are capable of synchronizing among them. Section three presents the necessary conditions that are needed to synchronize and the four different types of synchronization. Section four proposes event synchronization as a method for testing synchronization. Finally, section five provides some concluding remarks.

1. Triangular Relations

Interactions between states in triangular relations are difficult to understand and analyze. The complexity of triangular relations is due to its uncertainty in determining three points: (1) the existence of a triangular relation; (2) how the interactions exactly work; and (3) to what degree they affect each other. Triangular relations are, in essence, the interactions between three states. However, in a triangular relationship, three bilateral relations are involved: A and B, A and C, B and C (see Graph III.1). For instance, states A and B can have a more or less conflictive or cooperative relation because of the influence that C will have when interacting with A and B.

Graph III.1: Scheme of a Triangular Relation and Its Bilateral Relations

Source: author's elaboration, where A, B, and C are states...

The assumption that we observe a triangular relation because there are three states presumably interacting with each other is not enough. It is fundamental to establish that the interactions taking place do really involve the three states and that almost inherently produce effects between them. At this point, the concept of mutual effects in triangular relations is central to understanding these relationships.

There are some differences between effects, influences, and coercion. Effects are, in fact, produced by the interactions between states, as results of those interactions. In cases of influence, a state pursues that other state does something. It is ultimately the state being influenced that decides the direction that the influence can have, positive or negative, and returning to the state that is trying to influence. When a country with military power forces another state to take a particular decision, it is not purely effect and influence, but can be rather termed as coercion. Coercion is an extreme case of influence to do something one would not otherwise do. In coercion, the state has to obey by doing or not doing something according to the dictates of the stronger state. Thus, influence is a reciprocal process while coercion has only one direction. This perspective of effect, influence, and coercion is important to understand, because then we can recognize that every state, irrespective of the material capabilities it has, can have effects or influence other states.

One can say that the potential effects that a state has over others is determined by multiples factors such as their geopolitical position, material capabilities, and legitimacy, among others. We argue that the potential effects that a state exercises over others are dictated by the constellation of reciprocal interactions. Effects can be produced by any and every state, irrespective of their material capabilities.

The effects that states have in a triangular relationship are more complex and uncertain. It is because of these complexities and uncertainties that triangular relations earn a specific space in IR literature, more than the already existing empirical analysis. In chapter II, we analyzed the existing theoretical and empirical approaches towards triangular relations with valuable contributions of the "strategic triangle" concept proposed by Dittmer (1981). The subsequent corrections and complementarities were put forward in the work of Womack (2004), who added the concept of an "asymmetric triangle". Besides, the work of Goldstein and Freeman (1991) has provided us with a framework to test the China-Soviet Union-U.S. strategic triangle. However, a specific theoretical framework for triangular relations is needed and this thesis argues that synchronization is a useful approach to deepen and extend our understanding of the dynamics of triangular relations.

2. Synchronization in Physics and IR

The following explains what synchronization in physics is and what physics can clarify about triangular relations between states. The synchronization theory is a physical approach to interactions and not a mathematical one. That means that synchronization can be primarily explained theoretically. However, the use of mathematical tools is a way to confirm the theoretical propositions of this theory.

In physics, synchronization is understood as "an adjustment of rhythms of oscillating objects due to their weak interaction" (Pikovsky; Rosenblum; Kurths 2001:8). An easy way to understand this definition is to imagine the initial experiment of the Dutch mathematician Christian Haygens (see Chapter I): two pendulum clocks (oscillating objects) moving simultaneously (adjustment of rhythms) because they are communicated through the wall (weak interaction) on which they are placed. For its part, Boccaletti et al. characterize the oscillating objects as chaotic systems and they define the synchronization of chaotic systems as "a process wherein two (or many) chaotic systems (either equivalent or nonequivalent) adjust a given property of their motion to a common behavior, due to coupling or forcing" (2002:3).

In physics, oscillating objects are considered active systems that have their own energy. This internal energy is transformed in movements, which are oscillatory movements (Pikovsky, Rosenblum, & Kurths, 2001: 8). Moreover, the oscillation "...is determined by the parameters of the system and does not depend on how the system was 'switched on'" (2001: 9). This physical description of an object as an autonomous system that contains its own energy is a central point to assimilate states as autonomous systems as well. It is because of this characteristic that states have the capacity to synchronize. According to Pikovsky, Rosenblum & Kurths (2001), the form of oscillation of the object is stable, with the exception of perturbation, but the object returns to its original shape. Thus, states oscillate between cooperation and conflicts. This is explained in detail below in the following point on states as systems in synchronization.

According to synchronization, autonomous systems tend to adjust their rhythms. What do rhythms mean and how can we measure them? Rhythms are the movements or procedures with uniform or patterned recurrence of a wave (remember the pendulum of the clocks). But to measure rhythms is in some way complicated. "Often is convenient to characterize the rhythm by the number of oscillation cycles per time unit or by the oscillation cyclic frequency" (Pikovsky, Rosenblum, & Kurths, 2001: 9). The authors indicate as more convenient the consideration of the cyclic frequency. "Experiments show that even a weak interaction can synchronize two clocks. That is, two non-identical clocks which if taken apart, have different oscillation periods; when coupled they adjust their rhythms and start to oscillate with a common period. This phenomenon is often described in terms of coincidence of frequencies as own frequencies f1 and f2 are coupled together; they may start to oscillate with a common frequency. Whether they synchronize or not depends on the following two factors": coupling strength and frequency detuning (Pikovsky, Rosenblum, & Kurths, 2001: 11).

Coupling strength "...describes how weak (or how strong) the interaction is. In an experimental situation, it is not always clear how to measure this quantity" (Pikovsky, Rosenblum, & Kurths, 2001: 11). What is clear is that the interaction cannot be so strong or absolutely rigid. There has to be the necessary flexibility of communication because this allows the synchronization to take place. This point is related to the explanation above about the differences between influence and coercion. When the interaction is so strong and rigid that one state determines the actions of the other state, there is coercion, and, therefore, synchronization cannot take place. But in a relation of influences, the interaction is flexible and not so strong; states maintain their capacity to decide freely and therefore synchronization can take place.

Frequency detuning or also known as mismatch in physics "...quantifies how different the uncoupled oscillators are. In contrast to coupling strength, detuning can be easily measured and varied in experiments with clocks. Indeed, one can tune the frequency of a clock by altering the pendulum length. Thus, we can find out how the result of the interaction (i.e., whether the clocks synchronize or not) depends on the frequency mismatch". (Pikovsky, Rosenblum, & Kurths, 2001: 11-12). In other words, the frequency detuning or mismatch occurs when two oscillating objects that do not have previous communications, start to communicate until their frequencies coincide.

Since Haygens discovery, synchronization has been studied in physics and applied to several other disciplines. Synchronization has been developed to explain not only periodicity and timing, but also the complex influences between oscillating objects. For instance, the synchronization in humans and different animals groups (Strogatz 2003; Koukkari and Sothern 2006), synchronization of the climate system (Rial, Oh, and Reischmann 2013), as the South America rainfall dipole (Boers, Bookhagen, Marwan, and Kurths 2016), and synchronization of terrestrial processes with the Earth-Moon-Sun system (Sidorenkov 2015; Salazar, McInnes, and Winter 2016), synchronization of collective behaviors (Nèda, Ravasz, Brechet, Vicsek, and A.L., 2000), among others.

The initial idea to apply synchronization theory from physics to triangular relations in IR for this doctoral thesis came after the search for an IR theory that could explain the indeterminacy of state behaviors and mutual effects in triangular relations did not yield anything. Subsequently, learning more about this theory in physics, the initial idea grew to recognize that synchronization should be adapted and that it could be a useful approach to explain interactions in triangular relations.

This study argues that synchronization is a complex process of interactions and that it is frequently occurring. A main assumption of this thesis is that states interact with the tendency to synchronize. This is because states interact as a part of the international system, where they are influenced by the system and influence the system as well. The system is constituted by the actions and interactions between states. Therefore, in a system with multiple actions and interactions between states, mutual effects and influences are also multiple and are constantly present.

However, in physics, no measurement is exact, but it is possible to analyze the trajectory of objects as a tendency (Rovelli, 2016:111-14). This means that, by using synchronization as an approach to triangular relations, it is possible to explain the interactions and effects between states in triangular relations. However, synchronization also has its limitations. Synchronization indicates the probabilities of a certain sequence of events or interactions between states in triangular relations, but only as a tendency when some necessary conditions are present.

3. States as Systems in Synchronization

This thesis considers states as the main actors in international relations. For the purpose of this analysis, we consider states as: (1) autonomous-independent systems; and (2) dynamicchaotic systems. An independent system in physics is called "oscillators autonomous." This means that they are self-oscillatory systems. They can be isolated and will have their own rhythms (Pikovsky, Rosenblum, & Kurths, 2001:28). States as autonomous-independent systems have their own internal structures; when they interact with other states, the essence of the states do not change with the interactions. Theoretically, one can isolate a state from the international system and yet this state would continue to be a state without a loss of its characteristics.

While recognizing states' autonomy-independency, let us not forget the states' capacity to react pragmatically in the face of external influences as a way to protect their national interests. Synchronization recognizes that states respond to external influences, but the ways in which they do depends primarily on internal factors. According to the realist theory, states act in their own national interest - a behavior that is understood in terms of power. However, a state's behavior also has to be understood in pragmatic terms. Thus, a state's national interests are multiple, as are the issue areas in which states interact with each other. This pragmatism can include seeking power, looking for prestige, economic development, cultural influence, and so on.

States are also dynamic-chaotic systems because their reactions are unpredictable. States as chaotic systems have the capacity to react to an external influence in whatever way they want. According to Waltz (1979), the structure is what influences the behavior of states, which is partly true, but it does not guarantee how the reactions will be. Synchronization can help indicate the probabilities of certain sequence of events or interactions due to their triangular relationship. The states are still chaotic systems, but synchronization shows certain tendencies of states' reactions in triangular relations.

Synchronization explains the external influences that a third state has (1) specifically over the other two states and (2) in general on the relations between the three states. Synchronization is a process where at least three dynamic and autonomous states participate. One of the three states plays the role of the third mechanism, which means that this state in a specific moment of the process is the most influential state over the other two states. Thus, states adjust their behavior in light of their interactions with the third state. Synchronization occurs when three states interact and also when other necessary conditions are present.

The third state influences the cooperation and conflict between the two other states. Above, we explained that the influence can be positive or negative, and that the influenced state decides for itself the direction to take. Therefore, the third state can, ironically, be influenced negatively when the other two states decide to cooperate with each other and maintain parallel conflicts with this third state. These positive and negative influences are explained in detail as part of the presentation on the four different types of synchronization. But before that, we have to discuss the necessary conditions that have to be present in triangular relations in order to produce synchronization between states.

4. Necessary Conditions to Synchronize

A main assumption of this thesis is that states interact with a tendency to synchronize; states interact with the tendency to synchronize because the simultaneous interactions produce effects among them. Interactions between states are not only linear and direct, but also there are indirect effects. The indirect effects are produced as consequence of the interactions in the international system. The direct and indirect effects are demonstrated through the synchronization phenomenon.

Synchronization between states is not an accidental or unexpected process between them. But which factors determine that the process of synchronization will take place? There are some necessary conditions to be present for synchronization to occur: (1) there have to be interactions among at least three states; (2) the interactions have to produce effects between them, specially the state that plays the role of the third mechanism has to be able to influence the other two states; and (3) the capacity of the other two states to be able to decide independently about the influences of the third state.

How can we determine that there are three states interacting? When we refer to interaction, we refer to reciprocal actions between states, that one state produces an action that elicits a response from the other. In other words, this is no one-way communication but includes a feedback in return. In bilateral relations, it is less complicated to find the bilateral interactions. But in case of triangular relations, this becomes a main point of the uncertainties of triangular relations. Therefore, one has to establish at least some kind of qualitative correlations between the three states that are part of the supposed triangular relation.

The interactions have to produce effects between the three states. But the effects cannot be so strong that the affected state loses its agency in responding to the effect. The effect should not mean that the third state determines the functions or behavior of the other two states, thus questioning their status as independent systems. In other words, if a third state, let's say, state C, dictates the foreign policy of the state B, then state B is no more an autonomous state. However, we could not observe synchronization when state C and B have just one foreign policy, because there is no real interaction between states A and B.

IR theories and strategies as balancing or bandwagoning do not properly explain the role of a third state or mechanism. As we have already mentioned in Chapter II, the problem of balancing and bandwagoning as explanations of a state's strategies is that they represent the options of minor states as pre-determined in the sense that they cannot effectively influence the bilateral relations of more powerful states. The role of minor states are limited because they have only two ways to protect their national interests; either to ally itself with the powerful state or with the second powerful state. There is also the problem that states seem to be in a static position, either balance or bandwagon.

This thesis argues that there is no absolute and static strategy that the states adopt. Every state can play the role of the third state, meaning that every single state has the capability to influence other states. In these triads, states are simultaneously influenced by, and influence the others. At the same time, the state's orientation to the other state, and their responses to its actions can change over time as a product of its agency.

In a triangular relation, every state has different responses or frequencies in the face of the influences by the other two states. These responses depend mainly on their own national interests. The states' responses or reactions in the form of cooperative or conflictive behaviors will be normally stable. The behavior of the states within the triangular relation will tend to be stable, as they take mostly a cooperative or a conflictive approach. However, some

perturbations might appear that could produce changes in the behavior of the states, producing a switch from one to another kind of synchronization. This kind of synchronization depends on a number of possible reactions that we study in the following part of this chapter.

5. Types of Synchronization

In triangular relations, there are several possibilities of cooperative and conflictive interactions between states. In general, we understand cooperative events when states act together for a common purpose or benefit. On the other hand, the events are conflictive when there is discord in actions and opposition of interests. These possibilities of interactions in triangular relations generate a series of event combinations that produce synchronization processes that can be understood through four archetypes: perfect positive synchronization, double cooperative synchronization, double conflictive synchronization, and perfect negative synchronization.

It is important to remember that state interactions are not permanently and purely cooperative or conflictive interactions. When we refer to cooperative or conflictive synchronization, it means that there are more sequences of cooperative or conflictive events. It does not exclude the presence of cooperation and conflict at the same time. But it is analytically useful to separate these interactions into sequences in which there is a clear tendency of either cooperation or conflict.

We assume symmetry with interactions between two states. For instance, if State A is positive toward State C, this tends to make State C more positive towards State A, and viceversa. There is a transmission mechanism, so that if something changes, e.g. in the A-B States' relationship, it thus propagates to the A-C States' relationship.

5.1. Perfect Positive Synchronization

The perfect positive synchronization has three bilateral relations that maintain for the most part, cooperative behavior between them. This is the perfect positive synchronization because the three states decide to cooperate and benefit from their bilateral relations in the same period of time. In other words, States A, B, and C mainly cooperate (see Graph III.2 below). In this kind of synchronization, each of these states has a similar influence on their bilateral relations; therefore each of the states has the potential to play the role of third state. This is an ideal type of synchronization that is hardly observable in reality.

State A

Graph III.2: Perfect Positive Synchronization

Source: Author's own design.

5.2. Double Cooperative Synchronization

State B

In double cooperative synchronization, there is a conflict between two of the parties, but then the third party maintains cooperative relations with each of the other two (see Graph III.3 below). The third mechanism or third state in this triangular relation is the state that cooperates with the other two countries; meanwhile the other two countries have conflicts between them. In this synchronization, the third state negatively influences the other two bilateral relationships. The third state is a kind of an alternative partner for the other two states. Thus, the third state has a privileged position in the triangular relation.

In this kind of synchronization, the privileged position of the third state in the triangular relations and the negative influence exercised by the third state can be intentional or not. It is intentional when the third state cooperates with the other two as a part of a strategy in order to produce bilateral conflicts between the other two states. It can also be unintentional when the other two states enter into a conflictive relation because they compete for major cooperation with the third state or because prior to the triangular relation, they already had bilateral conflicts and they saw the third state as an alternative partner. This is probably the most common type of synchronization in triangular relations.

State A State C

Graph III.3: Double Cooperative Synchronization

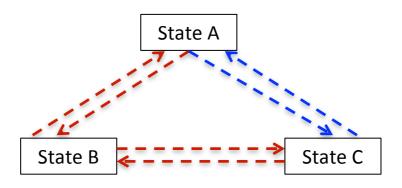
Source: Author's own design.

5.3. Double Conflictive Synchronization

This type of synchronization is produced when there is a conflict between States A and B, State B has conflict with C, but States A and C have relatively harmonious relations (see Graph III.4 below). In this case, the third mechanism is the State B that maintains bilateral conflicts with the other two states. Here, the third state influences positively over the bilateral relationship between the other two states. Thus, in this type of synchronization, it is the third state that has the most challenged position because this state sustains conflictive interactions in both of its bilateral relations.

This synchronization can also be intentional or not. Certainly, it cannot be intentional with regard to the third state. It is intentional when the two countries maintain a cooperative relation because they want to produce negative effects on the third state. Or, it is unintentional when the two states that maintain conflicts with the third state see themselves as alternative partners for each other, and the third state as a limitation on their own interactions. At this point, we have to remember what we have already mentioned above. The third state or mechanism is the most influential state not because of its material capabilities or intentionality, but because of the fact that its interactions with the other two states influence their mutual relations either as cooperation or as a conflict.

Graph III.4: Double Conflictive Synchronization

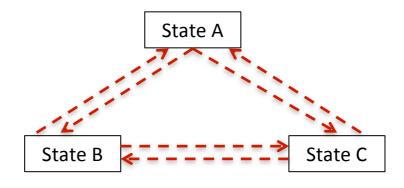


Source: Author's own design.

5.4. Perfect Negative Synchronization

The perfect negative synchronization is produced when the three states are involved in permanent conflicts in their three respective bilateral relations (see Graph III.5 below). In this kind of synchronization, states interact only in the second layer of conflicts. Each of these states have similar negative influence between their three bilateral relations, therefore each of them has the potential to play the role of third state alternating this position among them (see Graph III.5 below). This is also an ideal type of synchronization, which is hardly observed in reality.

Graph III.5: Perfect Negative Synchronization



Source: Author's own design.

6. Event Synchronization as Method

There are several methods in physics to demonstrate synchronization. The methods of synchronization can be classified under three major groups: (1) methods based on similarities of trajectories in phase space (Schiff, So, Chang, Burke, and Sauer 1996; Le Van Quyen, Martinerie, Adam, and Varela 1999; Arnhold, Grassberger, Lehnertz, and Elger 1999; Quiroga, Arnhold, and Grassberger 2000; Quiroga, Kraskov, Kreuz, and Grassberger 2002); (2) methods based on phase differences between the signals (Rosenblum, Pikovsky, and Kurths 1996; Tasss, et al. 1998; Mormann, Lehnertz, David, and Elger 2000; Rodriguez, et al. 1999); and (3) methods more commonly used, such as cross correlations, coherence function, mutual information, and also simple visual tracing (Quiroga, Kreuz, and Grassberger 2002).

This thesis applies event synchronization as a suitable method for the gathering of data. Event synchronization is a simple method that characterizes the interactions between states as events. Events are all actions and interactions between states in a bilateral interaction. Quantification of the bilateral events is a mechanism to find correlations between the three bilateral relations that comprise every triangular relation.

Event Synchronization "is based on the relative timings of events in a time series, defined, e.g. as local maxima. The degree of synchronization is obtained from the number of quasi-simultaneous appearances of events and the delay is calculated from the precedence of events in one signal with respect to the other" (Quian Quiroga, Kreuz, & Grassberger, 2002: 1). One of the most significant advantages of ES is that it scrutinizes the triangular relations as dynamic processes, where states are constantly interacting.

Events that are fully synchronized and their frequency are interpreted as the quasisimultaneous interactions between three states, when one of them has produced a positive or negative response on the bilateral relations of the other two states. ES can quantify not only the quasi-simultaneous events between states, but also the delay among them. Meaning that not only is the presence of events or relations between states considered, but also the later actions and/or absence of periods of interrelations are looked at.

The absence of events between states is also a part of the analysis since these are important to analyze as a part of the dynamics of triangular relations as processes. So, it is an instrument that offers the possibility to analyze how and to what extent states respond in a three-way interaction, besides allowing us also to observe the periods when they stop doing so, as a part of their dynamic processes of triangular relations.

Every event is codified as 1, without distinguishing between the different areas it came from (political, economic, etc.), or whether it is negative or positive. This is because it is not possible to calculate correlations with negative values, such as -1. This also does not distinguish between areas of political, economic or others interactions because we cannot discard any kind of probable synchronization between areas. For instance, it is not appropriate to calculate synchronization only between political events, when it seems that there could be synchronization among areas, or between all areas. After the quantitative and general tests of synchronization, it is possible to explain the synchronization by taking into account the different areas involved.

Afterwards, the thesis proceeds to establish correlations between the bilateral relationships. It is a necessary step towards event synchronization analysis. The correlation shows when two variables, meaning each of the bilateral relationships, systematically varied with respect to the other variable or bilateral relationship in terms of cooperation or conflicts.

The correlation is positive when the two variables react consistently in the some direction, meaning that both bilateral relationships are cooperating or yielding conflicts in similar periods of time. For instance, when two states cooperate with each other, the other bilateral relationship also cooperates. A negative correlation is when one of the two variables reacts in inverse directions. This happens when one bilateral relationship cooperates, whereas the other bilateral relationship maintains conflicts.

It is important to clarify that the terms positive and negative correlation are not synonymous with cooperation and conflict, respectively. In a positive correlation, for example, it can be the case that the two bilateral relationships are correlated due to their correlated conflicts. The correlation is due to the states' preferences, but the synchronization is a fact produced by the interactions between three states.

In order to establish correlation between the bilateral events, we search the running or moving average³ of events as follows:

³ Prof. Dr. Arkady Pikosky from the Departament of Physics and Astronomy at the University of Postdam has gently facilitated the formulas of running average and correlation for the application to the empirical cases of this thesis.

Suppose one has two time-series x_k and y_k , where k runs from 1 to N.

Running averages over length M are defined as:

$$X_k = \frac{1}{M} \sum_{j=k}^{j=k+M-1} x_k \qquad Y_k = \frac{1}{M} \sum_{j=k}^{j=k+M-1} y_k$$

Where k runs from 1 to L=N+1-M.

This means for M=4:

$$X_1 = \frac{x_1 + x_2 + x_3 + x_4}{4} \quad X_2 = \frac{x_2 + x_3 + x_4 + x_5}{4} \quad X_3 = \frac{x_3 + x_4 + x_5 + x_6}{4}$$

Etcetera.

Afterwards, we proceed to look for correlation.

Suppose one has two time-series X_k and Y_k where k runs from 1 to L.

At the first step one calculates averages:

$$\bar{X} = \frac{X_1 + X_2 + \dots X_L}{L}$$
 $\bar{Y} = \frac{Y_1 + Y_2 + \dots Y_L}{L}$

Then one subtracts these averages from the time series

$$\tilde{X}_k = X_k - \bar{X}$$
 $\tilde{Y}_k = Y_k - \bar{Y}$

Then one calculates the variances as:

$$V_x = \frac{(\tilde{X}_1)^2 + (\tilde{X}_2)^2 + \dots (\tilde{X}_L)^2}{L - 1} \qquad V_y = \frac{(\tilde{Y}_1)^2 + (\tilde{Y}_2)^2 + \dots (\tilde{Y}_L)^2}{L - 1}$$

Then one calculates the correlation coefficient as follows:

$$C_{xy} = \frac{\tilde{X}_1 \tilde{Y}_1 + \tilde{X}_2 \tilde{Y}_2 + \ldots + \tilde{X}_L \tilde{Y}_L}{L \sqrt{V_x V_y}}$$

This coefficient can vary from -1 to 1. C_{xy} close to 1 means strong positive correlation. C_{xy} close to -1 means strong negative correlation (or also called anti-correlation). C_{xy} close to zero means no correlation (they are "independent" processes).

Until the results of the correlations between the bilateral relationships are obtained, this thesis proceeds to test synchronization for the triangular relation. This thesis applies Event Synchronization. Event synchronization firstly, looks for the event rate in each time series. Secondly, it defines the symmetrical and asymmetrical combinations, which measure the synchronization of the events and their delay behavior, respectively. There is a Q=1 if and only if the events of the signals are fully synchronized. Events that are fully synchronized and their frequency are interpreted as the quasi-simultaneous interactions between three states, when one of them has produced a positive or negative response on the bilateral relations of the other two states. And by doing so, it finally sheds light on how and to what extent a bilateral relationship has been altered by their relationship with a third state.

In synchronization of triangular relations, normally one of the states plays the role of what is referred to as the "third mechanism" in physics, or what we refer to here as the third state. The third state is the state that permits the communication between the other two states. These communications that go through the third state produce variations in the cooperation or conflicts between the other two states.

As explained above, ideal synchronization has a value of 1. However, ideal synchronization is rare or almost impossible to observe in reality, because it could deny other factors that can also be influencing the relationship. There is a scale that also considers other values to represent synchronization. This study considers all values equal or above 0.4 to indicate an existence of synchronization in its positive form, whereas values equal to or lower than -0.4 indicate negative synchronization also called anti-synchronization.

The method however, also has some limitations, as the lack of qualitative analysis of the events. So, every event has the same value, meaning 1 or -1. Initially, we cannot determine the value or importance of every one of the events. It is only possible with a posterior qualitative analysis of the synchronized events.

7. Concluding Remarks

Synchronization is a proposal and an initial point from which to better understand triangular relations. We argue that triangular relations tend to be synchronized. This approach seeks to demonstrate that quasi-simultaneous interaction between three states occurs. It is also a proposal to show that state behavior that is apparently not interconnected produces mutual effects. States in triangular relations have a proper dynamic represented in the four types of synchronization. Also, one of the three states plays the role of the third state or mechanism. This third state influences the cooperation or conflicts between the other two states in a triangular relation.

We said that the role of the third mechanism could be played by every state. Material capabilities do not play a role in determining the role of the third state. The other two states have to be free to decide on their response to the third state's influence. We understand influence as the potential of a state to produce effects on the interactions and responses of the other state. However, it is the addressee states of influence that finally decides whether its response will be positive or negative, whether its behavior will be cooperative or conflictive.

This chapter also presented that synchronization takes place under the following necessary conditions: there have to be at least three states interacting; the interactions have to produce influences between them, especially from one of the states that plays the role of the third state; and the other two states have the capacity, given the influences of the third state, to act in a cooperative or conflictive way with each other.

For its part, event synchronization as a method has the advantage of simple methodology. But it also has its limitations, like any other quantitative method. It does not distinguish between the qualitative relevance of the events. However, it can be partly solved with a posterior qualitative analysis of the results of the synchronized events.

The following chapters IV, V, and VI present the qualitative analysis of the bilateral relationships of the case studies between China and Latin American countries, Latin American countries and the U.S., and China and the U.S. respectively. It is a preceding necessary step to explain the development of their bilateral relations for later tests of synchronization in their triangular relationships.

Chapter IV

China's Engagement in Latin America

"Let us work together for a new era of friendly cooperation between China, Latin America and the Caribbean." President of China, Jiang Zemin's speech at the ECLAC during his visit to Latin America in April 2001.

Since 2001, China's entry into the WTO set the stage for a significant expansion of its commercial relations with regions and countries around the world. This new dynamic of China's economic rise also included the extension of political and diplomatic engagement, using a multilateral and bilateral engagement strategy. This political and diplomatic engagement has notoriously been deepened with countries that were also considered to be of strategic value for Chinese interests. In Latin America, China has established so-called bilateral "strategic partnerships" with certain states. These bilateral strategic partnerships are diplomatic instruments that strengthen economic relations and political cooperation in line with broader strategic goals. The strategic partnerships distinguish these bilateral relations as priorities and transform them into comprehensive relationships.

The visit of President Jiang Zemin to Latin America in 2001 has been effectively seen as the inauguration of a new era of China-Latin America relations (Zheng 2009; Zhu 2010; Adams 2015; Paladini 2016; Shoujun 2016). Since this visit, China has considerably raised its presence in the region. There are multiple pieces of evidence pointing to this: a sharp increase in Chinese commerce, investment, and finance to this region; technological cooperation, such as the satellite cooperation programs; and the establishment of bilateral strategic partnerships. Until 2015, China has signed strategic partnerships in the region with Argentina, Brazil, Chile, Mexico, Peru, and Venezuela. The main goal of this chapter is to examine the increasing Chinese presence in the region from 2000 to 2015, with a special focus on its bilateral strategic partnerships with Argentina, Brazil, and Venezuela⁴.

⁴ Chapter I includes the criteria to select the cases of Argentina, Brazil, and Venezuela' bilateral strategic partnerships with China.

For the purposes of the argument being made in this thesis, it is important to study the bilateral strategic partnerships of China with these Latin American partners mainly for two reasons: the study of these bilateral relations shows the broad area of interaction among these countries. Additionally, this can also offer a base to analyze how China is moving to translate its bilateral relations into a regional policy and partnership. The other reason has more specifically to do with the role of the U.S. in the region that is typically viewed as its sphere of influence. The analysis of the content and mechanisms of interactions of these strategic partnerships identifies potential effects on the U.S. in its relations with Argentina, Brazil, and Venezuela. The analysis of these potential effects is necessary for understanding the dynamics of the triangular relationships.

This chapter is divided into three sections. It begins by highlighting the growing economic relations between China and the Latin American region. Section 2 discusses the political-diplomatic efforts of China and some Latin American countries to expand their relationships into strategic partnerships. Finally, section 3 provides an extended insight into the comprehensive bilateral strategic partnerships between China and Argentina, Brazil, and Venezuela, respectively.

1. Commerce and Investment

Trade between China and Latin America has multiplied twenty times from 2001 to 2015. China became the leading trading partner of some of the Latin American countries, such as Brazil, Chile, Peru, and Uruguay (see Table IV.1 below). The initial Chinese commercial interests looking for natural resources and markets have expanded to direct investment in sectors, such as infrastructure, energy, and telecommunication, among others. As Niu mentions, "... China updated its economic strategy towards the region by emphasizing investment, financial and industrial capacity cooperation, besides trade" (2015:40).

Table IV.1: Latin American goods exports to China, 2008-2014 (US\$ Millions)

Country	2008	2011	2014
Argentina	6,355	6,232	4,462
Bolivia	129	337	434
Brazil	16,403	44,315	40.616
Chile	8,519	18,629	18.288
Colombia	443	1,989	5,755
Costa Rica	613	215	339
Ecuador	392	569	502
El			
Salvador	4	47	6
Guatemala	32	25	43
Honduras	33	91	92
Mexico	2,045	5,965	5,979
Panama	52	41	69
Paraguay	96	30	48
Peru	3,735	6,961	7,025
Uruguay	172	526	1,220
Venezuela	270	492	11,320

Source: Red ALC-China, on the basis of official information from Comtrade.

The Latin American export to China is comprised primarily of natural resources. For instance, according to the Latin American Economic Outlook 2016, in 2013 the export of natural resources from Latin America to China was of 73%., thus making primary-goods the top exports to China. The growth of Latin American exports to China of mining and fossil fuels has been 16% annually (OECD/ECLAC/CAF, 2015). The growing export of primarygoods by Latin American countries is a consequence of growing trade with China. There have been critics in Latin America against the tendency by which the strong demand for commodities by China, and the direction of its loans and investment, tends to reverse the progress previously made away from commodities towards manufacturing.

For its part, until 2010 the Chinese Foreign direct investment (FDI) in Latin America was limited. According to ECLAC (2013), the FDI in two decades was only approximately USD 6 billion. The investments were aimed at the oil and gas industry in Argentina, Brazil, Colombia, Ecuador, and Venezuela, while Peru received Chinese FDI in its mining sector. The Chinese FDI in 2014 stood at USD 153 billion and was divided in mining, hydrocarbons, services sectors (telecommunications, financial services, energy distribution, and retail), but also in Brazilian and Mexican automotive and electronics industries. The main benefactors in Latin America in infrastructure projects have been Brazil and Peru (OECD/ECLAC/CAF, 2015:154). However, between 2014 and 2015 Chinese investment in the region declined by 9,1 %. According to the ECLAC, the decline has been caused by two factors, the tapering of investment in natural resource sectors and the slowing economic growth, especially of Brazil (2016: 20-21).

Table IV.2: Latin America countries estimated FDI flows from China, 1990-2015 (USD Millions)

	1990-2009	2012	2013	2014	2015
Argentina	143	3.100	2.450	600	120
Brazil	255	9.563	5.676	6.067	2.580
Chile	Na	5	0	76	19
Colombia	1.677	6	293	996	776
Ecuador	1.619	86	94	79	114
Guyana	1.000	Na	15	na	Na
Mexico	146	9	2	74	15
Peru	2.262	84	829	1.307	4.626
Venezuela	240	900	Na	na	1.400

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information, Thomson Reuters, FDI Markets, Heritage Foundation and information from the respective companies. Note: na = not available.

Moving to Chinese loans to the region, according to the Latin American Economic Outlook 2016, Chinese loans amount to the very large sum of USD 94 Billion since 2010. Meanwhile, in the same period, the combined loans from the World Bank, CAF, and IDB sum up to USD 156 billion (OECD/ECLAC/CAF, 2015:29). Thus, China has quickly surpassed the financial support that the primary international and regional creditor institutions have been offering to Latin American countries. "Chinese financing is concentrated in mining, transport, infrastructure, and energy sectors, whereas 60% of international financial institution (IFI) projects focus on other sectors (finance, education, health, environment, public administration). Argentina (16%), Brazil (19%), Ecuador (9%) and Venezuela (47%) were the most active in Chinese financing, accounting for 91% of Chinese loans between 2005 and 2014" (OECD/ECLAC/CAF, 2015:29).

Table IV.3: Chinese Lending to Latin American countries 2005-2015

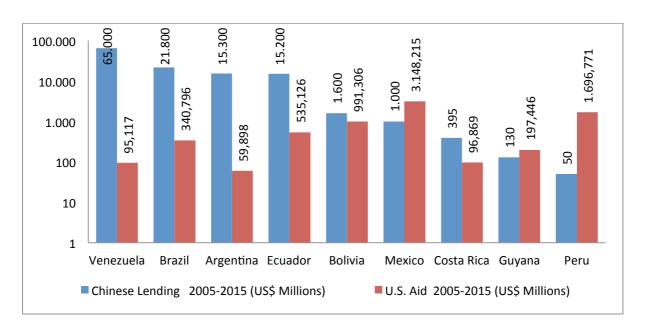
	USD
Country	Million
Venezuela	65.000
Brazil	21.800
Argentina	15.300
Ecuador	15.200
Bolivia	1.600
Mexico	1.000
Costa Rica	395
Guyana	130
Peru	50

Source: Author's own compilation, based on data

from Inter-American Dialogue.

Comparing the Chinese lending to Latin American countries with the U.S. Foreign Aid from 2005 to 2015, it is possible to see a kind of pattern there. China has been lending the most to countries where U.S. Foreign Aid is minimal (see Table IV.1 below). It is a pattern that should be considered to explain how some Latin American countries choose their partners. The desire of greater independence from the U.S. and Western-led global financial system take actions in ways that both produce a decrease in possible U.S. aid programs and also create an opportunity to turn to alternative sources of finance, commerce and investment such as China. Moreover, Chinese lending came with no conditions related, for example, with democracy, human rights, or drug enforcement, etc. Meanwhile the U.S. aid always comes with strings attached, which often require adherence to fiscal or other policy requirements as conditionality for funds.

Graph IV.1: Comparison of the Chinese Lending and U.S. Foreign Aid in Latin **America**



Source: Author's own compilation, based on data from Inter-American Dialogue and the United States Agency for International Development (USAID).

2. Chinese Political and Diplomatic engagement in Latin America

The Chinese advances in trade, investment, and lending in the region have been accompanied by its renewed diplomatic and political overtures in Latin America. The visit of the Presidents of China, Jiang Zemin, in 2001 to Argentina, Brazil, Chile, Cuba, Uruguay, and Venezuela, Hu Jintao in 2004 to Argentina, Brazil, Chile and Cuba, the visit of Premier Wen Jiabao to Brazil, Uruguay, Argentina and Chile in 2012, confirm the Chinese diplomatic efforts to engage and diversify its relationships with the region.

In 2001, Zemin's visit was accompanied by a delegation of 120 people, including the Minister of Commerce, businesspeople, and the media (BBC Mundo, 5 April 2001). On the occasion, China and the host Latin American countries signed numerous bilateral agreements in agriculture, energy, technological cooperation, among others. Later, Yang Zemin initiative to engage with Latin America was followed by Hu administration.

According to the former Foreign Minister of China, Li Zhaoxing, Hu's visit in 2004 looked to revitalize the China-Latin America friendship and deepen the mutual political trust between the countries in order to enhance cooperation, especially in the form of bilateral strategic partnerships. Hu Jintao also expressed his intentions to consolidate consultations and enhance coordination in international organizations. During this trip, President Hu signed 39 agreements with his Latin American counterparts in areas as such as trade, investment, aviation, aerospace, tourism, and education. In concrete, China announced the investment of USD 100 billion in Latin America in the following decade, from which Brazil was poised to receive USD 10 billion of the Chinese investment, mainly in energy, but also in railway and steel sectors. According to members of the diplomatic corps of Latin American countries, Chinese and some Latin American delegations have regularly met in order to coordinate positions in multilateral international forums.

Later, in 2012, Premier Wen Jiabao cemented the political-diplomatic and strategic relations between China and Latin America. He delivered a speech in Santiago de Chile that is taken as a basic document to understand the Chinese approach to the region. He recognized that China and Latin American countries are developing but also emerging countries acting in a profoundly changing world. This changing world brings new issues that pose challenges to individual countries and the international system. In this scenario "China is ready to advance its comprehensive and cooperative partnership with Latin America and the Caribbean with utmost sincerity and raise our practical cooperation to a new level" (Wen 2012). From a Chinese perspective, the comprehensive and cooperative partnership with Latin America would create and consolidate common interests to cooperate, and confront the challenges and influence the international system.

Premier Wen (2012) outlined four actions to the China-Latin American relations. The first proposal was to deepen strategic cooperation. This strategic cooperation includes "increase high-level contacts, establish various forms of government consultation mechanisms, expand exchanges between legislatures, political parties, and local governments, and enhance experience sharing on governance". It is not a coincidence that Wen's first proposal is strategic cooperation when he refers to a comprehensive and cooperative partnership. As we will analyze below with the bilateral strategic partnerships established by China with Argentina, Brazil, and Venezuela, respectively, the strategic cooperation has been a pillar of their interactions. On this point, he specifically proposed the establishment of a China-CELAC dialogue mechanism at the ministerial and also leaders levels.

The second proposal was to improve economic cooperation and trade, as opposed to protectionism. On this point, Wen (2012) looked to counter one of the main criticisms to China in the region: the trade surplus with some countries, and the "re-primarization" of their economies as consequence of their commerce with China and the lack of industrial cooperation. The Chinese Premier highlighted that China does not pursue a trade surplus with the Latin American region. He calls for establishing industrial cooperation mechanisms to support the import of more manufactured goods from Latin America with high value-added products. He also promised more investment in several areas.

However, the third proposal, "safeguard food security through agricultural cooperation" seems to contradict the second proposal, which is precisely not to deepen the problem of re-primarization. It could deepen the re-primarization of Latin American economies because it is integrated mainly by two natural resources: mineral, and agriculture products. One of the Chinese objectives is to create "an emergency food reserve of 500,000 tons between the two sides for natural disaster response and humanitarian relief. The Chinese government will contribute US\$50 million to set up a special fund for our agricultural cooperation and development". In this case, Latin American countries could benefit when the efforts are realized in order to industrialize agriculture products as well.

The fourth proposal was to deepen people-to-people and cultural contacts. It pursues to facilitate the understanding between the two sides. It includes cooperation in education, culture, media, sports, and tourism sectors, among others. What is more interesting about this fourth proposal, is the insertion of technological cooperation in this dimension. As Wen (2012) mentioned, "China proposes to launch a scientific and technological innovation forum between the two sides for stronger cooperation in space and aviation, new energy, resources and the environment, ocean, and polar science research". However, these areas are in essence strategic, e.g., the satellite development is part of the army, it does not matter if a satellite has civil or military uses.

While Chinese interactions initially focused on bilateral relations in Latin America, China looked for more possible ways to engage with the region. Thus, in 2008 China published the White Paper for Latin America. It showed Chinese intention to expand its relationship with the region, and diversified areas of interactions. Until 2004, China only participated as a formal observer in the Organization of American States (OAS). But since 2008, China has become a member of the Inter-American Development Bank (IDB), thus enabling China to invest in large regional infrastructure projects. In March 2012, the IDB and China jointly announced a plan to invest USD 1 billion in Latin American markets.

China has also shown interest to be part of new regional institutions, as such as the CELAC. In July 2014 CELAC organized a joined summit with China. In January 2015, China and the CELAC celebrated their First Ministerial Meeting of China-CELAC Forum and subscribed the Beijing Declaration. The China-CELAC Forum agreed to cooperate in mainly four general areas: (1) to respect each other's sovereignty, (2) to improve mutual benefits in trade, (3) to improve cooperation in cultural field, and (4) to enhance dialogue and close consultation in international affairs (China-CELAC Forum, 2015), which are similar to the four proposals of Premier Wen in 2012. According to Niu, the White Paper for Latin America of 2008 did not find a platform in the Latin American region, and the "...CELAC was a good opportunity for China to develop a regional strategy towards LAC" (Niu, 2015:44). Moreover, according to Nolte, the Chinese cooperation with regional organizations, such as CELAC, is a mechanism of China to exercise its new role as a global power, without direct conflicts with established structure and actors (2015:1).

The Beijing declaration reaffirmed the common status of China and Latin American countries as developing and emerging economies, and as actors for the promotion of multilateralism and a multipolar world. The Beijing Declaration highlights the mutual and general interests of all members, especially on coordination in international institutions. "The sides are ready to intensify dialogue and collaboration on regional and global affairs of mutual interest, enhance their collaboration on major global issues, strengthen the voice of developing countries in decision-making bodies of multilateral institutions and continue to make positive contributions to peace, stability, development, and prosperity".

The China-CELAC Forum also subscribed the "Plan of Cooperation between China and the Latin American and Caribbean Countries (2015-2019)", identifying the key areas and specific measures of cooperation between China and the region in the next period. The Bilateral Plan includes broad objectives on: policy and Security; International Affairs; Trade, Investment and Finance; infrastructure and transportation; energy and natural resources; agriculture, science and technology, aviation and aerospace; Education and Human Resources Training; Culture and Sport; Press, Media and Publication; Tourism; Environmental Protection, disaster risk management and reduction, poverty eradication and health; people-topeople friendship.

The bilateral strategic partnerships look for coordination on international issues. For instance, the bilateral Agreements between China, Brazil, and Venezuela, respectively establishing their strategic partnership. But, Chinese engagement with Latin America on global issues has not been seriously analyzed in the academic literature. This absence of significant analysis on global issues coordination has been shadowed by the spectacular and more visible economic-commercial exchanges. However, it seems that during the last few years, the initial bilateral Chinese engagement approach with its bilateral strategic partners is expanding as regional policy. As the mention to install regional ad-hoc diplomatic mechanisms to coordinate, "We will actively work to maintain high-level exchanges and contacts including institutionalized dialogues at relevant levels, to strengthen experiences on governance and enhance consultations on international issues" (Beijing Declaration, 2015).

There is also a debate as to whether the U.S. policy for Latin America has been a factor to be considered in the development of politic-diplomatic China-Latin American relations. For some authors, the absence of an active policy of the U.S. for Latin America has played a role in the China-Latin American relations (León-Manríquez & Alvarez, 2014). Contrary to this position, however, Ellis (2016) argues that there is no absence of U.S. policy for Latin America: there have been clear policy positions by the U.S. administrations toward Latin America, but the relative attention and resources given to Latin America have been low. However, it is this U.S. relative attention and resources given to Latin America that has in part encouraged the Latin American countries to look for other convenient partners, where China has offered multiple possibilities to improve trade and investment, among others.

For instance, as Ellis (2016) has mentioned as well, during the visit of President Hu in 2004 in Chile also as a part of his attendance to the APEC Summit, the President George Bush was present there, too. However, the approach of the two presidents for the region was entirely different. President Hu offered investment, more trade, several projects, that were welcome for Latin American countries' interests. Meanwhile President Bush came with "... an agenda out of step with most Latin Americans' interests: North Korea's efforts to obtain a nuclear weapon, the strong U.S. dollar and U.S. budget deficits." (Ellis, 2016).

This thesis assumes that China has been acting pragmatically with Latin American countries, in order to protect and reach its own Chinese national interests. According to Creutzfeldt "China's foreign policy towards Latin America is driven by domestic priorities and framed outwardly by the ideas of international cooperation for mutual benefit, nonintervention in internal affairs, growth of trade exchanges, and investment that combine Chinese financial and technological capacity with the developmental needs of most Latin American countries" (2016:32). However, the pragmatic behavior of China with Latin American countries does not discard that in fact, Chinese presence in the region has affected U.S. interests.

The mentioned Chinese diplomatic and political overtures in Latin American above has initially founded on the bilateral strategic partnerships with certain countries in the region. Therefore, these bilateral strategic partnerships are useful to understand the broad presence of China in the region. Below, this chapter analyzes the bilateral strategic partnerships of China with Argentina, Brazil, and Venezuela.

The Latin American strategic partners are considered the priority partners of China in the region and signify the countries those have more diverse interactions with China than just trade. In Latin America, China has thus far established comprehensive strategic partnerships with Argentina, Brazil, and Venezuela. There exists a certain consensus that comprehensive strategic partnerships are instruments of political coordination in seeking of support for

common positions in international institutions. In addition, diplomats in South America affirm that these relationships transcend bilateral interests and economic motivations. Nevertheless, there is neither a consensus on what an actual bilateral comprehensive strategic partnership is, nor how to best conceptualize it.

As mentioned in chapter I, academics understand strategic partnerships as emphasizing different characteristics. Avery Goldstein (2001), interpreted the strategic partnerships as instruments of major powers and "that Chinese leaders' adoption of this formulation of strategic partnerships is more descriptive of the multifaceted bilateral relationships that they envisaged establishing with the major powers." For her part, Nadkarni (2010) notices that the strategic partnerships are not a diplomatic instrument signed only by major powers, but by pivotal powers as well. Pivotal states and secondary powers see the strategic partnerships as safe policy option "in a complex and globalizing world [...] which share a range of both common and divergent interests" (Nadkarni 2010: 47).

This chapter argues that the bilateral comprehensive strategic partnerships are diplomatic instruments of the post-Cold War era. The post-Cold War era is characterized as one in transition, where emerging and minor powers are looking for better positions in the international system. The comprehensive strategic partnerships are bilateral diplomatic instruments that include pragmatic state behaviors, the establishment of ad-hoc diplomatic channels of coordination, and the inclusion of bilateral, as well as regional and global mutual interests.

For its part, the formalization of the partnership requires two main elements: the public, mutual recognition of the strategic relationship, generally achieved by signing an agreement; and, the establishment of bilateral diplomatic ad-hoc channels of communication that permit to materialize the partnerships, for example, a high-level commission, subcommissions, and a bilateral plan. These ad-hoc diplomatic mechanisms support the mutual aspirations to long-term collaboration and introduce permanence into these bilateral relationships. The regular meetings and coordination between the sub-commissions of the ministries monitor how far compliance with bilateral targets is being achieved. Nevertheless, these diplomatic mechanisms do not necessarily reduce conflict between the partners. They do, however, prevent escalation while also potentially facilitating the resolution of it.

In strategic partnerships, the term strategy manifests itself in two ways. On the one hand, it has the function of securing national interests; on the other hand, it includes an orientation towards the future, in its contribution to long-term national interests. The strategic partnerships support securing national interests because they are a policy option to behave pragmatically with diverse partners. States can pursue individual relationships with different partners that may not follow a comprehensive multilateral framework, or be strictly consistent with the ideology or policy toward other partners. The notion of being future-oriented includes the possibility of creating mutual strategic interests that states do not yet share, thereby reinforcing the permanence of long-term relationships.

The strategic partnerships of China introduce orientation towards long-term policies and plans. This was not, though, previously a feature of the policies of the Latin American countries. However, the bilateral comprehensive strategic partnerships signed with China introduced this orientation with their investments in energy, infrastructure, and technology. This is particularly evident in the case of Venezuela as both China and Venezuela have a long-term bilateral plan. Venezuela has started to elaborate a long-term "National Plan" with the help of advice from the Chinese, and both have signed the longest-existing bilateral plan, which is effective until 2030. China started to back the Venezuelan regime through the Sino-Venezuela Joint Financing Fund in order to obtain oil at a fixed price for a period initially of ten years.

The bilateral strategic partnerships are a framework of the comprehensive bilateral relationships that China has established with Argentina, Brazil, and Venezuela. These bilateral strategic partnerships content mechanisms that should have implications for the U.S. interests. The strategic partnerships are a kind of starting point of the triangular relations with the U.S. The strategic partnership looks actively to engage with the partners in a strategic sense. It is this strategic sense and the establishment of these comprehensive bilateral relations that generate the implications for the U.S. interests, turning an apparent bilateral relationship into triangular relationships.

3. Brazil and China' Comprehensive Strategic Partnership

Brazil was the first country in the Latin American region to sign a bilateral strategic partnership with China in 1993. This strategic partnership between Brazil and China also started the development of what seems to be a triangular relationship with the U.S. This strategic partnership exposed the Brazil-China mutual interest to coordinate in global issues in order to influence the international system, and subsequently affect the U.S. regional and global interests.

This comprehensive strategic partnership contains political-diplomatic coordination, technological cooperation, trade and financial support, and coordination in global governance. The cooperation in technology is reflected mainly in the China-Brazil Earth Resources Satellite (CBERS). Initially, the establishment of the bilateral strategic partnership between Brazil and China was driven by their mutual interest to cooperate in technology, specifically in the area of satellite building. Brazil has the largest aerospace program in Latin America, where the CBERS project with China is the most significant Brazilian satellite project.

The first outcome of the CBERS program was the launching of a satellite (CBERS-1) in 1999. In 2003 they launched the CBERS-2, which also provides satellite images to some African countries. The facilitation of satellites images to some African countries was part of their aspiration to present their partnership as a result of South-South cooperation that would benefit developing countries. The CBERS-2B was launched in 2007 when Brazil and China also agreed to develop a second generation of CBERS satellites (CBERS-3 and -4). The CBERS-3 was launched in 2013, and the CBERS-4 in 2014. In 2015 both countries signed an agreement for developing and launch the sixth satellite (CBERS-4A).

The CBERS satellites are satellites in geostationary orbit for meteorological purposes and telecommunication. Currently, the CBERS has over 2.500 organizations that have been benefited with the use of the images with 35.000 users around the world. Brazil has used the CBRES images in areas, such as deforestation control and environmental monitoring in the Amazon region, water resources monitoring, urban growth, soil occupation, and education, etc. According to officials of the satellite agency of Brazil, the CBERS has also allowed Brazil to become more autonomous from the U.S. and Europe in the field of satellite imagery, and to give them the possibility to turn this bi-national program toward the export of imaging services to developing countries in both Latin America and Africa (INPE). Despite this, China is the most important partner of Brazil in this field, in terms of the volume of investment, some areas are not covered by this cooperation—one of them, for example, is the need of Brazil to develop its own launch sites and capabilities.

Moving on to the political-diplomatic development between these two countries, in 2004, China established a high-level commission with Brazil in order to facilitate political coordination in bilateral matters and in the context of regional and global strategic dialogue. Both countries agreed to build powerful coalitions in international institutions based on South-South cooperation. For instance, the coordination at the WTO, where Brazil actively participated in the Doha Rounds or the successful political coordination between Brazil and China for increasing their voting shares in the IMF (Pereira and de Castro Neves 2011: 8).

In 2010, Brazil and China together with the others BRICS members, namely Russia, India, and South Africa, negotiated the quota and governance reforms inside the IMF. As a result, China positioned itself as the third largest IMF quota-holder, and Brazil entered into the top 10 members of the IMF. However, the US veto power and inaction of the IMF required that BRICS countries looked for an alternative to the traditional institutions, such as the New Development Bank (NDB) (Snell, 2015). The NDB, created in 2014, is an initiative of China and the BRICS countries, as an instrument of global governance reform and seconded by rising powers, such as Brazil. China has consequently played a dual role, as Abdenur (2014) has mentioned that 'the BRICS allows China to strengthen its dual identity as both a developing country dedicated to South-South cooperation and a rising power striving for governance reform' (2014:90). Despite their own difficulties, the NDB challenges the traditional western economic and financial institutions.

In 2014 President Xi Jinping visited Brazil and re-affirmed the Chinese objectives of the strategic partnership with the country: first, "(...)strategic coordination, continuously strengthen strategic mutual trust, understand and support each other on major issues concerning core interests such as sovereignty, security, and territorial integrity..."; secondly "...a good plan for common development, strengthen coordination on macroeconomic policy, expand convergence of the development strategy of both sides..." and thirdly, "...shoulder international responsibilities, jointly safeguard and carry forward international fairness and justice...strengthen coordination and cooperation within international and multilateral mechanisms, and actively participate in global governance...".

Brazil and China signed approximately 70 bilateral agreements from 2000 to 2015, all as a part of their comprehensive strategic partnership. The economic-commercial accords between Brazil and China represent 36 % of their bilateral agreements, followed by technological cooperation with 31 % of the agreement area; political issues constitute 20 % of the accords, educational and cultural exchanges take up 9 %, and other diverse issues form the remaining 4% of the accords. The contents of the bilateral agreements between both the countries evidence their intentions as trade partners, and their cooperation in the field of satellite imagery, to secure political dialog and coordination, and to transform global governance in order to improve their position in the international arena.

3.1. Brazil-China Bilateral Events

This section presents some finding of the codified bilateral events between Brazil and China from 2000 to 2015. For the purpose of the triangular relations analysis, the important facets of the previously described relationship are codified for quantitative analysis. As mentioned in Chapter I, this research codified, as an event, every bilateral action and interaction between the countries that appeared in the international media as news. The process of codification is explained in Appendix I.

In 89% of the events, Brazil and China were cooperating with each other, whereas, only 11% of the events represent conflicts between both countries (see Graph IV.2 below). Both countries strongly based their cooperative relationship on political-diplomatic interactions representing the 40% of the events. Obviously, countries that maintain cooperative bilateral relationships accompanied it mainly with diplomatic-political cooperation. However, what is not obvious is that the other half of the cooperative events is composed of strategic interactions, and then the third place is occupied by economiccommercial interactions

The events also show that Brazil-China bilateral strategic partnership's primary efforts are not primarily commercial, both countries devoted constant diplomatic and political efforts to engage each other in diverse areas. The strategic dimension occupied the second position of cooperation with 21% of the events. The strategic cooperation contained interactions mainly on satellite building, development of software, nuclear energy cooperation and others. This is the only bilateral dimension that has consequently signed agreements and is regularly supported by their bilateral interactions, specifically in the area of technological cooperation.

The economic-commercial interaction just reaches the 18% of the cooperative bilateral events. However, most bilateral agreements signed by Brazil and China are economiccommercial agreements. Surprisingly, the cooperation in the "soft" field interactions between these two countries reaches a significant 8%. This dimension surpasses the defense-security interactions. However, it is almost absent in the academic literature on Brazil-China relations. Brazil and China have been actively working to build mutual trust supporting the cultural and educational exchanges, promoting tourism.

Now, looking at the positive versus negative character of the events, the conflictive events constitute only 11% of the interactions between China and Brazil. These are made up of political-diplomatic conflict (6%), economic-commercial (4%) and strategic (1%). The 6% of political-diplomatic conflicts are especially due to the declaration of different sectors in Brazil against the Chinese presence, the industrial sector in Sao Paulo, or members of Congress. In general, the conflicts between Brazil and China are originated by Brazil that sees disadvantages in the commerce with China. These disadvantages are due to the increasing import of manufactured Chinese products.

Soft Coop. Strat. Confl. 8% 1% Strategic Coop. Politic Coop. Defense/ 21% 40% Security Coop 2% Economic Econ. Coop. Confl. 18% 4% Politic Confl. 6%

Graph IV.2: Cooperation and Conflicts between Brazil and China in the 5

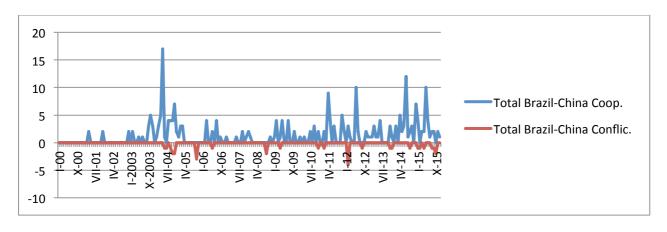
Dimensions 2000-2015 (%)

Source: Author's own codification, based on data from the Media.

The most intense period of interactions between the two countries are three: (1) from 2003 to 2004, (2) from 2010 to 2012, and (3) from 2014 to 2015. From 2003 to 2004 Brazil and China began to identify mutual global interests. For instance, they engaged in issues such as the Kyoto Protocol, Brazil supported that China reaches the status of market economy, both countries joined a call for better access to the markets for development countries; they

criticized the politicization of Human Rights, among others. The second period from 2010 to 2012 includes events as the establishment of a high-level commission, intensification of the political coordination in international forums. The third period from 2014 to 2015 is positive due to the concentration of the relationship on the signing of a series of commercial agreements, as well as those in the technological sector, such as the launch of the CBRES 4.

The periods of most conflicts between Brazil and China are in 2005, 2008, 2012, and 2015. The periods of conflicts are significantly shorter, as compared to the longer periods of cooperation. In 2005, the conflicts between the two countries were produced by some sectors disappointed with the consolidation of the agreement signed between Brazil and China, especially in the commercial sector, as a consequence of which Brazil called to reduce the imports of textile from China. Brazil negotiated the limitation of products imports from China and also threated to adopt safeguards against Chinese imports. In 2008, Brazil threated to increase the prices of minerals, specifically iron and steel. In 2012, the major conflicts are also commercial, due to the still increasing Brazilian imports of manufactured Chinese products.



Graph IV.3: Brazil-China Bilateral Events (2000-2015)

Source: Author's own codification, based on data from the Media.

The codified bilateral events between Brazil and China confirm the high level of cooperation between both countries, which is based on political-diplomatic and strategic engagement. The findings also show that there is not permanent cooperation between the

countries, but periods of major cooperation. For its part, conflicts between both countries are low, and they are presented in the period of major cooperation as well.

4. China and Venezuela's Comprehensive Strategic Partnership

The strategic partnership between Venezuela and China contains mainly three elements: adhoc diplomatic mechanisms for political and strategic coordination, trade and investment, and technological cooperation. Initially, in 2001, Venezuela and China agreed to establish a strategic partnership to commence regular cooperation in energy and agricultural exchange. China started to invest in oil production and infrastructure in Venezuela, as well as installed experimental farms to increase agriculture production. Despite their limited areas of cooperation and almost nonexistent trade in 2001, they still created a high-level commission that permanently coordinates their joint projects. Venezuela was the first partner in Latin America that established a high-level bilateral commission with China, as a new diplomatic channel for communication and coordination.

In 2004 this strategic partnership subsequently expanded to other areas, with the bilateral political coordination being consolidated as the center point of their bilateral relationship. For its part, commercial exchange increased by 400% from 2000 to 2010. Venezuela is the country in Latin America with whom China has most exponentially increased its commercial exchange. China was ranked as the 37th destination for Venezuelan exports in 2000 but has been ranked third Venezuelan exports as of 2008 (ECLAC 2010).

When comparing the figures for Venezuelan oil exports over the course of the last decade, they doubled to the U.S. while they multiplied by a factor of nine to China in 2008 (Argus Fundamentals and CGES: 2008). Until 2010 the interactions between China and Venezuela showed spectacular rising, but it was still not important in volume, as León-Manriquez has mentioned "Absolute Sino-Venezuelan trade figures are not as spectacular ... what draws attention, however, is how this relationship has evolved" (2006: 34). But, later the volume and amount of trade, financial support, and investment passed the expectations. This relationship emerged rapidly; China positioned itself as the leading investor in Venezuela, and its second-biggest market and the most important trade partner of Venezuela.

For its part, the ad-hoc diplomatic mechanisms include sub-commissions in eleven different ministries that involve almost all areas of cooperation. China and Venezuela have also agreed on a long-term bilateral plan, including a route for investment in several projects until 2030. Moreover, Venezuela has started to elaborate a long-term "National Plan" with the help of advice from the Chinese. Venezuela and China created the Joint Financing Fund (Fondo Pesado Sino-Venezolano) that permits the Venezuelan government immediate capital for social projects in Venezuela. This consists of Venezuela being granted credit in return for oil

China and Venezuela also included cooperation in the technological sector, specifically in satellites cooperation. For instance, China was the most important pillar in the creation of the Bolivarian Agency for Aerospace Activities (ABAE). In January 2005 China and Venezuela agreed to develop an aerospace technological cooperation. It includes research cooperation, development of the satellite industry, TT&C cooperation, and professional training in operating satellites provided by the Chinese. In 2008, Venezuela set up the Bolivarian Agency for Aerospace Activities (ABAE) with China as its preferential partner. With the help of its Chinese partner, Venezuela launched its first two satellites in 2008 (Venesat-1) and 2012 (VRSS-I). So far, Venezuela's cooperation with China has included the launching of these two satellites, the construction of two ground stations in Venezuela, and professional training (Noesselt and Soliz-Landivar 2013).

In the defense-security dimension, Venezuela is the fourth biggest market for China's arms sales from 2011 to 2015 according to the Stockholm International Peace Research Institute (SIPRI). A factor to consider at this point is the U.S. embargo on selling arms to Venezuela. Thus, Venezuela looked for other suppliers, and it found China and Russia.

What is interesting to highlight is the almost permanent official visits at the ministerial level, significantly higher when compared with the cases of Brazil and Argentina. There are less presidential or prime ministerial visits, but an important mass at the ministerial level. This finding strongly supports the view that Venezuela and China have been permanently coordinating.

The rise of the bilateral relationship between Venezuela and China has been accompanied by a boom in bilateral agreements. Venezuela and China signed more than 400 agreements from 2000 to 2015. These agreements evidence that the bilateral relations between Venezuela and China are highly concentrated in economic issues, which take up 73% of the

agreements. Technological cooperation is at the second position with 12% of all agreements, and the accords that contain political agendas are only around 7%, followed by other diverse areas at 4%. Education, cultural exchange and military cooperation each take up 2% of agreements between the countries. Contrary to the case of Brazil, Chinese bilateral agreements with Venezuela reflect mainly economic-commercial interests. However, Venezuelan political discourse highlights its strategic relations with China. Even though the bilateral relation between Venezuela and China are strategic, they are predominantly economic.

4.1. Venezuela-China Bilateral Events

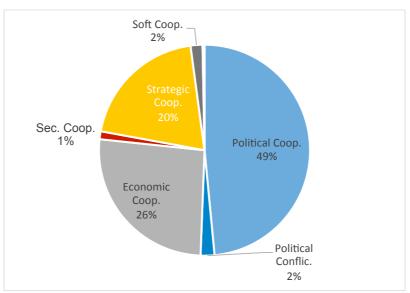
The following paragraphs present the findings of bilateral events between Venezuela and China. From 2000 to 2015, China and Venezuela on average maintained the highest cooperative interactions with 98% of events. Consequently, only a minor 2% were cataloged as conflictive events (see Graph IV.4 below). The 49% of cooperative interactions are part of the political-diplomatic dimension. However, an important number of events in the politicaldiplomatic interactions is the result of the almost permanent admiration by the president and high-level authorities of Venezuela for the Chinese model and its leadership, and their "brotherhood" with the people of China.

Venezuela and China also strengthened their relationships in several other areas, which are part of the other 51% of their bilateral cooperative events, which the bilateral agreements do not reflect. The economic-commercial cooperation reflects 27% of cooperation and the strategic interactions are 20%. In the economic-commercial sector, it is not a surprise that the results of the events show intense cooperation in oil, with the correlated investment in infrastructure, sales of machinery, exchange of personnel, building of refinery, also mining, agriculture, and infrastructure in railways sectors. In the defense-military dimension, the interactions range from the donation of military uniforms to the sales of military weapons. This dimension only occupied the 1% of the cooperation, but it has been enough to convert Venezuela as the fourth biggest market of Chinese military hardware. This could indicate that there is a bias in announcing only economic events, more than military cooperation, which is sensitive.

The strategic cooperation in technology is diverse in sectors and amount, such as the assembly of Chinese computers in Venezuela, the aforementioned satellite program, and the joint-telecommunications company with ZTE, among others.

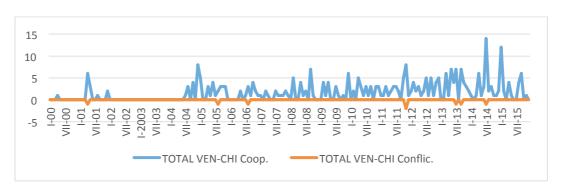
The conflicts between these two countries constitute only 2% of their interactions; this includes some criticism from Chinese officials and some sectors in Venezuela that are vocal against the secretive agreements with China and its increasing presence in this country. These sectors in Venezuela are mainly congressmen of the opposition.

Graph IV:4: Cooperation and Conflicts between Venezuela and China in the 5 **Dimensions 2000-2015 (%)**



Source: Author's own codification, based on data from the Media.

Since 2004 there is an almost permanent interaction between Venezuela and China. There is no particular moment of conflict between the two countries. There are not many significant changes in Venezuela-China relations after the death of Hugo Chávez, and the administration of Nicolas Maduro, apart from the change in behavior on the Chinese side, e.g., granting loans.



Graph IV.5: Venezuela-China Bilateral Events (2000-2015)

Source: Author's own codification, based on data from the Media.

5. Argentina and China's Strategic Partnership

The bilateral strategic partnership between Argentina and China intensified their commercial exchanges and expanded their bilateral interactions into more strategic fields, such as technological cooperation in aerospace and nuclear technologies. Argentina established its bilateral strategic partnership with China in 2004. Before this, they maintained limited bilateral interactions with seldom diplomatic meetings, economic or technological exchanges.

China is the second biggest trade partner of Argentina, as well as the third leading investor after the U.S. and Spain. Chinese investment notoriously increased in Argentina since 2004, after Hu announced his government's plans to invest USD 20 billion in Argentina over the next ten years in railways and constructions projects. The Chinese investment has been offered to strategic sectors in this South American country, such as the building of hydroelectrical plants, aerospace bases, nuclear energy reactors and transport infrastructure.

China and Argentina announced the building of two hydro-electrical plants in Patagonia, with an investment of USD 4.700 Million. China is also building a satellite base in the Argentinean Patagonia, in Quintuco. Argentina agreed to lend the terrain where the Chinese satellite base is being built for 50 years, as well as offered tax exemption for the same period. This is a strategic project because of the potential uses of the satellite base and its benefits, and on the other side, because of the long-term of the Chinese investment. The China National Nuclear Corporation (CNNC) and the Argentine government signed an agreement to build two nuclear plants in Argentina. The investment is approximately USD 14.000 Million,

where 85% of the cost is being financed by China. There are also important Chinese investments in Argentinean infrastructure, specifically in railways.

For its part, Argentina and China agreed to coordinate positions in international institutions as a part of their strategic partnership. They especially refer to the International Monetary Fund (IMF), G20 and the World Trade Organization (WTO). In 2004 when President Hu Jintao was visiting Argentina, he specifically proposed to improve mutual coordination and multilateral cooperation for the democratization of international relations. They also included symbolic gestures vis-à-vis the Malvinas and Taiwan, China supported Argentina on its sovereignty over the Malvinas Islands, and the Argentineans provided recognition to the policy of one China. In practice, this solidarity is translated into the diplomatic and rhetorical support that are regularly expressed in official meetings, but also in multilateral resolutions as the one adopted by the G77+China in 2015 supporting the Argentinean sovereignty over the Malvinas.

Argentina and China have signed approximately 80 bilateral agreements from 2000 to 2015. However, the contents agreements are somewhat different from those between Brazil and China, or between Venezuela and China. Some 48% of Argentina - China agreements represent economic and commercial interests. The second common interest of both countries is reflected in their search for dialog and political coordination, which has 18% of all agreements to it, followed by other diverse agreements with a 15%. Educational and cultural exchange agreements constitute 11% of agreements, and technological cooperation, including nuclear cooperation, with 8%.

5.1. Argentina-China Bilateral Events

In 83% of the events examined, Argentina and China were mainly cooperating with each other. However, there is a big presence of conflicts between these two partners with 17 %, as compared to the low levels of conflict in the cases of Brazil and Venezuela (see Graph IV.6 below). Both countries strongly based their cooperative relationship on political-diplomatic interactions representing 44% of the events. Economic-commercial cooperation represents 24% of the events.

Soft Coop. Soft Confl. Strategic Coop. 5% 1% 5% Security Coop. 5% Politic Conflict 5% Politic Coop. 44% **Economic** Coop. 24% Economic Confl. 11%

Graph IV.6: Cooperation and Conflicts between Argentina and China in the 5 **Dimensions 2000-2015 (%)**

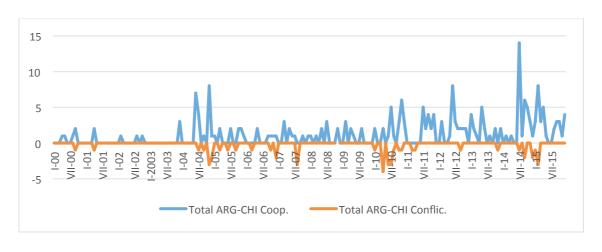
Source: Author's own codification, based on data from the Media.

The greatest period of cooperation between Argentina and China also coincided with the periods of major conflicts. It is because of the almost simultaneous mutual responses in the face of conflict. The periods of most cooperation are 2004-2005, and since 2010 there is almost a permanent and high interaction between both counties, with some picks in 2010, 2012 and 2014. In 2004 this bilateral relationship was given a strong impulse with the establishment of their strategic partnership, accompanied by investment, cooperation in satellite technology, software development, military cooperation, and openness of Chinese market for Argentinean metal. However, simultaneously, the conflicts between both countries focus on the negotiation and threats to limit Argentinean import of Chinese products and the imposition of Chinese phytosanitary measures against Chinese imports of Argentinean soy.

In 2007, there is a pick in the conflicts between Argentina and China; this is due to the Argentinean efforts to restrict the import of Chinese products. Additionally, there are Argentinean statements against the lack of Chinese investment and the lack of follow-on activities to the agreements in 2004.

2010 was a year characterized by a mixture of cooperation and conflict concerning the interactions between China and Argentina. In cooperation, both countries reach more cooperation in the military sphere, as the exchanges of personnel, and some agreements on technology cooperation. However, the main problem between these two countries persists. On the one hand, Argentina restricted the import of Chinese products due to its deficit commercial balance with China and China openly responds to this restriction by cutting down its import of soy from Argentina. In 2010, there was also the resolution of the Argentina-China trade dispute, with the quid pro quo for the purchase of Chinese railroad products after Christina de Kirchner's visit to Beijing.

In 2012 the relations between Argentina and China showed a greater disposition to cooperate, which gets a boost due to Premier Wen's visit to Argentina. They agreed to follow cooperation in energy and defense sectors and installed a satellite base in Patagonia, as well as increased investment in railways in Argentina. This is also deepened in 2014 with similar cooperation, including cooperation in biotechnology and nuclear energy.



Graph IV.7: Argentina-China Bilateral Events (2000-2015)

Source: Author's own codification, based on data from the Media.

6. Concluding Remarks

It seems that the growing economic relations between China and the discussed Latin American countries are the most visible, yet only one aspect, of their interactions. China has been investing in strategic areas with a view to its long-term goals in this region. Chinese investment and cooperation has been vital to the technological sector, especially in the areas of satellite building, nuclear energy, software development, and biotechnology. Moreover,

there are existing ad-hoc political-diplomatic mechanisms with some countries in the region, framed into their respective strategic partnerships.

The bilateral strategic partnerships comprise the evidence of China and the analyzed Latin American countries' efforts to expand their relationships into meaningful political, diplomatic, and strategic interactions. China used these partnerships not only to develop its existing relationships, but also for creating new ones with strategic content. This was the case of the strategic partnership between Venezuela and China, where the bilateral relationship was almost non-existent before the establishment of the strategic partnership.

Although there are similarities between these strategic partnerships, each of these cases has a different intensity. The similarities between Argentina, Brazil, and Venezuela in their bilateral strategic partnerships with China are, first, the ad-hoc bilateral institutionalization. As it has been discussed in this chapter, these strategic partnerships have led to the creation of ad-hoc political and diplomatic mechanisms for permanent coordination and cooperation. These coordination and cooperation mechanisms also identify global interests and look for similar positions in international forums. China and its strategic partners share the goal of influencing global governance institutions, creating more opportunities for themselves as emerging powers.

A second similarity is that technological cooperation is an essential part of these partnerships, especially the cooperation in satellite building as well as in nuclear energy. This cooperation has multi-faceted effects on both civil and military uses of these technologies. And, third, the content of these partnerships reflects the long-term nature of the Chinese approach. This long-term approach will have an impact on the sectors and investment projects it prioritizes, even if these are not always consistent with traditional short-term marketing logic. There are projects planned for at least 50 years that cannot be ignored.

The establishment of these partnerships also suggests that these bilateral strategic partnerships have been the "experimental" model to expand Chinese regional policy and strategy in Latin America. The reference to an "experimental" model is because China's bilateral approach to its strategic partners is moving to expand these bilaterally configured relationships into a broad-based Chinese approach to the region, e.g. the China-CELAC Forum. This is another reason to analyze the bilateral comprehensive strategic partnerships of China with Argentina, Brazil, and Venezuela in order to understand the Chinese presence in Latin America and its regional policy.

This chapter also examined the main findings of the bilateral codified events between China and three of its five Latin American strategic partners. This provides a more concrete and reasoned insight into the bilateral comprehensive strategic partnerships between China and Brazil, Venezuela, and Argentina, respectively. The results may be summarized as follows:

First, most of the bilateral events between China and Argentina, Brazil, and Venezuela, respectively, are political-diplomatic interactions followed by strategic interactions. This does not automatically mean that China and some Latin American countries have mainly political and strategic common interests, but it suggests the existence of permanent and tremendous efforts on the part of these countries to engage with one another in a strategic sense.

Second, political-diplomatic interactions are also instruments to achieve economic results. The political-diplomatic interactions mentioned earlier do not however, invalidate the thesis that China and the three Latin American countries have strong economic relations. We should, however, remember that the economic interactions are carried together with other interests, such as political-diplomatic, technological, and strategic interests.

Third, with Argentina and Brazil, China has had periods of major interactions of cooperation as well as conflicts. In the case of Venezuela, the interactions are frequent since 2004, where one can refer to a particular period of cooperation from 2004 to 2015. The absence of interactions between two periods of continued interactions should also be the focus of a study, as in the case of Argentina and Brazil. This absence of interactions will be analyzed in Chapters VII and IX, as a part of the synchronization of the empirical analysis of the cases.

Fourth, despite the high cooperation between China and its bilateral strategic partners, there are also some levels of conflict with some minimal differences between them. In the analysis of China and Brazil, we saw the incidence of conflicts to be at 11%, but the occurrence was much higher in the case of Argentina at 17%. This could be a result of the different Chinese responses to Argentina and Brazil in the face of conflicts. In the case of Argentinean restrictions on Chinese products, China has also been replicating with commercial restrictions on Argentinean products. Meanwhile in the case of Brazil, they show more cooperation and compromise in several other areas of cooperation. So China, in some cases against the Brazilian claims, has responded by offering more cooperation instead of restrictions. In the case of Venezuela, the South American country did not have claims against China.

The impression that the Chinese-Latin American bilateral relationships produce only bilateral effects is extremely limited in face of the foregoing analysis, especially in the case of the bilateral strategic partnerships. The content and mechanisms of interactions of the Chinese strategic partnerships with Argentina, Brazil, and Venezuela suggest potential effects on U.S. interests and its relations with these Latin American countries. China created an opportunity for these Latin American countries to turn to alternative sources of finance, commerce, investment, as an alternative partner in political and strategic cooperation, and on regional and global issues.

But before the study of these triangular relations and their possible synchronization, the following Chapter V analyses the U.S. presence in Latin America and focuses on its bilateral relationships with Argentina, Brazil, and Venezuela. Chapter V also studies how Argentina, Brazil, and Venezuela chose China as their partner to indicate their desire for greater autonomy from the U.S. It also implies that the Latin American countries took actions in certain ways to provoke a decrease in U.S. influence in the region by using China as an alternative partner.

Chapter V

The United States' Influences and Engagement in Latin America

"The era of the Monroe Doctrine is over... It's about all of our countries viewing one another as equals, sharing responsibilities, cooperating on security issues and adhering not to doctrine but to the decisions that we make as partners to advance the values and the interests that we share." U.S. Secretary of State John Kerry in a speech at the Organization of American States (OAS) in November 2013.

There are several ways to characterize the relationships between the Latin American countries and the U.S. This thesis adopts "the sphere of influence" as an approach to the U.S. relations with Latin America due to their interests in the region and their concerns on the increasing Chinese presence in Latin America. Viewed through this lens, the region seems to be a sphere of influence of the U.S. considering that on one hand the U.S. has behaved as the protector of the region, spending political, economic, and military efforts and resources for promoting and protecting western values, such as democracy, human rights, and free trade. On the other hand, on several occasions, most of the Latin American countries were dependent on U.S. financial and commercial support.

Since the U.S. government's assertion of the Monroe Doctrine in 1823, it has been a permanent pillar of U.S. foreign policy that Latin America is its sphere of influence. Initially, at the time of the Latin American countries' transition from being colonies to independent republics, the U.S. warned the colonialist European countries that any intentions to re-install their colonial presence in the region would be viewed as acts of aggression against the U.S. Thus, the U.S. has since proclaimed itself as the sole power responsible for handling the affairs of the Americas. This U.S. foreign policy position for the region has played out in at least two ways: intervening in domestic policies, such as the policy to "elect good men" and eschewing, in general, any extra-regional power's influence.

More recently, the U.S. Secretary of State, John Kerry announced, "the era of the Monroe Doctrine is over". However, and despite Kerry's statement on the Monroe Doctrine, there is still a lot of debate in political and academic circles on the Latin American region as the U.S.' sphere of influence (Smith 1981; Schoultz 1987; Dent 1995; Molineu 1995; Williams 2012; O'Toole 2013; Hast 2014; Dominguez and Covarrubias 2015). The U.S. influence in the region is exercised in several ways. For instance, political aspects are apparent when the U.S. asserts that western values such as democracy are preeminent. In economic terms, the U.S. supports free trade and imposes itself as the main investor in the region.

This chapter is divided into three sections. It begins by introducing the concept of "sphere of influence" and examines the bilateral relations between Latin America and the U.S. from this perspective. Section 2 analyses the main issues and interests of the U.S. in Latin America. Finally, section 3 provides a more extensive insight into the bilateral relations between the U.S. and Argentina, Brazil, and Venezuela, respectively. The role of China as the extra-regional power is reserved for the following chapters that analyze each of the triangular relations that are part of the case.

1. The Concept of Sphere of Influence

The concept of sphere of influence recognizes a country with the potential to indicate practices, alliances, and bilateral relations that other countries in its region may have. Kaufman (1976) examined the concept of sphere of influence as a part of the Cold War era. Thus, Kaufman emphasizes the sphere of influence as the dominant presence of a superpower in a geographic region, which excludes other powers to play a role in the region, especially its rival superpower (1976: 11). According to Kaufman's view (1976), the sphere of influence is an issue and competition between superpowers. For its part, according to Keal (1983), the sphere of influence is also an issue mainly between two countries: an external power looking for influence in a defined region and the states in this region, who fear losing their independence or freedom of action (1983:15). Hast (2014), recognizes three participants in the concept of sphere of influence: two superpowers, and the "limitation of the independence or sovereignty of the influenced state" (2014: 6).

According to Hast (2012), there are two core problems with the sphere of influence concept: "The first is the lack of interest in the concept itself; the second is the range of pejorative associations which the concept has acquired. When the two problems are put together -lack of explanatory power and pejorative meaning- use of the concept can result in simplifications" (2012:45). It is because of this pejorative meaning, and the condemnation of the concept by the international community, that some states opt to use the term "sphere of interest". However, "replacing the word 'influence' with 'interest' also entails a risk of simply inventing a new term to justify influence by claiming that is fundamentally different as if to avoid the moral judgment that influence carries with it" (Hast 2012:44).

Nevertheless, the term of "sphere of interest" is also not new. For instance, Lord Cruzor in 1907 had already written, "spheres of interest tend to become spheres of influence". Thus, the sphere of interest was a kind of a previous period of a sphere of influence. In some way, Trenin (2009) agrees with Cruzor on this point when he signals that "...unlike 'influence' which tends to be both all-inclusive and exclusive, 'interests' are more specific and identifiable. Rather than whole countries, they include this various politico-military, economic and financial, and cultural areas within them" (Trenin, 2009:13). More recently, the Russian leadership has mainly used the term of the sphere of interest. As Lo analyzes, the use of the term sphere of interest gives a "moral right" to influence (2002:115).

This chapter opts to use the term of the sphere of influence because it has a relatively clearer meaning without morally trying to justify the dominant presence of a powerful state in some region. We argue that the sphere of influence has at least three actors, one powerful country that exercises influence in a determined region, a second extra-regional power that looks for influence in the region of the powerful state and the countries in the region that are affected and their autonomy limited by the interference of the powerful states. The concept has at least three actors because there can be more extra-regional powers.

In this constellation of sphere of influence, the countries in the region are also actors that can play an active role and apply strategies as responses. According to realism, states can decide to use balancing or bandwagoning. In this study, we focus on three actors: a super power (U.S.) that avoids the increasing influence in its own region (Latin America) of an extra-regional power (China).

Before the nineties, there are several examples of frequent political interventions by the U.S. in domestic issues of Latin American countries. This is especially true when it refers to the U.S. statement for Latin America to "elect good men". There has been a lot of criticism against the U.S. policies in Latin America, precisely because of the constant interventions of the U.S. in the domestic issues of Latin American countries. For instance, according to Williams, the U.S. support of democracy in the region is relative, because 'democracy brought to power governments the United States disliked intensely, as exemplified by the leftist, democratically elected governments of Guatemala's Jacobo Arbenz and Chile's Salvador Allende. Each tested the U.S.' commitment to democracy, and ultimately, Washington failed these tests by orchestrating or encouraging their overthrow' (2012:327).

However, it is also true that in some cases, U.S. interference in the region has also been accompanied by domestic Latin American forces calling for the U.S. to intervene. It shows the acceptance – or, at least, profitable use – by certain actors within Latin American countries of the U.S.' paternalistic politics in the region.

From the 2000s there have not been open interventions of the U.S. in the region; however, this sphere of influence approach is still present not only in the imaginary of the people but also of the officials and politicians. It is interesting that Kerry's announcement in 2013 is accompanied by the proposal to establish "equal partnerships". The equal partnerships base on sharing of responsibilities between the U.S. and Latin American countries. It is a call for active engagement of Latin American countries with the U.S. looking at the common interests, and more novelty, to work together on regional and global issues. The common interests on regional and global issues include support of democracy, regional and global security, education, and climate change.

The sphere of influence concept includes by definition the view of triangular relations: two powerful states are looking to influence thirds states in a region. However, for understanding the concept of sphere of influence as a part of triangular relationships, it is necessary to analyze the bilateral relations between the U.S. and Latin American countries, which is the aim of this chapter.

2. From Bush Jr. to Obama

This part of the chapter briefly introduces the relations between the U.S. and Latin America from 2000 to 2015. During this period of study, the U.S. was led by two presidential administrations: George W. Bush from 2001 to 2008 and Barack Obama from 2009 to 2016. Both presidencies had different approaches to the Latin American region. However, the main principles and interests of the U.S. in the region were similar, such as free trade, democracy, human rights and the war on drugs.

During the G.W. Bush administration time, the issues between the U.S. and Latin American were the same as mentioned: free trade, democracy, human rights and the war on drugs. However, these issues were introduced as a part of the war against terrorism that the U.S. has been leading since then. For instance, the U.S. identified some areas in the Americas as threatening its national security. This has been the case of the triple frontier between Argentina, Brazil, and Paraguay, and the border between Colombia and Venezuela. According to the U.S. government, these zones were hosting terrorists, financing terrorist activities, money laundering, etc. Previously, these areas were areas characterized by the high presence of criminality and weak state presence. But the U.S. national security based approach during the Bush administration elevated their status as threatening U.S. national security due to their nexus with terrorism.

Most of the countries started to collaborate with the U.S. after the 9/11, improving their border control, financial control, among others. As the governments of the Tri-Border Area (TBA) "have long been concerned with arms and drugs smuggling, document fraud, money laundering and the manufacture and movement of contraband goods through this region...In 2002, at their invitation, the United States joined Argentina, Brazil, and Paraguay in what became the "3+1 Group on Tri-Border Area Security" to improve the capabilities of the three TBA states to address cross-border crime and thwart money laundering and potential terrorist fundraising activities" (U.S. Country Reports on Terrorism: Western Hemisphere, 2007).

For its part, Venezuela showed strong opposition to the U.S. policies. This opposition produced strong U.S. concerns. 'It remains unclear to what extent the Government of Venezuela provided material support to Colombian terrorists. However, weapons and ammunition –some from official Venezuelan stocks and facilities- have turned up in the hands of Colombian terrorist organizations the Venezuelan government did not systematically police

the 1,400-mile Venezuelan-Colombian border to prevent the movement of groups of armed men or interdict arms flow to narcoterrorists' (Country Reports on Terrorism: Western Hemisphere, 2007).

For several authors, the era of Bush Jr. has profoundly eroded the relationships between the U.S. and Latin American countries (Leogrande, 2007; Dominguez, 2005). But the erosion of the U.S.-Latin American relations was not only a result of the G.W. Bush's policies in the region. During this period, other factors also played against U.S.-Latin America cooperation. On the one hand, extra-regional actors as China played as an alternative partner to several countries in the region. On the other hand, several Latin American countries were lead by left-wing political administrations that openly reacted against the U.S. policies in the region and the world.

Moving onto the Obama administration, since 2009, the U.S. approach to Latin America was officially led by the proposal of "equal partnerships". The concept of equal partnership looked to share responsibilities with the Latin American region on issues of common interests. This includes that the U.S. and the region have obligations to each other, reinforcing the idea that equal partners have common responsibilities. It seems to be an alternative approach to the sphere of influence, replacing a paternalistic approach for an active engagement of Latin American countries, also on regional and global issues according to western hemisphere values and interests. As Obama pointed out in 2012, during his official visit to Santiago de Chile: 'I believe that in the Americas today, there are no senior partners and there are no junior partners, there are equal partners. But equal partnerships, in turn, demand a sense of shared responsibility. We have obligations to each other, and today, the United States is working with the nations of this hemisphere to meet our responsibilities in several key areas'.

During Obama's administration, U.S.' approach to the region was a more pragmatic one. In some cases, Latin American countries also reacted pragmatically, except Venezuela. A notable example of this is the U.S. re-establishment of diplomatic relations with Cuba. According to Reid, the attention to the region came late, but "Obama's record must be viewed in the context of dramatic changes in Latin America" (Reid, Michael, 2015: 45).

For its part, from 2000 to 2015 the Latin American region experienced at least two different waves of political and economic periods. During the Bush era, several Latin American governments initialized a transition from a liberal regime to left-wing governments. Meanwhile, the Obama administration observed during the last period of his term, a transition from left-wing governments to more liberal ones. Despite that these processes in Latin America cannot be purely explained as a result of and reactions to the U.S. approaches to the region, the U.S. presence in the region has been one of the factors on this development in Latin America.

The left-wing governments that came to power in Latin America regularly instrumentalized the anti-American discourse for gathering the support of nationalists and domestic citizens. This anti-American discourse included the recognition that the U.S. was the enemy of the region, the cause of poverty and underdevelopment in Latin American countries. In order to win voters, the left-wing government also linked the right-wing political parties in Latin America as allies of the U.S. We will see in this chapter that these discourses also materialized in concrete decisions and policies against U.S. interests, e.g. the failed of the Free Trade Area of the Americas (FTAA), the creation of the Bolivarian Alternative for the Americas (ALBA), among others.

As previously stated, during the G.W. Bush and Obama administrations, the U.S. approach to the region was similar in content, but not in form towards conflictive issues between both the sides. A more pragmatic U.S. approach would have, at least, produced more availability of Latin American countries to cooperate. In the following part, we will look more closely into the main issues between the U.S. and Latin America in economic, security and democratic affairs.

3. U.S.' Economic Engagement in Latin America

A clear line and efforts of the U.S. in Latin America have been exercised in its engagement with the region on economic issues. Therefore, this section contains the main U.S. interactions with Latin American countries in commercial and investment aspects from 2000 to 2015.

One of the U.S. most ambitious initiatives in the region was the creation of the Free Trade Area of the Americas (FTAA) proposed by President Bill Clinton during the First Summit of the Americas in 1994. The FTAA proposed to eliminate the existing barriers to trade and investment. The attendees approved a Plan of Action, which first installed 12 working groups at trade ministerial level to identify possible approaches for further negotiations. Four ministerial meetings took place from 1995 to 1998, and a year later they

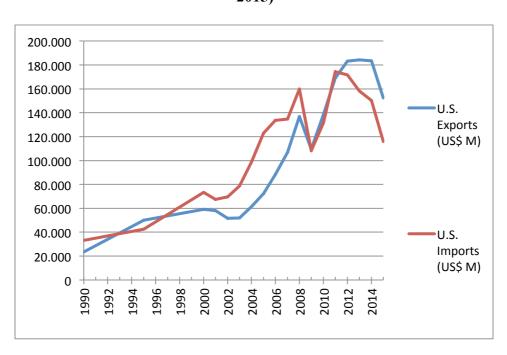
officially launched the FTAA negotiations. However, the FTAA met its demise in 2005 during the last summit held in Mar del Plata, Argentina.

How did the FTAA fail? In the 2000s several countries in Latin America turned to leftist governments. Despite that some leftist governments, for instance Brazil's, did not immediately have bad relationships with the U.S. government, they pursued protectionist Several Latin American countries criticized the U.S. agricultural subsidies as protectionist, which firmly opposed the FTAA. The presidential branch of the U.S. after 9/11 became distracted from Latin America, and Latin American countries became more autonomous, helped by the commodities boom. The demise of the FTAA in 2005 was accompanied by anti-American rhetoric.

After the demise of the FTAA, the U.S. looked for a distinct way to trade with Latin American countries and started to expand its trade with the region through the establishment of bilateral Free Trade Agreements (FTAs). The U.S. has, as of 2015, signed bilateral FTAs with Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, Panama, and Peru. However, the U.S. has not been able to establish this kind of a trade agreement with two of the biggest economies in Latin America – Argentina and Brazil.

In absolute terms, the U.S. trade in goods with Latin American countries had been increasing until 2008, as Graph V.1 illustrates below. There was a sudden decrease in 2009 that corresponded to the financial crisis in the U.S. in the previous year, which hurt its economy. However, it is also true that the U.S. lost its trade primacy with some countries in the region, such as Brazil and Chile. In some way, the U.S., but also European countries, lost their position as the leading trade partners of Latin America, due to China's even faster expansion of trade with the region.

There are at least two major differences between the Latin American exports to the U.S. and those going to China. Firstly, Latin American exports, mainly from Mexico and Central America, to the U.S. contain a significant proportion of manufactures; whereas Latin American exports to China are mainly natural resources. Secondly, the Latin American exports to the U.S. are more diversified than their exports to China, "on average, Latin America and the Caribbean export more products to the United States than to the European Union and Asia, but the largest number of products is exported within the region itself" (ECLAC, 2015: 19).



Graph V.1: United States Trade in Goods with Latin American Countries (1990–2015)

Source: Author's own compilation, based on data from the U.S. Census Bureau 2016.

Moving onto U.S. investment in the Latin American region. The U.S. is still the leading investor in the region with almost 25% of the investments. During the last decade, the U.S. has been the largest investor country in the region representing about a third of all FDI. In 2014, from the U.S. "The largest recipient of FDI in Latin America and the Caribbean is Brazil, which received US\$62.803 billion, followed by Mexico with US\$22.795 billion and Chile with US\$22.002 billion" (ECLAC, 2015: 22). The sectors of main U.S. investment in the region are the service sector, manufacturing, and natural resources. However, the U.S. has lost its primacy in big economies of the region, such as Brazil (ECLAC, 2016).

4. U.S. Security Policy Toward the Americas

U.S. economic-commercial policies in Latin America are interconnected and overlap with issues such as democracy, development, and security. As the Secretary of State, Condoleezza Rice affirmed in 2007: "in today's world, it's impossible to draw clear lines between our security interests, our development efforts and our democratic ideals" (USDS 2007: 6). In the

following paragraphs, we refer to these U.S. interests in the Americas, especially democracy and security.

At the end of the Cold War, it was expected that the U.S. policies for the Latin American region would diversify themselves rather than just be limited to the fight against communism (Wiarda, 1995; Maxwell, 1999; Domínguez J. I., 2000; Castanheda, 2003). That is what effectively happened. The diversification included potential domestic security problems of Latin American countries, such as "humanitarian crisis, piracy and trafficking of weapons, drugs, and people, refugee flows, or civil strife" (Mateo & dos Santo 2014: 10). But after 9/11, terrorism converged at the heart of the security policy of the U.S. in the region and in the world to interconnect itself with all other issues.

After the 9/11 attacks, almost all states in the Americas expressed solidarity with the U.S. The countries in the region reacted multilaterally and invoked the Rio Treaty of 1945. The Rio Treaty stipulates collective self-defense of OAS member states in response to an attack on any member. It was the first time that countries in the region invoked this treaty. Moreover, the Organization of the American States (OAS) adopted the Inter-American Convention against Terrorism in June 2002. The purposes of the Convention are to prevent, punish and eliminate terrorism (Article 1). According to this instrument, terrorism is a threat to democratic values and international peace and security. Member states have to take measures to prevent, combat and eradicate the financing of terrorism, confiscate any funds that would be used or intended to be used to finance terrorism and fight money laundering. States should pursue more cooperation on border controls, mutual legal assistance, transfer of people in custody, among others. Thus, the Convention against Terrorism gives the OAS an important mandate in the security arena (Crandall, 2008: 40).

However, the immediate support of Latin American countries against the 9/11 gradually dissolved. The securitization approach of the U.S. to the region generated significant resistance. Colombia was cataloged as a "narco-terrorist" state (USDS 2006). According to the U.S. Department of State, Colombia was the only country that had the largest number of terrorist organizations in the region including the FARC, and the United Self-Defense Forces of Colombia, the ELN, (USDS 2010: 235-240). These terrorist organizations were dually threatening because of their financing, producing and trafficking of drugs.

Despite the fact that the war on drugs was already an agenda item present on the U.S. -Latin American relations from the 80s, the war on drugs assumed a new importance for the U.S. due to their potential support to terrorist organizations, and moreover, their new category as terrorists. Traditionally, the U.S. policy applied the "Source-Country Strategy". It targeted the countries where drugs were produced with the aim to stop the drugs from being flown away in different directions. According to this strategy, it is difficult to fight inside the U.S. where the drugs were being consumed, while in Latin America it was geographically and logistically possible stop the production. However, this strategy has not been successful due to the increasing production and consumption of drugs (Zirnite, 1998).

As a part of the U.S. strategy for the war on drugs, the Andean countries have been specially targeted by the U.S. anti-narcotic policies and applied condition-based relations. It has been because the coca leaf originates and is produced in the Andean countries, which is the main source to produce cocaine – the main drug "export" from Latin America to the U.S. Different actions were taken in Bolivia, Colombia, Ecuador, and Peru to reduce coca leaf production. For instance, the U.S. offered credit depending on whether the countries reduced coca leaf production.

There has also been an academic debate about the U.S. Drug-war strategy in Latin America. According to Crandall, 'The United States' vision entailed an aggressive, militaryled source-country strategy' (2008: 43). As Lowenthal (2009) has noted, the "war on drugs" has to look for another approach. "The "war" metaphor should be dropped because it reinforces the tendencies to look for "victory" against a defined enemy and to favor mainly coercive methods. Even though there are undoubtedly some links between drug traffickers and guerrillas, Washington and Latin American governments should stop emphasizing "narco-terrorists," because the narcotics issue is not really primarily about terrorism or military security. It is, rather, a complex societal, cultural, medical and institutional problem that has as much to do with deep-seated failures in advanced industrial countries as with weak governance, crime, corruption and poverty in Latin America and other producing nations" (Lowenthal, 2009: 12).

The fact is that the U.S. poured billions of dollars in resources to combat drugs and most of it was destined for the Latin American region. Most of the support came in the form of foreign aid with the participation of several U.S. agencies, such as the Drug Enforcement Administration (DEA) and the U.S. Agency for International Development (USAID). USAID

has been the agency that had a large budget destined for the region. According to Mateo & dos Santo (2014), one can observe two main objectives of the U.S. aid: support and improve conditions of human life according to western values and use the foreign aid to protect U.S. interests. It is also true that the U.S. foreign aid has been an important instrument for influencing the Latin American region according to western values.

In South America, the Andean countries such as Bolivia, Colombia, Ecuador, and Peru have received the highest amount of U.S. foreign aid with programs supporting governance, health and population, and agriculture that are directly related to the drug war. Haiti, as the second-largest recipient of U.S. aid in the Latin America and Caribbean region, has also received aid focused on governance, but this was done so mainly through humanitarian programs (see Graph 2 below).

Historically, the country that received the most U.S. aid in the region has been Colombia. The U.S. supports the "war on drugs" in Colombia, and the latest of its initiatives has been the establishment of "Plan Colombia". The Plan initialized in 1999 was conceived by the Colombian and the U.S. governments with the aim to finish the internal armed conflicts in Colombia by offering a social and economic as well as an anti-narcotic strategy. "The U.S. has spent nearly \$8 billion on the initiative –more than anywhere outside of the Middle East, and Iraq and Afghanistan since the end of the Cold War" (Shifter 2012). Colombia was identified as a direct threat to U.S. national security, especially considering that 90 percent of the cocaine consumed in the U.S. comes from Colombia (Shifter 2012). Moreover, after 9/11 the Plan Colombia instrumentalizes the war on terrorism against the guerrilla organization in Colombia. The guerrilla was identified as a terrorist organization, which justified the U.S. military engagement in Colombia.

Venezuela: Brazil: Argentina: Ecuador: 340.796 59.898 95.117 535.126 Bolivia: Costa Rigge Mexico:96.869 Haiti: 3.148.2154.787.963 Guyana: Colombia: 197.446 7.026.054 Peru: 1.696.771

Graph V.2: United States Foreign Aid for Latin American countries 2005– 2015 (US\$Million)

Source: Author's own compilation, based on data from the United States Agency for International Development (USAID).

Moving on democracy, the OAS has been the regional institution strongly supported by the U.S. that pursues democracy in the Americas, in some periods. After the 9/11attacks, the OAS also approved the Inter-American Democratic Charter. The Democratic Charter signalizes the right to democracy of the people, and the obligation of the governments to promote and defend it. According to Shannon, Assistant Secretary of State for Western Hemisphere Affairs, the Democratic Charter is an instrument to ensure democracy that pointed to link democracy and development: "...democracy is the only legitimate form of government in the Americas, but also that democracy is essential for the social, economic and political development of the Americas. And by linking democracy and development, we suddenly had a tool, a conceptual tool to understand how you make sure that democracies deliver the goods, but also how development can be democratic" (2008).

Shannon recognized that the U.S. "began to realize that the vocabulary that we've been using about job creation, about counter-narcotics and security and counterterrorism was misunderstood in the region and was not understood as actively addressing their social concerns about poverty and equality and social exclusion" (2008). Crandall observed a distinct meaning of the democratic clause. He argues that in 'simple language, the "democracy clause's" insertion into the Summit of the Americas process ensured that for

better or worse, there would be a link between economic integration and democratic governance. "No democracy, no trade," the clause mandated' (2008: 34).

Turning now to the Obama administration. He turned down the securitization approach and looked for a more pragmatic approach to the Americas. This pragmatic approach of the U.S. also generated similar pragmatism from some Latin American countries in their relations with the U.S. The best example is the reestablishment of Cuba-U.S. diplomatic relations. "The Obama administration's dramatic shift in policies toward Cuba illuminates the wisdom of reconsidering long-held policies and belief. The ruling Cuban Communist Party -the one remaining holdout from the Cold War in the Americas- recognized that its drive to modernize its economy requires more normal and respectful relations with the United States" (Feinberg, Miller, & Trinkunas, 2015: 18).

The mentioned pragmatism is also visible in the U.S. position at the OAS. In 2013 at the OAS, Secretary of State John Kerry declared that 'The era of the Monroe Doctrine is over'. It was part of the same remarks on U.S. Policy in the Western Hemisphere, but with a call for a more active role of Latin American countries. The U.S. proposed to establish relations between the U.S. and Latin American countries under the principles of equal partners, sharing responsibilities, and cooperating on security issues. In order to secure their goals, they proposed to promote and protect democracy, security, and peace; educate young people who will drive the economies, and work together to effectively address the threat posed by climate change.

After this general and brief view of the Latin American countries relations with the U.S., the following part looks into a more detailed analysis of the bilateral relations of the three cases that this thesis focuses on the relations that the U.S. has had with Argentina, Brazil, and Venezuela, respectively. The bilateral relations of the mentioned countries are composed of interactions depicting cooperation, and pragmatism, and, at the same time, conflicts, ideology and contradictions.

5. The Bilateral Relations Between Argentina and the U.S.

In the following section, we present a brief overview of the Argentina-U.S. bilateral relations from 2000 to 2015 in economic, political and technological cooperation.

In economic terms, the U.S. is the third biggest trade partner of Argentina, after Brazil and China. The main Argentinean export products to the U.S. have been biodiesel, oil, wine, aluminum, preserved food and chemicals. Meanwhile, the main imports from the U.S. have been mineral fuels and mineral oils, aircrafts, machinery, immunologic products and vaccines, and organic chemical (INDEC, U.S. Department of State).

The balance of trade between Argentina and the U.S. had mainly maintained a surplus for the U.S., with an exception from 2002 to 2004 when the surplus favored Argentina. From 2006 until 2015 there is an increasing trend in Argentinean imports from the U.S. At the same time, the Argentinean exports to the U.S. have almost constant, with an increase in 2008 (see Graph V.3 below).

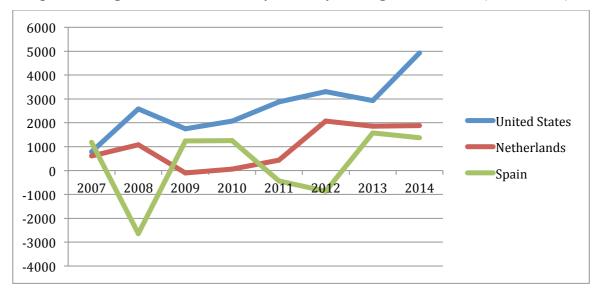
10 8 6 Export 4 Import 2 0 2009 2006 2007 2008

Graph V.3: Export and Import of Argentina to and from the U.S. 2000 – 2015 (US\$Million)

Source: Author's own compilation, based on data from the World Bank.

Another significant aspect of the Argentina-U.S. bilateral relations is the U.S. investment in this South American country. The U.S. is the main investor in Argentina, followed by Netherlands and Spain (see Graph V.4 below). There is an almost permanently increasing trend in U.S. investment in Argentina, with a decrease in 2013. According to the U.S. Department of State, there are more than 500 U.S. companies as top investors in Argentina. The areas of major investments are mostly in industry and agriculture, natural resources, finance, and services. The energy sector, specifically the oil sector, is the main

destination of U.S. investments with a 40% share. Other notable sectors are chemicals, rubber and plastic, and machinery and equipment (Argentinean Central Bank).



Graph V.4: Argentina Inward FDI by Country of Origin, 2007-2015 (US\$Million)

Source: ECLAC, Foreign Investment in Latin America and the Caribbean 2016.

Moving on to the political-diplomatic relations between Argentina and the U.S., from 2000 to 2015 both countries experienced several challenging and conflictive events. With the beginning of the 2000s, the governments in Argentina of Nestor Kirchner and his successor Cristina Fernandez de Kirchner confronted the U.S. and joined some regional projects of the ALBA with Venezuela, such as the multilateral telecommunications project Telesur, among others.

The ambivalent position of the U.S. on the Islas Malvinas (Falkland Islands) has also produced some tension between the two countries. The Islas Malvinas is a priority issue and clear line of the Argentinean foreign policy. But, according to a statement from the Spokesperson for the State Department on June 13, 2012, the position of the U.S. on the issue "remains one of neutrality. The United States recognizes de facto U.K. administration of the islands but takes no position regarding the sovereignty claims of either party. The U.S. Government supports U.K. and Argentina cooperation on practical matters and urges a peaceful resolution to the overall issue". For its part, and as mentioned in Chapter IV, China recognized the sovereignty of Argentina on the Islas Malvinas, which is seen as a significant achievement for Argentinean diplomats.

From 2000 to 2015, Argentina signed approximately 120 agreements with the U.S. A majority of these agreements cover diverse issues – almost 40% deal with matters, such as agriculture, medicine, visa, etc.; followed by economic, commercial agreements with around 20%; technological cooperation is positioned in the third place with 16%, military cooperation with 10%, political issues only with 8% of the contents and finally educational cooperation occupies the last position with 6%. On average, the interests of Argentina and the U.S. have been diverse, without a clear and specific issue in focus.

Argentina and the U.S. maintain cooperation in the field of science and technology. Both countries have carried out multiple projects in several areas, such as environmental improvement, space technology, nuclear energy, agriculture, biotechnology and medicine. Finally, in 2010 Argentina and the U.S. established a formal bilateral joint science and technology-working group. This group regularly monitors the projects' working and looks for new possibilities of cooperation.

Among their bilateral mechanisms, both countries count a bi-national energy working group in the framework of the energy cooperation as a part of a Memorandum of Understanding in clean energy technologies signed by the Ministry of Federal Planning, Public Investment and Services of Argentina and the Department of Energy of the United States in April 2010. This group coordinates and looks for cooperation in energy efficiency, renewable energies and civil nuclear energy, among others. Moreover, since 2004 Argentina and the U.S. also have the Joint Standing Committee on Nuclear Energy Cooperation.

In the field of satellite cooperation, the Argentinean National Aerospace Council (CONAE in Spanish) and the NASA cooperate on an earth observation satellite established in 2011. This cooperation is not a one-way reception of knowledge, but both countries have knowledge to share, which converts this cooperation into a real partnership. Until now Argentina is the only country in South America that has the required expertise to build a satellite on its own. In 2015, Argentina and the U.S. signed a bilateral agreement on heliophysics. Heliophysics studies the nature of the sun and its effects on space. According to the NASA, "studying this system not only helps us understand our place in the universe, but also helps protect our technology and astronauts in space".

The aforementioned working groups of cooperation are similar to the commissions created under the bilateral strategic partnership between Argentina and China. The projects are different, but the establishment of these governmental coordination mechanisms promotes a more intensive exchange between these countries.

5.1. Argentina-U.S. Bilateral Events

The next section presents some findings of the codified bilateral events between Argentina and the U.S. from 2000 to 2015. These bilateral events between Argentina and the U.S. offer a concrete and summarized view of periods of cooperation and conflict, and their issues. As mentioned in Chapter I, this research codifies as an event every bilateral action and interaction between the countries that appeared in the international media as news.

In 67% of the events examined, Argentina and the U.S. were mainly cooperating with each other. However, there is big presence of conflicts between these two partners amounting to 33% of the events, as compared to the low levels of conflict in the case of Argentina with China at 17%. Both countries base their cooperative relationship on political-diplomatic interactions representing 37% of the events. Economic-commercial cooperation represents 17% of the events. But at the same time, it is in these areas of major cooperation that both these countries have a high presence of conflicts. Political-diplomatic conflicts occupied the 18% of the bilateral events and in economic issues conflicts amount to 11 % (see Graph V.5 below).

SECURITY SORATION STRATEGIC SOFT Conflic. CoOrdic. Conflic. Coop. -1% -3% 1% SECURITY Coop. 17% POLITIC Coop. **ECONOMIC** 37% Conflic. -11% **POLITIC** Conflic -18% **ECONOMIC** Coop. 12%

Graph V.5: Cooperation and Conflicts between Argentina and the U.S. in the 5 **Dimensions 2000-2015 (%)**

Source: Author's own codification, based on data from the Media.

It is interesting that despite the high presence of political-diplomatic conflicts, as well as economic troubles, Argentina and the U.S. have managed to cooperate in security matters, more than in economic issues (see Graph V.4 above). The security cooperation includes coordination to support the war on drugs, to create mechanisms to block money laundering for financing terrorism, among others.

The greatest period of cooperation between Argentina and the U.S. also coincided with the periods of major conflicts. It is because of the almost simultaneous response in the face of a conflict in order to find solutions. The periods of most cooperation are 2003 and 2005. The political situation evolved with the transition from the Nestor Kirchner to Cristina de Kirchner government that since 2006 there is almost no high interaction between both counties with only some picks or short periods of cooperation.

In 2003, this bilateral relationship was given an impulse as seen in the flow of investment, cooperation in satellite technology, software development and military cooperation. Moreover, Nestor Kirchner also visited George Bush in Washington in 2003. Argentina reformed its intellectual property laws that favored the U.S., some Argentinean products were free of tariff to be exported to the U.S., and the U.S. has strongly supported the negotiation of Argentinean bonds in the IMF.

2005 was a year characterized by a mixture of cooperation and conflicts concerning the interactions between Argentina and the U.S. Both countries signed more accords in the energy sector, technological cooperation, in agriculture, fight against terrorism and combating money laundering. However, conflicts also multiplied between these countries. Some of the main issues in 2005 were: a verdict of International Centre for Settlement of Investment Disputes (ICSID) favored the U.S. company CMS Energy Corp against Argentina, the previous U.S. support to the negotiations in the IMF disappeared and the failure of the FTA in the Americas in the Mar del Plata Summit.

Between 2007 and 2008, the bilateral relations deeply deteriorated and the "suitcase" scandal was a reflection of it. In 2007, a Venezuelan businessman, Guido Antonini Wilson, was caught with carrying suitcase with approx. 800.000 USD in cash without having declared it. Antonini Wilson arrived in Buenos Aires on a private flight direct from Venezuela. Afterwards, he flew to Miami, where he apparently collaborated with the FBI. The FBI arrested three Venezuelan citizens and one Uruguayan in Miami for being Venezuelan agents and for threatening Antonini Wilson. According to U.S. Justice Department, this money was being sent by Venezuela to Argentina for supporting the presidential campaign of Cristina Fernández de Kirchner. This is a case that shows that Venezuela supported left-wing political parties and governments in the region.

From 2011 to 2015 there are not many events of conflict or cooperation between Argentina and the U.S. (see Graph V.6 below). However, the conflicts in this period are almost permanent. In 2011, Argentina withheld an American military aircraft at the airport in Buenos Aires. The Argentinean authorities detained this aircraft, accusing the U.S. of violating Argentinean norms. Afterwards, Argentina returned the U.S. military aircraft, but the political and diplomatic relations between both countries deteriorated. It is not a surprise that in 2011 during Obama's visit to South America, Argentina was not one of his destinations, which produced a visible Argentinean diplomatic frustration. During these years, U.S. reproached Argentina for its corruption, lack of a free press and of having narcotic networks with Venezuela. The unpaid Argentinean bonds and suspension of some trade benefits accompanied the accusations against Argentina.

Graph V.6: Argentina-U.S. Bilateral Events (2000-2015)

Source: Author's own codification, based on data from the Media.

The codified bilateral events between Argentina and the U.S. confirm the high level of cooperation between both countries, based on their political-diplomatic, security, and economic cooperation. The findings also show that from 2006 to 2015 there are no periods of significant cooperation or conflicts between the two countries. This is in part explained by the tense political-diplomatic relationship that both countries tried to keep restricted.

6. The Bilateral Relations Between Brazil and the U.S.

This part presents a survey of Brazil-U.S. bilateral relations, focusing on their interactions in political-diplomatic, economic and technological sectors. This relationship has been based on multiple instances of permanent bilateral dialogue and coordination. There are more than thirty dialogue mechanisms between the U.S. and Brazil, including the Global Partnership Dialogue, Defense Cooperation Dialogue, Economic and Financial Dialogue, the Joint Commission on Economic and Trade Relations, the Commercial Dialogue, the CEO Forum, the Consultative Committee on Agriculture, and the Strategic Energy Dialogue, among others. All these mechanisms of dialogue look for promoting common positions on global economic and financial issues, bilateral economic and trade cooperation, investment, agriculture and energy (USDS).

The U.S. has been Brazil's second-largest trading partner. Brazil's main exports to the U.S. have been crude oil, aircraft, iron and steel, and machinery. Meanwhile, Brazil's main imports from the U.S. have been aircraft, machinery, petroleum products, electronics, and

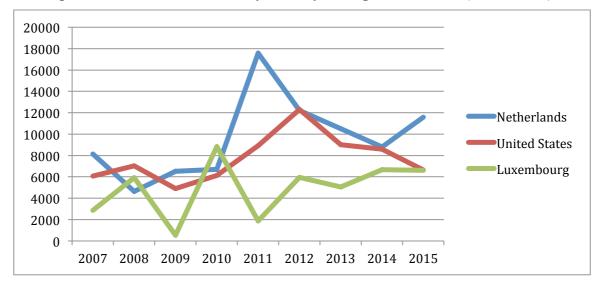
optical and medical instruments (USDS). From 2000 to 2015, the U.S. maintained a surplus in its trade balance with Brazil, which grew sharply from 2009 to 2014 (see Graph V.7 below).

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Graph V.7: Export-Import of Brazil from and to the U.S. 2000-2015 (US\$Million)

Source: Author's own compilation, based on data from the World Bank.

Turning to investments, the U.S. has been one of the largest foreign direct investors in Brazil until 2016 (see Graph X.8 below). The U.S. investments in Brazil have been directed to manufacturing, nonbank holding companies, and finance and insurance sectors. Similarly, Brazilian investment has been going to the finance and insurance, and manufacturing sectors in the U.S.



Graph V.8: Brazil Inward FDI by country of origin, 2007-2015 (US\$Million)

Source: ECLAC, Foreign Investment in Latin America and the Caribbean 2016.

Regarding energy cooperation, Brazil and the U.S. established in 2011 a Strategic Energy Dialogue. The priority areas of cooperation are oil and natural gas, biofuels, clean energy and efficiency. In the area of oil and natural gas, both countries have organized some workshops and conferences, especially in offshore technology, safety and spill responses. Biodiesel cooperation includes several projects, such as enhanced methods for life-cycle modeling of biofuels sustainability, exchange of information on ethanol-optimized engines in flex-fuel vehicles, development of sustainable aviation biofuels, etc. Both countries have also installed the Sustainable Development of Hydropower Initiative for developing of hydropower and wind power as strategic areas.

In the case of scientific cooperation, specifically in nuclear energy, Brazil and the U.S. have been collaborating in the safe, secure, and responsible nuclear power for peaceful purposes. According to the White House Office of Press Secretary, "the United States looks forward to exploring with Brazil areas for technical cooperation ranging from site selection and licensing to reactor long-term sustainability, reactor life extension, severe accident management, and radioactive waste management, among other potential commercial activities" (2012). However, the U.S. maintains some concerns about the Brazilian nuclear power policy. For instance, "Brazil's refusal to sign the Additional Protocol, and its nuclearsubmarine program also raises some questions in the United States" (Kassenova, 2016: 595).

At the same time, Brazil has been looking for Chinese investment in this area. In 2017, e.g., Brazil and China approached each other in order to invest in the third Brazilian nuclear energy plant, Angra III.

Regarding defense cooperation and general security of military information, both countries have signed an agreement on these issues that has entered into force in 2015. This agreement includes cooperation in research and development, technology security, and the acquisition and development of products and services (USDS).

With regard to the bilateral agreements signed by Brazil and the U.S., they are similar in content with the accords signed by the U.S. with Argentina. Almost 32% of the contents of these agreements are diverse and relate to minor issues. These are followed by 26% of the agreements on economic and commercial matters, 22% on technological cooperation, 8% on political issues, 7% on educational cooperation and 5% on military cooperation agreements. There are, however, some differences. For instance, there are more military cooperation agreements between Argentina and the U.S., whereas, agreements between Brazil and the U.S. show more interest in economic and technological cooperation.

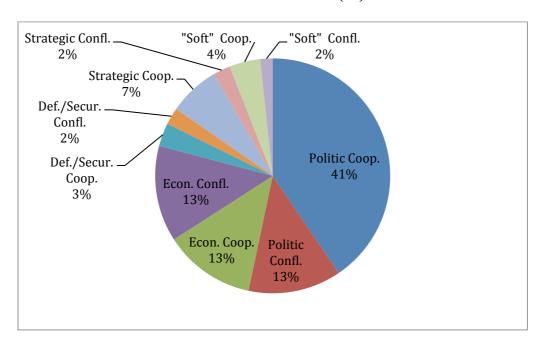
Another significant aspect of the Brazil-U.S. relations is their cooperation in third countries and regions. This is also a practice between Brazil and China. Brazil and the U.S. cooperate and assist development projects in Africa and Latin America. For instance, they collaborate in food security programs in Haiti, Honduras, and Mozambique, citizen security in Central America, Angola, and Egypt (USDS).

6.1. Bilateral Events Between Brazil and the U.S.

The following paragraphs present the findings of bilateral events between Brazil and the U.S. From 2000 to 2015, Brazil and the U.S. on average maintained the highest cooperative interactions with 68% of events compared with the relations of the U.S. with Argentina and Venezuela. Of these, 32% were cataloged as conflictive events (see Graph V.9 below). The cooperation between these two countries was also based on political-diplomatic exchanges that constituted 41% of the events.

The economic-commercial events reflect 13% cooperation, which is not especially high, compared with strategic, security and defense cooperation that represented 10% of all events. Conflicts between these two countries are mainly political at 13% of the events and economic with another 13 %. One can assume that in case of economic-commercial conflicts, both the countries tried to strengthen their cooperation at the same time in order to solve those conflicts or they tried to compensate for the conflicts by offering alternatives for cooperation.

Graph V.9: Cooperation and Conflicts between Argentina and the U.S. in the 5 **Dimensions 2000-2015 (%)**



Source: Author's own codification, based on data from the Media.

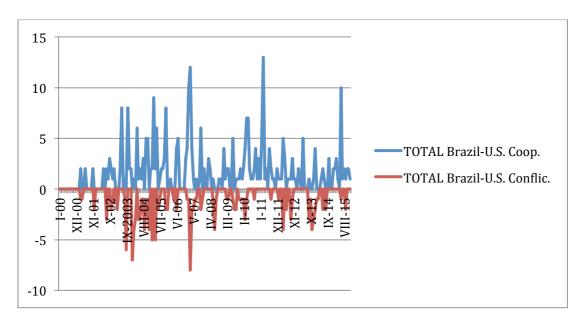
The events between Brazil and the U.S. show a permanent interaction between both countries. As can be seen from the line graph V.8, there are several picks of cooperative events and a minor degree of conflicts. The periods of considerable cooperation are during the years 2003, 2005, 2007, 2010, 2011, and 2015. From these years, the periods of 2007, 2011, and 2015 are especially prominent. In 2007 the U.S. supported the Brazilian leadership into the G20 in order to improve their negotiating position in the Doha Round of the WTO. Among the highlights of their cooperative events, both countries announced cooperation to

produce ethanol, signed agreements in energy cooperation, president George W. Bush visited Brazil and president Lula da Silva visited the U.S. They also announced the establishment of an international space station in Brazil, closed view on climate change and cooperation in clean energy. In 2007, for the first time, Brazil and the U.S. cooperated together in a third country.

In 2011, Brazil and the U.S. cooperated in multiple fields: development of vaccine against yellow fever in roots of vegetables, several top officials visited Brazil and vice-versa, including the visits of Obama to Rousseff in Brazil, the U.S. invested in infrastructure in Brazil, they signed an agreement on "open skies", cooperation on anti-corruption, cooperation between Boing and Embraer to study the production of ethanol for the aviation industry, and finally the U.S. approved to end tariffs on ethanol imports from Brazil. However, the U.S. did not support Brazilian claim to permanent membership of the Security Council of UN.

Alongside, the periods of more conflicts between Brazil and the U.S. are 2003, 2004 and 2005, 2007 and 2014. Among the conflicts, these are especially numerous in 2004 and 2007. In 2007 Brazil claimed against the U.S. subsidies to produce ethanol and the tariff imposed by the U.S. on ethanol. President Bush visited Brazil in 2007, which saw multiple protests against his visit. During the Bush visit, Brazil and the U.S. did not reach an agreement on commercial issues, neither on their position vis-à-vis the WTO negotiations.

In 2013, a major scandal involving intensive U.S. interception of Brazilian government phone numbers surfaced, which deeply affected the political-diplomatic relations until 2014. The U.S. interceptions included the surveillance of President Dilma Rousseff and top officials, including her secretary and her chief of staff. The U.S. aim was economic espionage. As an immediate result of this, Dilma Rousseff canceled a planned visit to the U.S. over alleged spying on her communications.



Graph V.10: Brazil-U.S. Bilateral Events 2000-2015

Source: Author's own codification, based on data from the Media.

Some patterns emerge from the data in Graph V.10. First, Brazil and the U.S. during the period observed sustained their main conflicts during the early part of the period being examined, but always maintained cooperation. Secondly, conflicts between these two countries were mainly in the economic sphere. Thirdly, they resolutely undertook efforts to cooperate in strategic, security and defense matters.

7. The Bilateral Relations Between Venezuela and the U.S.

From 2000 to 2015, the relationship between Venezuela and the U.S. was unlike any other period in the history of U.S. relations with this Latin American country. Venezuela and the U.S. started political and diplomatic confrontations shortly after Hugo Chávez took office as President of the country. The U.S. continued to be the main trade partner of Venezuela and Venezuela is the third biggest commercial partner of the U.S. in Latin America, after Mexico and Brazil. However, strong political disappointments and conflicts escalated leading to a complete breakdown of their bilateral diplomatic relationship in 2008.

The following part on Venezuela-U.S. bilateral relations includes a more detailed analysis about the presidency of Hugo Chávez and his project. This analysis is necessary to be included in order to better understand its consequences on Venezuela-U.S. relations.

Hugo Chávez took over the country's presidency in 1998. He planned to lead a profound structural transformation of the country, which he called the Bolivarian revolution. The Bolivarian revolution wanted to achieve in terms of land reform, breaking the hold of the two political parties AD and COPEI on power, and the associated high level of corruption, it included structural changes in the country's polity. It envisaged a new constituent assembly, a new constitution and new political institutions, such as the new assembly. The Bolivarian revolution also involved nationalistic rhetoric and called for a better redistribution of the wealth from the country's national resources among the domestic poor.

According to the National Plan 2001–2007 of Venezuela, there were two main objectives of the Venezuelan foreign policy: to strengthen national sovereignty and to promote a multipolar world. Both objectives were linked with the Venezuelan view of the U.S. This view saw an asymmetric war with Colombia as a real threat to Venezuelan sovereignty. An asymmetric war with Colombia was a scenario where the U.S. could use Colombia as an instrument for attacking Venezuela.

For its part, the promotion of a multipolar world, or more precisely a "pluripolar" world, looked to reduce the U.S. global leadership, supporting other powers, as well as to position Venezuela as a regional power in Latin America and the Caribbean. The promotion of a "pluripolar" world implied a privileged relationship of Venezuela with Latin American and Caribbean countries and also to pursue international diplomatic coordination with other developing countries in the global processes of decision-making in international institutions.

From 2001, President Chávez started to voice strong criticisms of U.S.' policies and actions in Afghanistan, Iraq and other countries. Moreover, Venezuela initialized to reach out to Cuba and demonstrated a trend towards radicalizing its "revolution". From February 2004, Hugo Chávez began with a barrage of accusations against President George Bush of having supported the golpe de Estado in 2002.

On 12 April 2002, Hugo Chávez was placed under arrest as part of a military coup, and the country's military officers announced his "resignation". The only countries in the region that recognized the "golpistas" as a legitimate government were the U.S. and Chile. By contrast, the other governments of the region denounced the new government installed in Venezuela for being unconstitutional. Some days later, Hugo Chavez was restituted to his presidency. Then, the Venezuelan government accused the U.S. of intervening in the country, on the suspicions that the U.S. supported the attempted military coup in Venezuela. The reinstalled president radicalized his discourse against "the Yankee imperialists" and openly turned to the implementation of a socialist project in Venezuela, while also commencing with a public diplomatic confrontation with the US.

According to Williams (2012), the U.S.' response to the Venezuelan coup in 2002 disseminated the idea that U.S. policy in the region had not changed after the end of the Cold War era. The U.S.' support for the attempted military coup in Venezuela is reflected herein at least; "by appearing to encourage the coup, the accepting of an unconstitutional end to a distasteful democratically elected government, the administration revived America's credibility gap, re-sensitized Latin America to U.S. interventions, and made it easier for states to oppose Washington's regional diplomatic, economic, and political initiatives" (Williams, 2012: 329).

In addition, Cuba and Venezuela signed a series agreements regarding oil supply to the Caribbean island, exchanging oil for the services of Cuban medical doctors in the social programs of Venezuela. Afterward, Venezuela moved to strengthen the Bolivarian project for Latin America by establishing the Bolivarian Alternative for the Americas (ALBA) with Cuba in 2004. The ALBA project included several other projects, such as Petroamerica including Petrocaribe, Petrosur and Petroandina, Banco del Sur, Telesur, and others. The ALBA was seen as an alternative way to balance U.S.' project of the FTAA as well as to counter U.S. influence in the region.

Venezuela has used its energy resources as a geopolitical instrument. It is the core instrument used in its foreign policy. Moreover, oil has been the only line consistently cited in the foreign policy of Venezuela (Petkoff 2005-86). According to Romero (2006:186), since 1959 all governments in Venezuela have been using oil as an economic instrument for reaching political objectives. Oil has been the main part of Venezuelan foreign policy, an instrument of hard power (Fürtig, Gratius 2010:180) and a tool to change the geopolitics of Latin America (Gonzalez Urrutia, 2006; Gratius 2010).

In 2007, the government of Venezuela published its new National Plan 2007–2013. This Plan included the policy of diversifying partners as an objective of national security, not only as a mechanism by which to promote a multipolar world. Moreover, Venezuela announced its intentions to maintain the diversification of the oil market, especially with China, Iran, and Russia, and thus expanded its alliances with OPEC members. In this period, they aimed to attain independence from the U.S. market, which was not mentioned in the National Plan 2001–2007. At the political level, Venezuelan government resolved to strengthen its relations with left-of-center social movements in the U.S. and Europe, at the same time limiting its relations with the conservative governments.

The U.S. reacted to these developments in Venezuela by imposing sanctions on the country. The U.S. argued that Venezuela was not adhering to cooperate in the fight against narcotrafficking and other transnational organized crime. The U.S. also reprimanded Venezuela for human rights violations and claimed that democratic institutions were failing. Actually, it was the U.S. refusal to sell Venezuela spare part for its F-16 fighters that principally drove the turn to Russia as an arms supplier, and later as a more fully engaged partner.

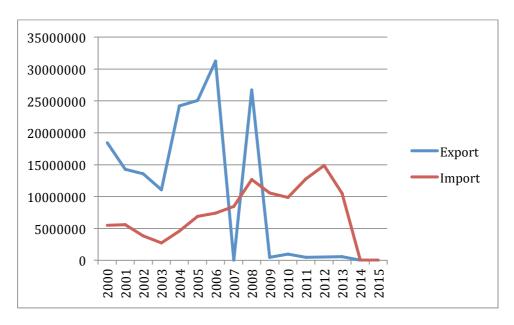
Since 2006 the U.S. restricted the sale of defense equipment and services to Venezuela. According to the U.S. Country Reports on Terrorism 2006: "Venezuelan cooperation in the international campaign against terrorism remained negligible. President Hugo Chavez persisted in public criticism of U.S. counterterrorism efforts, and was unwilling to deny safe haven to members of Colombian terrorist groups, as called for in UN resolutions".

Also, in 2011 the U.S. imposed sanctions on Venezuela under the Iran Sanctions Act of 1996 on PDVSA for delivering components for gasoline to Iran. These sanctions included the prohibition to PDVSA in competing for U.S. government contracts, securing financing from the Export-Import Bank of the U.S. and obtaining export licenses (USDS). However, Venezuela insisted on maintaining its commercial nexus with Iran, North Korea and Syria. In 2013, the U.S. re-imposed sanctions on the Venezuelan military industry company. In 2015, due to the suspected violations of human rights in Venezuela, the U.S. announced the freezing of properties and the suspension of entry of certain persons contributing to the situation in Venezuela.

Counter-narcotics has been another example of the lack of Venezuela's cooperation with the U.S. interests in the region. "Counternarcotics cooperation between Venezuela and the United States has been very limited and inconsistent since 2005 when Venezuela refused to sign a negotiated addendum to the MOU to improve anti-drug cooperation. The United States remains committed to cooperating with Venezuela to counter the flow of cocaine and other illegal drugs transiting Venezuelan territory" (International Narcotics Control Strategy Report, U.S. Department of State, 2015). There was a U.S. perception that Venezuela was not cooperating with actual enforcement, and indeed that Venezuela was collaborating with the narcos.

Notorious but not surprisingly is the absence of bilateral agreements between Venezuela and the U.S. from 2000 to 2015. There are only five agreements signed between 1995 and 1999, one on training and defense services, two on legal assistance and administration of justice, one on topographic mapping and one on narcotic drugs.

In contrast to the political-diplomatic scenario between Venezuela and the U.S., in economic-commercial terms, the U.S. has been the traditional and Venezuela's largest trading partner. Venezuela's exports to the U.S. have been mainly crude oil. Meanwhile, Venezuela's import from the U.S. has been petroleum and refined petroleum products, machinery, organic chemicals, agricultural products, autos and auto parts (USDS). However, since 2012 there is a lack of data on export and import of Venezuela that difficult the analysis (see Graph V11 below).



Graph V11: Export-Import of Venezuela from and to the U.S. (US\$Million)

Source: World Bank. There are no official data from 2007 to 2008. There is not available data of export in 2007, and export and import from 2012 to 2015.

7.1. Venezuela-U.S. Bilateral Events

From the data it follows that between 2000 and 2015, the relationship among Venezuela, and the U.S. was strongly driven by conflicts – 79% of the events were conflictive and only 21% of events were cooperative. The bilateral conflicts were mostly part of the political-diplomatic dimension with 51% of the events, several of them being rhetorical conflicts. The security and defense conflictive events are 12%, followed by other issues also with 12% of the conflictive events (see Graph V.12 below). There are only 2% of conflicts between Venezuela and the U.S. that is economic-commercial matters.

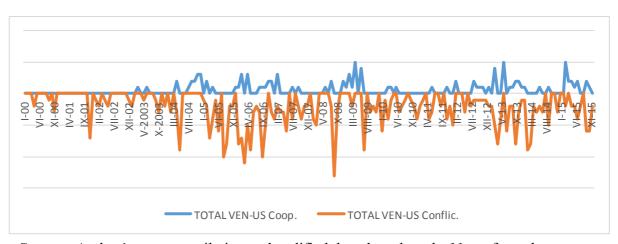
The 21% of cooperative events between Venezuela and the U.S. are distributed as 14% of the politic-diplomatic events, 3% in soft interactions, 2% in strategic interactions, 1% in defense-security interactions and 1% in economic interactions. The events that are codified as cooperative are mainly part of the politic-diplomatic dimension, but they are mostly declarations in order to de-escalate the conflicts. Thus, the cooperation, in fact, was almost non-existent between these two countries.

SOFT Coop. STRATEGIC Conflic. POLITIC -2% Coop. STRATEGIC 14% Coop. SECURITY Conflic. POLITIC Conflic -12% SECURITY Coop -51% 1% **ECONOMIC** Conflic. **ECONOMIC** -2% Coop. 1%

Graph V.12: Venezuela-U.S. Bilateral Cooperation and Conflicts from 2000 to 2015

Source: Author's own codification, based on data from the Media

There are no specific periods of conflicts or cooperation between Venezuela and the U.S., as was in the cases of Argentina and Brazil with the U.S. Venezuela and the U.S. experienced an almost one period of permanent conflict, especially from 2004 to 2015. However, there are some periods of cooperative events between these two countries in 2004, 2006, 2009, 2013 and 2015 (see Graph V.13 below).



Graph V.13: Venezuela –U.S. Bilateral Events from 2000 to 2015

Source: Author's own compilation and codified data, based on the News from the Activa Data Base.

8. Concluding Remarks

This chapter has attempted to provide a brief summary of the U.S-Latin America relations, with focus on the bilateral relations of the U.S. with Argentina, Brazil, and Venezuela, respectively. This thesis has argued that Latin America remains in the sphere of influence of the U.S. But one consideration that cannot be ignored is that, admittedly, the Monroe Doctrine has been welcomed in the approach of several Latin American governments with the U.S.

This section reviewed the concept of the sphere of influence because, by definition, it includes the view of triangular relations. There are two powerful states and a third state in a region. However, the concept of the sphere of influence is only one aspect of the triangular relations between Latin American countries, the U.S., and China. This aspect will be analyzed in the following chapters.

The relationships between the Latin American countries and the U.S. are much more complex and diversified as compared to the equation between the former and China. On one hand, the complexity is due to the sphere of influence approach and the paternalistic U.S. presence in the region. On the other hand, Latin America and the U.S. have been traditional partners with multiple areas of mutual interest that both have been engaged in.

This chapter has also described the relationships between Latin America and the U.S. under two different presidential administrations: G.W. Bush and Obama. They pursued similar U.S. interests in the region; however, their approaches were different: the securitization approach of Bush and the pragmatic approach of Obama. Causal or not, in case of the first, Latin America witnessed the political rise of left wing parties and several of them took presidential offices; meanwhile the Obama era witnessed the re-installation of more liberal governments. However, the characteristics of the bilateral relationships alone are not sufficient to explain the cooperation and conflicts between countries.

To conclude this chapter, comparing the bilateral relations of the U.S. with Argentina, Brazil, and Venezuela, we see that Brazil maintained the most cooperative relations with the U.S., where conflictive issues between the two countries were in quantity mainly restricted to economic-commercial matters. The political conflicts were less numerous, but also present in the form of Brazilian leadership in South America, by excluding the U.S., and their opposite position in global affairs, such as the Iraq war, Iran nuclear policy, among others. Brazil and the U.S. also maintained efforts to cooperate in strategic, security, and defense issues, which is similar to the relations between the U.S. and Argentina. The most consequential and permanent bilateral relationship in the region has been that between Brazil and the U.S.

The interactions between Argentina and the U.S. from 2006 onwards were decreasing in number and reduced to a distant bilateral relation, but these were in the backdrop of a small number of conflicts. In the case of the bilateral relations between the U.S. and Venezuela, it is a not a surprise that there exists an extremely conflictive relationship between the two with almost no presence of any kind of cooperation.

In the following chapter, we present a brief overview on the bilateral relationship between the U.S. and China, as one of the three vertices of the triangular relations between China, Latin American countries, and the U.S.

Chapter VI

China and the United States

"A sound China-U.S. cooperation can serve as the ballast for global stability and the propeller for world peace." (Xi Jinping in a joint press conference with president Obama in California in 2013)

The bilateral relationship between China and the U.S. is diverse and complex; therefore, it can be analyzed in several ways. This chapter proposes to look this relationship as a part of the international system that is in the process of transitioning to a multipolar order, wherein China and the U.S. are decisive actors. The Chinese leadership perceives that the world is moving toward a more comprehensive multipolar order. The world can currently be viewed as a multipolar arrangement with regard to the distribution of economic power and soft capabilities. However, China does not yet have political power commensurate with its economic power, which is why reforms to the global institutional order are being advocated and sought by rising powers, among others.

The first part of this chapter analyzes the relations between China and the U.S. as a relationship threatened by the fear of the powerful state observing the rise of a new power. This part also outlines the system as one into a process of transiting towards a multipolar order. The second part explains how China moves from traditional alliances to strategic partnerships. The third part of this chapter presents a brief overview of the bilateral relations between China and the U.S. during the period in question. The fourth part focuses on China-U.S. bilateral events, as a concrete representation of their relationship. Finally, it introduces briefly the relation between China and the U.S. in Latin America.

1. Contesting the Global Order

The international system has been experiencing a process of transitioning to a multipolar order, where the key dynamic is between China as a rising power, and the U.S. as the established power threatened by the Chinese rise. From a realist approach, the bilateral relations between China and the U.S. are one of balancing. There have been debates whether the balancing between these two countries is occurring or not (Layne, 1993; Ikenberry, 2002; Paul, Wirtz, & Fortman, 2004; Pape, 2005; Lieber & Alexander, 2005); some authors have also predicted conflicts between rising and declining hegemonic powers (Organski, 1968; Organski & Kugler, 1980; Gilpin, 1981) as well as power transition into regions (Lemke, 2002). According to Organski (1958, 1968). It is the rising powers that seem to be the initiators of a war against the powerful state.

We consider it important to analyze, firstly, the context of the international system where China and the U.S. have been interacting. Then we can understand the potential conflicts between China and the U.S. as a result of the growing power of China.

There is neither academic consensus about the distribution of poles of power nor any consensus on how to define the current international system. Depending on the indicators of capabilities that are used and the recognition or negation of multiple levels of action in the system, the configuration of poles can be defined as either unipolar, bipolar, or multipolar and, in some cases, as being somewhere in between. According to Ikenberry, Mastanduno, and Wohlforth (2009), the polarity is established with respect to the capabilities of the state and also in comparison with others. For them, given the dominant material capabilities of the U.S., the world is unipolar. With the end of the Cold War era, the world has not returned to multipolarity. Obviously, these authors are only looking at one level of material capability, namely the military. This view of capabilities invariably leads to the evaluation of the global order as being unipolar.

This chapter argues that, since the end of the Cold War era, the international system has been in a process of transitional to multipolar order. The transitional process implies that there are other levels of action – such as economic and soft capabilities – where other states could be more reasonably comparable with the U.S., such as China. The transitional process is being driven predominantly by the increasing capabilities of rising powers, who are seeking to influence the global economy and to exert pressure with regard to multiple global issues – such as trade, climate change, global energy, security and currency, thereby potentially

frustrating the decisions made by the traditional (Western) powers in international forums. This is supported by their geographical and population size, by their increasing economic clout as their gross domestic product (GDP) grows, by exponential growth in foreign trade, industrialization and direct investment in their economies, as well as by their role as leaders in regional integration and the establishment of international networks.

In a transitional global order, countries act in a way that reflects the growing clout of rising powers in international institutions. Thus, we see demands for the reform of the United Nations (UN), including the Security Council, the World Trade Organization (WTO), the World Bank (WB) and the International Monetary Fund (IMF). Emerging countries argue that international institutions do not exist in accordance with the realities of contemporary global political order because they still reflect the power configurations of the post-World War II and Cold War eras. The required change would be that they encourage and influence emerging and developing countries in the translation of their economic power into political power.

The main demands of China for reform are: the achievement of the redistribution of the quotas that are currently established in the IMF and WB, so that they are instead calculated according to a country's economic weight in the world economy, the modification of membership rules for international institutions, veto power structure, regional representation, expansion of the Security Council and revision of its functionality. The U.S. and other major (Western) powers currently retain the majority of the voting power and decision-making clout in these institutions. China's demands also include abandoning the country-of-origin limitations imposed on nominees for directorships of these institutions, which are currently restricted to candidates from the U.S. and certain European countries.

China and the U.S. are in different positions in this transitional process, whereby China has been playing the role of rising power and the U.S. as the declining powerful state. For instance, the presentation of the U.S. Defense Strategy in 2012 by President Barack Obama opened with the statement that: "Our nation is at a moment of transition". This strategy was reformulated in consideration of the changing global geopolitical environment, as well as its changing fiscal circumstances. According to Gelb (2010), it is a normal practice that states adjust their national security strategies in light of economic concerns, although he argues that this is less so the case with the U.S. The Defense Strategy of 2012 reflects the significant impact of economic issues in security considerations and the adjustment of the U.S. in the face of transition.

In contrast to the U.S' position, in 2004 the Chinese National Defense Strategy already affirmed that the trends towards a multipolar world and economic globalization are strengthening. It announced the observation of changes in the balance of power among major global players, accompanied by a realignment and redistribution of China's interests. The major powers have previously built relations where cooperation and competition with each other happened simultaneously.

The Chinese National Defense Strategy of 2010 referred to the profound and complex changes of the international relations in a turning point towards multipolarity. The document stresses that "the international balance of power is changing, most notably through the economic strength and growing international status and influence of emerging powers and developing countries". According to the same document, the predominant strategy that is required is the exertion of pressure for reform within the existing international institutions. They highlight the role of the G20 and the necessity to reform the UN, as well as other international political and security institutions and organizations. They describe the profound realignments in international relations, which were also mentioned in the document of 2004, such as economic interdependence, coordination, and cooperation as the most preeminent issues among major powers.

The Chinese National Defense Strategy of 2010 declared that: "China now stands at a new historical point, and its future and destiny has never been more closely connected with those of the international community". This is reflected in an active Chinese diplomacy, as Yang notices, "China has become an important player in the international system. It has joined more than 100 inter-governmental organizations and acceded to over 300 international conventions. It has taken an active part in international and regional affairs and earnestly fulfilled its international obligations. In recent years, it has played an important role on such issues as counter-terrorism, non-proliferation, the nuclear issue on the Korean Peninsula, the Iranian nuclear issue and so on. China is the largest contributor of peacekeeping personnel among the five permanent members of the UN Security Council. It has participated in 22 UN peacekeeping operations and dispatched a total of more than 10,000 peacekeeping personnel, including 2,000 who are currently on peacekeeping missions" (Yang, 2008).

The U.S. has recognized the emergence of China as a potential factor that will affect both the American economy and the country's security. According to the U.S. Department of Defense, "Over the long term, China's emergence as a regional power will have the potential

to affect the U.S. economy and our security in a variety of ways" (2012: 2). The document also observes that China and the U.S. are interested in building a cooperative bilateral relationship. But the U.S., at the same time, is not willing to share its power and geopolitical advantages; therefore, the U.S. reaffirms its interests to maintain its regional access and the ability to operate freely with its friends and allies in Asia.

In the fourth section of this chapter, we will analyze the bilateral events between China and the U.S. from 2000 to 2015. This could give us more concrete data to find whether China and the U.S.' bilateral relationship has the tendency to cooperate or enter into conflicts and what are their main issues. But before that, we will discuss the role of China's strategic partnerships, as a Chinese instrument in this transitional process.

2. From Alliances to Strategic Partnerships

A characteristic of the transitional power process of the international system is the formation of new splits and realignments. Readjustment includes the countries' choice to expand their networks and support from military alliances to the development of various kinds of partnerships. Despite that military factors still occupy an important position in state security, China has intensified a policy of partnerships and rejected military alliances as far as possible. During the last 20 years, China has established bilateral strategic partnerships and expanded its political, economic, and technological cooperation, among other types, with countries in different regions around the world. China has done so by establishing permanent strategic bilateral relationships, increasing trade volumes, making greater financial investments and cooperating in technological sectors. In the following paragraphs, we present a brief analysis of the Chinese strategic partnership. We argue that China's use of partnerships plays a role in its maneuvering in an international order in transition, where it moves in power vis-à-vis the dominant U.S. pole.

The necessity for states to secure national interests in a transitional order has led to strategic partnerships being a formal political instrument for coordination and cooperation between rising powers. Since these states do not have enough resources to impact the current global distribution of power individually, their strategic partnerships include bilateral coordination that augments the force of bargaining, economically strengthen their partners and support their mutual technological development. The strategic partnership between China and Russia, established in 1996, for example, is a mechanism by which both the states

exchange views on major issues, such as "a number of vice-foreign-ministerial level consultations on the nuclear issue on the Korean Peninsula, the questions of Iraq and the Middle East, and other international, regional, and bilateral issues of common concern" (Joint Declaration by the People's Republic of China and the Russian Federation, 1996).

But China is not the only country to opt for this mode of inter-state cooperation. Other rising powers, such as Brazil, Russia, India, and South Africa have also relied on bilateral strategic partnerships to strengthen their relationships with different countries. All these rising powers are seeking to transform the structure of the international system. International institutions, for instance, are among the main arenas where the asymmetry of capabilities can be balanced. Thus, countries with less relative power – such as the BRICS countries – demand reforms of international institutions that would allow them to have greater impact on international decision-making processes. This would enable them to enhance their international position and would also accelerate the transition from a unipolar to a multipolar global order. The bilateral strategic partnerships that these countries have established has allowed them to coordinate and complement their work to focus on common interests.

For their part, alliances are formal military coalitions formed against third states. It was the main instrument for alignment in the bipolar order of the Cold War era. According to Snyder (1997), this militarist functionality is the most important difference between an alliance and most other forms of international institutions or regimes. The state maintains its primary interest, which is to survive, and, as a derivative, also maintains security against attacks from outside forces (Snyder 1997: 4). Traditional or military alliances appear to have lost some of their effectiveness at multi-strategic levels, especially when a single state dominates in terms of military capabilities. Strategic partnerships are not, however, intended to replace these traditional alliances, and instead aim to diversify the mechanisms available in a transitional multipolar order.

Strategic partnerships are flexible diplomatic instruments that allow the countries to behave pragmatically by having several bilateral strategic partners depending on their mutual interests. China has been the pioneer and saw the need to look for strategic partners earlier than others. It signed its first bilateral strategic partnership with Brazil in 1993 and then pragmatically signed its agreement with Russia in 1996. It important to note that, for instance, strategic partnerships are not strategic at the point of time that agreements between the

partners are signed; that is only the initial step for projecting the possibilities of the forthcoming strategic relationship.

Having discussed how China and the U.S. are positioned in the international system in transition and having mentioned the intensive work of Chinese diplomacy to expand its network of partnerships, we will now move on to discuss the bilateral relationships between the aforementioned countries.

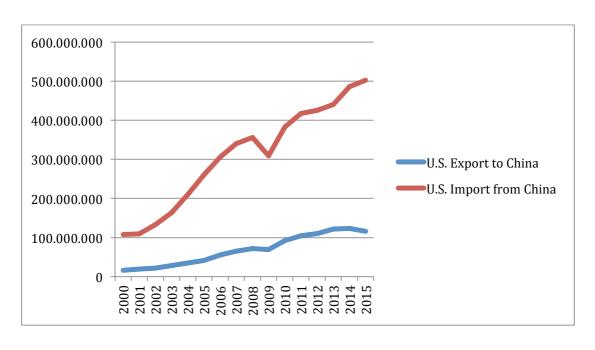
3. China-U.S. Economic and Diplomatic Engagement

A key point to consider into the China-U.S. relationship is trade. China has become the second-largest trading partner of the U.S. after Canada. China is also the first source of U.S. imports, as well as the third largest export market for the U.S. after its NAFTA partners. "In the last 10 years, China has been one of the fastest-growing export markets for the United States, with the latter's exports to China rising by 349% from 2004 to 2013" (ECLAC, 2015: 20-21). It would be a successful trade relationship, if it is was not for the enormous U.S trade deficit with China. U.S.' imports from China have been permanently increasing, whereas its exports to China haven't seen such a sharp rise (see Graph VI.1 below).

Main U.S. exports to China have been grains, seeds, soybeans, aircraft and their parts, electrical machinery and machinery in general, and vehicles. The main U.S. import from China has been electrical machinery and machinery in general, furniture, toys and sports equipment, and footwear (U.S. Department of Commerce). "China was also the third-largest source of agricultural imports into the United States and the seventh-largest source of service imports" (ECLAC, 2015: 21).

Similar to the cases of Latin American countries, Chinese imports from the U.S. have been a bulk of commodities, such as soybeans. According to the Report of the Commission U.S.-China Economic and Security in 2013, the big capacity of the Chinese market for specific agricultural products necessitates that China controls the commodity trade flows and the value-added processing of commodities takes place in China. Additionally, "the intensifying competition from other agricultural exporters, such as Australia, Brazil, and Argentina, allows China to hedge its import strategy in ways that can damage U.S. interests" (Review Commission U.S.-China Economic and Security, 2013:190). This Commission calls for treating China as a major market instead of a country in need of developmental assistance, by taking effective actions to protect U.S. production.

In 2012, the U.S. signed a Plan of Strategic Cooperation with its Chinese counterparts on agricultural science, trade, and education (2012-2017). The objective was to cooperate through technical exchange and to strengthen coordination in priority areas. The announced priority areas are plan health and disease, food security, sustainable agriculture, genetic resources, biotechnology, emerging technologies, and of course, agricultural markets and trade. In the same way, China and the U.S. later signed the Memorandum of understanding between the U.S. and Chinese departments of Agriculture. The purpose of this memorandum included the promotion of cooperation in food security, food safety, plant health, and animal health, agricultural markets, biotechnology and new technologies, business investment and trade cooperation, plan and animal genetic resources and disease prevention and control, personnel exchange, capacity building, and extension, cooperation on agricultural science, technology, economics, and statistics, open data for agriculture, among others.



Graph VI.1 United States Trade with China (1990-2015)

Source: Author's own compilation, based on data from the World Bank.

Another aspect of the China-U.S. relations is foreign direct investment, which is not so high when compared with trade volumes. "Only 1% of the stock of U.S. direct investment abroad is in China and in recent years the flow of direct investment from the U.S. to China has been close to zero. The stock of Chinese direct investment in the U.S. is also lower than what would be expected, given that the U.S. is the world's largest recipient of FDI flows" (Dollar 2015). However, the Chinese investment in the U.S. is increasing rapidly.

The U.S. has been investing in manufacturing, wholesale trade, and depository institutions in China. Chinese direct investment in the U.S. has been going to manufacturing, depository institutions, and real estate sectors. According to Dollar (2015), the small investment between these two countries, and especially from the U.S., responds on the one hand, to the poor protection of property rights in China, showing that U.S. companies do not risk investing there. On the other hand, the low investment also illustrates the restrictions under Chinese law on foreign investment in many sectors.

Moving on to political-diplomatic engagement, this relationship is characterized as one in rational stability. We assume that both states are rational actors interacting in a changing relationship. However, we do not consider rational choice theory, because "Rational choice might seem ineffective for studying change. The concept of equilibrium is inherently statics since it is defined as the absence of any tendency to change" (82). In this chapter, we understand rational stability as a constantly and parallel oscillation among states between cooperation and conflict, where countries escalate or de-escalate their conflicts taking into consideration the advantages and disadvantages that a continuation of the conflict or cooperation will pose to them.

China and the U.S. have established several channels of permanent communication and coordination. Since 2009, China and the U.S. meet once a year at the U.S.-China Strategic and Economic Dialogue. This forum was an initiative of Barack Obama and Hu Jintao during the visit of the American president to Beijing. According to Clinton and Geithner, in this meeting of highest-ranking officials it was essential "to keep up with these changes that affect our citizens and our planet; we need to update our official ties with Beijing" (Clinton & Geithner, 2009). This forum offers a space to discuss several topics on their bilateral relations, regional and global issues. The points of interests between these two countries are: to promote trade and investment in their respective markets; to cooperate on climate change, energy and the environment; to find understanding on potential complementary cooperation in security in

Asia region, which includes security issues in North Korea, Afghanistan, and Pakistan, as well as economic issues in Africa; and to cooperate in a world of permanent challenges.

This brief and general overview of the bilateral relationship between China and the U.S. shows, on the one hand, the conflictive trade, agriculture, property rights events. On the other hand, there is a clear predisposition between both countries to cooperate to solve their conflicts, mainly through diplomatic actuation. The following part of this chapter presents more concrete and quantitatively the conflicts and cooperative events between these two countries.

4. China-U.S. Bilateral Events

The next paragraphs present some findings of the codified bilateral events between China and the U.S. from 2000 to 2015. The analysis of these bilateral events between China and the U.S. offers a concrete and summarized view of periods of cooperation and conflicts, as well as the issues involved.

The events between China and the U.S. are also codified into four dimensions: (1) political and diplomatic interactions; (2) economic and commercial interactions; (3) defense, security, and strategic interactions; and (4) soft and other interactions. In the case of China-U.S. relations, security, defense, and strategic interactions are part of the same dimension, due to their overlapping interactions.

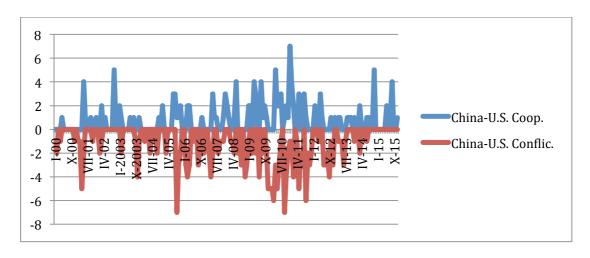
Soft/Others Secur/Defen/_ Soft/Others Conflic. Strateg. Coop. Conflic. 1% 2% 13% Secur/Defen/ Politic Coop. Strateg. Coop. 22% 8% Politic Conflic. Economic Conflic. 28% 16% Economic Coop. 10%

Graph VI.2: Cooperation and Conflicts between Brazil and China in the 5 **Dimensions 2000-2015 (%)**

Source: Author's own codification, based on data from the Media.

In 41% of the events during the period under review, China and the U.S. were cooperating with each other, whereas 59% of the events represented conflicts between the two countries (see Graph VI.2 above). Both countries based their cooperative relationship on political-diplomatic interactions representing the 22% of the events, followed by economic cooperation with 10% of the events. However, the main conflicts were also a part of politicaldiplomatic interactions with a considerable 28% of the events, followed also by economic conflicts with 16% of the events. Regarding security, defense, and strategic cooperation, cooperation was seen in 8% of the events, while conflicts in the same dimension are 13%. The relative similarity in percentage between the cooperative and conflictive events may indicate some kind of rational stability, and both countries look for constancy in their relationship. These countries have clear differences. However, China and the U.S. work together in order to maintain the stability and deter or avoid the deepening of their conflicts.

Graph VI.3 shows that there has been permanent existence of both conflictive and cooperative events and in similar period of times. This supports the aforementioned assumption and suggests that China and the U.S., when facing a conflictive situation, look simultaneously for cooperation. This can be intentional or not, but the fact that there are simply numerous events across multiple topics facilitates the de-escalation of conflicts. For its part, the permanent interaction between these two countries is a distinguishing characteristic, when compared with the previously analyzed bilateral relations in the previous chapters, where China as well as the U.S. maintained certain periods of no-interactions with the Latin American countries.



Graph VI.3: China-U.S. Bilateral Events (2000-2015)

Source: Author's own codification, based on data from the Media.

Among the permanent events between China and the U.S., there are some periods with numerous events, especially intense ones, that one can highlight in 2001, 2003, 2005, 2008 and 2010-2011. In 2001, we observe a mixture of diplomatic, commercial, and defense events, such as the U.S. criticism against the Chinese violations of human rights, discussions about the membership of China to the WTO, the Chinese claims against the U.S. anti-missile system installation that should protect Taiwan, and the increasing defense budget of China, among others. But the event that generates an important diplomatic crisis between China and the U.S. was the interception of a U.S. military aircraft by China in its maritime territory. According to the U.S. China were trying to intimidate the aircraft flying at the edge of its airspace, and physically ran into it, forcing it down. China detained the aircraft, including its crew, who were let go after some weeks; the aircraft stayed in China for several months and returned to the U.S. as cargo after being dismantled. The U.S. responded by receiving the President of Taiwan, Chen Shui-bian on an official visit, as well as Bush's public support for the Dalai Lama.

In 2001, at some point, there was no means of negotiation until president Bush offered a commercial deal to China. Bush and Jiang Zemin initiated conversation and China returned the U.S. aircraft. The U.S. proposed a new dialog on human rights that China accepted. Finally, the U.S. formalized its commercial relations with China. These events are an example of the complexity of this bilateral relationship and the overlapping areas of interactions, where commercial interests facilitated dialogue on defense and human rights issues, for example.

The year 2003 was mainly a year of conflicts between China and the U.S. North Korea positioned into the China-U.S. agenda. North Korea has always avoided an agreement with the U.S. on nuclear weapons. The U.S. signaled that China was not cooperative enough in issues concerning Iraq and North Korea. The U.S. also criticized the deliberate devaluation of the Chinese Yuan. China suspended some import of agriculture products from the U.S., whereas the U.S. imposed some tariff on Chinese textiles. China also denounced the U.S., because they had found fungus in soybeans imported from the U.S.

In 2005 there are numerous conflicts between China and the U.S., yet also a stronger predisposition towards cooperation compared to previous years. China and the U.S. reached an agreement to give an impulse to the trade between the two countries, but with the Chinese compromise to reduce the export of textiles to the American market. Both countries were negotiating a textile agreement, and this process saw many ups and downs, tensing their relationship. One point of their commercial trouble was the increasing negative trade balance for the U.S. China took some measures with the Yuan and abandoned the parity of the Yuan with the U.S. Dollar. Hu Jintao visited the U.S. in order to reduce the tension in the relationship of China with the U.S. and Bush also visited China. Finally, China and the U.S. reached a commercial agreement, and China compromised itself to buy 70 Boeing aircraft from the U.S. Parallel to these commercial issues, the situation of North Korea forced the U.S. to ask for Chinese intermediation.

In 2008, the major events between China and the U.S., as reported by the Media, were mainly cooperative. They found some agreements in commercial aspects, such as when China increased the value of the Yuan and both countries initialized negotiations in investment. No less important is that China and the U.S. started their dialogue about outer-space security and their common responsibility. However, there were still some bilateral commercial conflicts, as well as among diplomatic issues, and Taiwan again tested their relationship due to the U.S.' possibility to sell weapons to Taiwan.

In the period from 2010 to 2011, China and the U.S. experienced both cooperative and conflictive events. There was a dispute about Google that ended with Google exiting from China. There were some other diplomatic events that deepen their conflicts, such as President Obama's proposal to the U.S. Congress to sell weapons to Taiwan, an unprecedented event that resulted in a strong rejection by China. Moreover, China asked the U.S. President not to meet with the Dalai Lama. However, Obama ignored the Chinese warnings and met with him. For its part, China alternated between negotiation and opposition; they offered a minimal devaluation of the Yuan. China also accepted to reinstall the bilateral dialogue on human rights with the U.S. But North Korea reappeared on the scene and threatened actions against South Korea. China and the U.S. reinitiated the dialogue on Defense, and the U.S. suspended its bilateral military exercises with South Korea. Hu Jintao visited the U.S. But later, the U.S. accused China of informatics piracy. China criticized military exercises of the U.S. in Chinese Sea and the U.S. criticized China for the Yuan devaluation.

As discussed above, the bilateral relation between China and the U.S. is extremely complex and conflictive, but the events suggest that both countries choose stability at the end, as mentioned previously – a kind of rational stability. This rational stability is possible in part because both countries have numerous resources to negotiate, which is associated with their numerous conflicts within the several areas that both countries have been interacting with each other.

However, there are an increasing number of scholars who describe the relationship between China and the U.S. as one in power transition, where the escalating conflicts are inevitable; "[...] as a result of its genuine development and the impact of its expanding influence on the international system, China and the United States are inescapably engaged in a power transition process, which is, on top of all other issues, about the future of international relations" (Lai, 2011: ix).

5. Bilateral Relations in Outer Space Technologies

In the section that follows, we present a brief analysis on satellites technology as a part of the relationship between China and the U.S. The decision to include a specific reference on this matter is due to two reasons: firstly, the literature on outer space has been under-analyzed; the U.S. is the predominant power in this sphere, and, at the same time, China is the most promising power in outer-space investment and development. Secondly, the relevance of incorporating the outer-space policies and strategies of countries across the globe into International Relations is due to their strategic repercussions for terrestrial affairs as well.

A country that integrates a space system multiplies its power and is more effective in how it resolves terrestrial conflicts. A space system enables communications and system functioning, and it is also an instrument of deterrence. Moreover, in the post-Cold War era, civil and commercial competition in space has emerged that supports a commercial space industry that involves many sectors, including the commercial, civil, and national security ones. For example, commercial considerations can make defense issues of more problematic. One such problem that the U.S. faces regarding defense is the control of exports. U.S. companies want to sell different technological components not only to China but also to other emerging markets. As a result, the U.S. has developed the Evolutionary Acquisition for Space Efficiencies (EASE) program, which includes the initiative to buy a series of satellites, with the aim of reinvesting in and supporting U.S. companies by providing financial stability.

It is important to note that thanks to such technology the boundaries between the terrestrial sphere and outer space are being increasingly strengthened and reinforced. In military affairs, the U.S. considers the defense of outer-space technologies as a useful way to deter terrestrial conflicts and to prevent vulnerabilities in space from causing instability in a terrestrial crisis (United States-China Economic and Security Review Commission 2011:9).

Outer space was an area where the U.S used to operate alone. During the Cold War era, the Soviet Union was a rival and the U.S. did not establish any partnerships in this field. However, in recent years circumstances have changed, such as, for example, the emergence of rising countries possessing genuine capabilities vis-à-vis space technologies. The U.S. has, without a tradition of operating with partners in the use of outer space, recently sought to incorporate a new space policy (2012) that looks for partners. Such partnerships represent an important strategy in several regards, such as the possibility to share data, develop technologies that can augment the capabilities of each party, contribute to deterrence, as well as facilitate cost-sharing — especially important in a period of budget constraints on U.S. spending (Schulte, 2011).

During the last years, China has strongly invested in developing satellites. China is on its way to converting itself into a new space power. China spends more money than Russia on space science development. China has rapidly multiplied the launches of several kinds of satellites, from communications satellites to science stations. China is the country with the

biggest investment in counter-space technology, more than Russia or any other country, while at the same time it is increasing the number of jammers it owns. China has also engaged with several countries around the world in satellite cooperation, which is known as China's satellite diplomacy.

China's satellite diplomacy includes, among other activities, the establishment of partnerships in the satellite sector, support for the sale of commercial satellites, and the training of personnel. China understood that they did not have the technological knowledge or the capability to develop space programs themselves and that these partnerships were thus a vital resource for them. China has already profited from working with partners such as Russia, Ukraine, France, Germany, and Brazil, among others. During the last ten years, China has also begun to find other willing partners in Latin America, such as Argentina and Venezuela. In Southeast Asia, meanwhile, China has established cooperation with new partners such as Myanmar, Sri Lanka, as well with ASEAN countries. China's lunar and Mars programs, China's satellite launches for others; China needs to build tracking capabilities in other hemispheres, which drive it to be interested in cooperation in space with Argentina and the project in Neuquen, Brazil, and the CBERS program, as well as cooperation with Venezuela.

The rapid development of China in outer-space technology has produced some concerns among U.S. officials. U.S. concerns about this China-related development are due to the so-called "Three Cs": the contested, congested and competitive use of outer space. According to U.S. officials, the three Cs represent grave challenges to the current U.S. space system. China is an actor contributing to the apprehension of the U.S. in the area of contestation, not least due to the former's development of counter-space technology. In 2007, for example, China tested an anti-satellite system (ASAT) that destroyed an existing satellite. This Chinese maneuver surprised the Americans because of the technology that China has been able to develop and because of the production of a significant amount of debris as a result of the collision. The U.S. is also concerned to see the increasing engagement of China with emerging spacefaring nations over commercial space ambitions as "a part of the more competitive nature of space" (United States-China Economic and Security Review Commission 2011:9).

Despite the aforementioned issues, no country can rationally have an interest in participating in a conflict in or over outer space. Thus, while for the U.S. space is considered as a vital national interest, any conflict in it would do more harm than good — for example through the creation of even more debris, which might destroy satellite systems as well as have consequences for terrestrial resources. In light of this, many of the U.S.' strategies are aimed at developing a more responsible use of space. An example of such cooperative behavior is the services that the U.S. Strategic Command STRATCOM offers, with the goal of preventing collisions of satellites in space. The STRATCOM system constantly monitors for possible collisions with space debris. It also shares information with the Chinese government, in order to avoid the creation of more space debris. As a result, there has been an inevitable rise in cooperation between the two countries.

6. China and the U.S. in Latin America

The complexity of the relationship between China and the U.S. also is present in different regions around the world; one of these regions is Latin America. This complexity involves several fronts, and Chinese engagement in Latin America has three ways effects: the effects over Latin American countries, effects in China's own relation with the U.S., as well as effects on Latin America-U.S. economic, political, and strategic relations, both cooperative and conflictive. According to Ellis (2015), the presence of China in Latin America generates negative consequences, and hence undermines the strategic position of the U.S. in the Western Hemisphere.

There are multiple pieces of evidence of U.S. concerns in the face of China's presence in Latin America. Therefore, in 2006 China and the U.S. decided to coordinate policies on this issue by establishing a China-U.S. dialogue on Latin America. Thomas Shannon, the then Assistant Secretary of State for Western Hemisphere Affairs, traveled to China in 2006 to meet his Chinese counterpart Zeng Gang, Head of the Foreign Ministry's Department of Latin American Affairs.

China's increasing presence in Latin America (the sphere of influence of the U.S.) tend to be interpreted as a threat to U.S. interests (Bachelet 2005; Mearsheimer 2005, Ellis 2004/2007/2012). Moreover, the increasing presence of China in the region follows Chinese economic interests and it could be also a Chinese contestation strategy against the increasing U.S. presence in Southeast Asia (China's own sphere of influence).

Among other scholars that predicted the increasing interest of China in the region, Dumbaugh and Sullivan (2005) considered that the interests of China in the region were not only economic, but also political, and diplomatic. In 2006 Peter Hakin already asked, is Washington losing Latin America? In the Academia, there is not a consensus whether Chinese presence in Latin America represents a threat to U.S. interests. "For the United States, Beijing's new footprint in the Western Hemisphere poses little immediate or direct threat tot he United States. However, China's increasing economic relations with Latin America may enhance Beijing's utility of alliance. It will accelerate Latin America's power transition from the US to China" (Hsiang 2016:64).

According to the U.S.-China Economic and Security Review Commission (2018), "China's emergence as the region's second-largest trading partner, a major lender, and the fourth-largest investor is eroding U.S. economic dominance in the region. The size and continued expansion of China's market creates enormous growth potential for LAC exporters (particularly in agriculture) that the U.S. market cannot match.... In addition, the rapid growth of LAC imports from China is decreasing U.S. market share in the region" (2018.28). Additionally, this report signals the Chinese financing presence in the region as supplanted the U.S., and other aspects included are telecommunications and China's growing military and security engagement with the region (2018:29).

The China-U.S. relationship in Latin America is also complex because of the multiple areas that have to be included in the analysis. For instance, cooperation in aerospace technology. This aspect of China-Latin America relations has been neglected in academic research for quite a long time, and even think tank analysts still disagree on how to interpret the spillover of strategic cooperation on issues of high politics. Some predict that these joint space programs might pose a threat to U.S. security (Ellis 2010). According to Delgado-López (2012: 8), however, Chinese-Latin American space cooperation does not follow any global ambitions but is mainly driven by respective national development interests (Noesselt and Soliz 2013).

According to Feinberg, Miller, and Trinkunas, "there is a manner in which Chinese influence in the region is prejudicial to U.S. interests. Chinese diplomats care little for democratic institutions and Chinese investors too often are impervious to good governance issues such as fiscal transparency, environmental stewardship and international labor

standards" (2015: 17). In this way, Hsiang (2016) coincides with the Beijing diplomatic aggressiveness in Latin America.

7. Concluding Remarks

This chapter has attempted to provide a brief summary of the bilateral relationship between China and the U.S. As explained in the introduction, China and the U.S. interact in a transitional international system. However, there is currently no academic consensus on the distribution of poles of power and neither do scholars agree on how to define the international system. It is not yet clear whether the positive and negative interactions between China and the U.S. in this transitional order are the predictable conflicts between a rising power and a declining superpower, or something else.

In this transitional global order, strategic partnerships have been an important instrument of Chinese diplomacy for expanding its network. The strategic partnerships also represent an attempt to influence the system by collaboratively pushing for a more comprehensive multipolar order. The main assumption underpinning such agreements is that bilateral strategic partnerships are the best available and most effective bilateral mechanism in the transitional global order, especially because they simultaneously reinforce national interests and contest the global order.

As discussed above, the bilateral relation between China and the U.S. is extremely complex and conflictive, but the analysis of the events suggests that both countries ultimately chose stability – a kind of rational stability to mark their relationship. This rational stability is possible because both countries have numerous resources to negotiate, which is associated with their numerous conflicts within the several areas that both countries have been interacting in. Thus, when one issue threatens the existence of the bilateral relationship, e.g. Taiwan, North Korea, or the Dalai Lama, another area of the relationship offers a way to resolve the crisis, such as commercial cooperation.

Having examined the bilateral relations between China, the U.S., and each of the three countries in Latin America that serve as our case study, the next three chapters turn to an analysis of the three-way interactions.

Chapter VII

The Triangular Relation Between Brazil, China, and the United States

In this chapter, we empirically tested the synchronization of the triangular relationship between Brazil, China, and the U.S. We quantitatively verified whether China's engagement with Brazil has influenced the bilateral relation between this South American country and the U.S. from 2000 to 2015. But, because this is a study on triangular relations, our analysis also included the other two vertices of possible influences: (1) the effects of Brazil's engagement with the U.S. in China-U.S. relations, and (2) the effects of China's engagement with the U.S. in Brazil-China relations. The main findings show periods of synchronization where China and the U.S. have played the role of the third mechanism, meaning that during some periods China and the U.S. have directly reinforced the cooperation or conflicts with Brazil with regard to one of them.

This chapter is divided into two sections. The first section presents the synthesis and evaluation of the main findings of the correlations between the bilateral relationships of Brazil-U.S., Brazil-China, and China-U.S. This first section is a necessary step to then look for synchronization. One can argue that the correlations can also be coincidental, but it introduces the comparative analysis of the bilateral relations dynamics. Correlations between bilateral relationships show the unilateral approach that one state has over its bilateral relations with the other two states. When correlations exist, it suggests that interests or expectations of the first state are simultaneously present in its interactions with the other two states.

The second section tests the presence of synchronization by adopting event synchronization analysis as its method, where we try to show to what degree these interactions affected each other⁵. As opposed to simple correlation, synchronization identifies the high presence of simultaneous correlations between the three vertices. Whereas correlation is a view of the unilateral preferences of one state interacting in a parallel manner

⁵ The methodology is explained in Chapter III on Synchronization and Method. The codification process is clarified in Appendix I.

with other two states; synchronization shows the fact that under certain conditions⁶, three states apparently interacting only in bilateral relationships, produce simultaneous effects among them. The effects are represented in terms of increasing or decreasing conflicts among the three states.

1. Correlation Between Brazil-U.S. and Brazil-China Bilateral Events

The section below describes the results of the correlation between the Brazil-U.S. relations with the Brazil-China relations. During the period under review from 2000 to 2015, they experienced both positive and negative correlations. These bilateral relations are correlated among ten years (see Graph VII.1). The periods of a positive correlation between Brazil-U.S. and Brazil-China are from 2001 to 2003, in 2005, and from 2011 to 2012, meanwhile, negative correlations are present in 2004, from 2006 to 2007, and in 2009.

As mentioned above, positive and negative correlations do not automatically mean cooperation or conflicts, but they imply that in positive correlation both bilateral relationships reacted in similar directions, either both cooperating or both in conflicts. Meanwhile, cases of negative correlations mean that both the bilateral relationships reacted in different directions; one bilateral relationship behaved cooperatively, and the other one mainly presented conflicts.

Graph VII.1 below shows that from 2001 to 2003 there has been a positive correlation between Brazil-China and Brazil-U.S. bilateral relations. It seems that Brazil cooperated with both countries, China and the U.S. In 2001, the president of China, Jiang Zemin visited Brazil - a key visit to provide an impulse to this bilateral relationship in economic-commercial terms. At the same time, Brazil and the U.S. experienced commercial and political cooperation. For instance, they were negotiating positions on the Free Trade Area of the Americas (FTAA). The U.S. supported the leadership of Brazil in South America, e.g., the U.S. and Brazil discussed the financial crisis in Argentina. In this period Brazil initialized a diplomatic offensive to consolidate a regional leadership and emerging global leadership role for itself.

Until 2003 the positive correlation between these bilateral relationships is due to their still cooperative relationships. On the one hand, Brazil and China diplomatically reinforced their bilateral strategic partnerships and diversified their areas of cooperation. In terms of

⁶ See Chapter III about synchronization as a conceptual framework.

technological cooperation, they launched their second joined satellite. They signed an accord to install a production plant of EMBRAER in China. As a permanent member of the UN Security Council, China, at least in its discourse, supported a more important role of Brazil into the Security Council of the UN. A bilateral proposal to cooperate in nuclear energy was discussed. Brazil and China reinforced their cooperation in agriculture. On the other hand, Brazil and the U.S. also maintained mainly a cooperative relationship. They joined the dialogues on regional issues, such as the situation in Colombia with the FARC and maintained the negotiations on FTAA. However, despite their bilateral correlation with the Brazil-China relations, the Brazil-U.S. bilateral relationship did not diversify itself in other areas of mutual interests, as was the case between Brazil and China.

In contrast to the previous positive correlations, in 2004 Brazil-China and Brazil-U.S. relations present negative correlation. The negative correlation in 2004 is associated with more cooperative Brazil-China bilateral relationship and the more conflictive interactions between Brazil and the U.S. Brazil and China strengthened their relationship around mutual global interests. The mutual global interests between Brazil and China included their coordination on issues such as the Kyoto Protocol. Both the countries joined the call for better access to markets for developing countries, they criticized the politicization of Human Rights, among others, and Brazil supported the China's status of market economy. Concerning the bilateral Brazil-U.S. relations, both countries focused on negotiations for the creation of the FTAA. This U.S. project for the Americas leads the relationship with Brazil during that year. There is a marked difference between the approaches of China and the U.S. to Brazil. China supported Brazil as a global partner, whereas the U.S. maintained Brazil's status as more of a regional partner – a counterpart to discuss regional issues in South America with – ignoring the transformation that Brazil was now looking for a global leadership role.

The return to a positive correlation between Brazil-China and Brazil-U.S. relations happened in 2005 as result of primarily commercial disputes that Brazil maintained in parallel with both China and the U.S. The conflicts between Brazil and China were produced by the increasing disappointment of several sectors in Brazil – politicians and industry - with the slow and lack of Chinese cooperation for trading and investments that were expected due to the agreements signed between both countries. Brazil actively started to impose some limitations on the import of Chinese products, threatening the country with the adoption of safeguards against Chinese products.

Turning now to the conflicts between Brazil and the U.S. in 2005, the main disagreements, in this case, were also in the economic-commercial sphere, relating to the establishment of the FTAA. Brazil decided not to support the creation of the FTAA, whereas the U.S. refused any negotiation with the Mercosur. Brazil and the U.S. also were involved in a conflict at the WTO, which favored Brazil and ordered the end of the U.S. subsidies for cotton production. There was also a dispute against the patent of medicines of U.S. pharmaceutical companies. All this occurred despite the visit of George W. Bush to Lula da Silva. Thus, Brazil confronted China, on the one hand, with the necessity to concretize the commercial agreements. But as China did not react efficiently, Brazil started to take actions to protect its industries from the products of the Asian country. On the other hand, Brazil raised several commercial disputes with the U.S., some of these related to the U.S.' protectionist policies.

In 2006 and 2007 the negative correlations are the consequences of continuing commercial conflicts between Brazil and China and the most cooperative approach between Brazil and the U.S. During this period, the relations between Brazil and China are more distant. Brazil questioned the slow development of projects with China, and China criticized the lack of patience of their Brazilian partners. In fact, the trade balance turned negative for Brazil in its commercial exchanges with China. In the case of Brazil-U.S. relations, they show their motivation to work on common interests. President George W. Bush visited Brazil, and Lula da Silva visited the U.S., they initialized a bilateral dialogue for possible common positions in the Doha Round. There are some conflicts, but they are solved, such as the Brazilian claims against the U.S. subsidies to produce ethanol. The U.S. announced its support to a Brazilian leadership into the G20 in order to improve their negotiating position in the Doha Round of the WTO. They signed agreements on energy cooperation. They also announced the establishment of an international space station in Brazil and agreed to cooperate in climate change and clean energies. In this period, the U.S. understood the Brazilian aspirations for a global leadership position.

By contrast, the negative correlation between Brazil-China and Brazil-U.S. bilateral relations in 2009 results from the latter. Brazil and China improved their bilateral cooperation; meanwhile, Brazil and the U.S. witnessed more conflicts. In 2009, Lula da Silva visited his counterpart Hu Jintao in China, which reinvigorated their bilateral strategic partnership, focusing on commercial, financial, mining, satellite and defense cooperation. Brazil and China strengthened their strategic partnership as a way to improve their advantages in the face

of the global financial crisis. Brazil and China agreed to trade with each other partially in Yuan and Real, replacing the U.S. Dollar. They signed agreements relating to the mining and energy sectors. Brazil increased its export of oil to China and obtained a credit for Petrobras. Moreover, China also promised to invest around of 10 billion USD. They expanded the China-Brazil Earth Resources Satellite program (CBERS) and agreed to build two more satellites. Additionally, Brazil and China agreed on military cooperation, including the capacity building of personnel and coordination on international peace missions.

In 2009 Brazil and the U.S. experienced several conflicts on commercial, but also important political and regional issues. Among commercial issues, Brazilian claims against the U.S. subsidies became a recurring issue. Brazil criticized the war on drugs of the U.S. and called upon the U.S. to combat drug consumption and attempt to solve the problem in its own territory. But the major conflict came when the U.S. unveiled its plans to install a military base in Colombia, as a part of its war on drugs. Brazil openly opposed this and called to meet with the presidents of South America to avoid this kind of U.S. military intervention in the region. Moreover, on global issues, Brazil criticized the U.S. for not committing to sufficient reductions in its greenhouse gas emissions during the UN Conference on Climate Change in Copenhagen.

The positive correlation in 2011 is caused by the cooperative bilateral events between Brazil-China and Brazil-U.S. In 2011, Brazil and China established their high-level bilateral commission, a mechanism to institutionalize regular political coordination. The importance of this mechanism is the centralization and total coordination of this bilateral relation across all ministries and coordinated by their vice-presidents. Meanwhile, Brazil and the U.S. strengthened their bilateral relation and cooperated in multiple fields., Several top U.S. officials visited Brazil and vice-versa, including the visits of Obama to Rousseff in Brazil. The U.S. invested in infrastructure in Brazil, they signed an agreement on "open skies", Boeing and Embraer agreed to cooperate in research of ethanol for the aviation industry, they agreed to cooperate to combat corruption, the U.S. approved the end of tariffs on ethanol imports from Brazil and the development of vaccine against the yellow fever in roots of vegetables.

In 2012 the correlation is still positive. However, it comes as a result of the increasing conflicts of Brazil with China and the U.S. One more time the main conflicts between Brazil and China are commercial; this is especially evident due to the increasing Brazilian imports of manufactured Chinese products. For its part, the relation between Brazil and the U.S. also saw commercial conflicts and the claims were the same as those in the past, such as the protectionism of the U.S. economy.

0,8 0,6 0,4 0,2 0 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 -0,2 -0,4-0,6 -0,8 -1

Graph VII.1: Correlation Between Brazil-China and Brazil-U.S. Events 2000-2015

Source: Author's own codification and calculation, based on data from the Media.

To conclude this section, the bilateral events suggest that Brazil-China and Brazil-U.S. bilateral relations depict correlation in several periods. They experience both, positive and negative correlations, meaning that in some periods Brazil was cooperating at the same time with China and the U.S., but in other periods, Brazil experienced conflicts with both, or just with China or the U.S. During the periods of correlations, due to the simultaneous conflicts of Brazil with China and the U.S., these conflicts are mainly commercial. However, when the correlation is due to the conflicts of Brazil with only one of these countries, the cooperation of Brazil in political-diplomatic issues is improved with the other one.

Whether these correlations imply that Brazil's cooperation and conflicts with the U.S. were caused by its relation with China, or Brazil's cooperation and conflicts with China were caused by its relation with the U.S. it is not possible to establish at this point. These potential mutual influences we will try to answer in the last section of this chapter that deals with synchronization analysis.

3. Correlation Between Brazil-U.S. and China-U.S. Bilateral Events

The other part of the vertice of the triangular relationship between Brazil, China, and the U.S., is the correlation between the bilateral relations of the U.S. with Brazil, and China, respectively. In this vertex, we witness some periods of positive correlation from 2000 to 2001, from 2003 to 2004, from 2007 to 2009, and only two periods of negative correlation: in 2005, and from 2013 to 2014.

The positive correlation from 2000 to 2001 it seems to be the effects of the U.S. efforts to solve its bilateral conflicts with Brazil and China, turning these bilateral relationships to be more cooperative. During this period, China and the U.S. confronted a diplomatic crisis when China detained an American military aircraft used for espionage. At some point, there was no-way of negotiation until president Bush offered a commercial deal to China. Bush and Jiang Zemin initialized conversation and China returned the U.S. aircraft. The U.S. proposed a new dialog on human rights that China accepted. Finally, the U.S. formalized its commercial relations with China.

From 2000 to 2001, Brazil and the U.S. experienced a period of mostly cooperative interactions, especially with the U.S. support to the regional leadership of Brazil in South America. For instance, Brazil and the U.S. were negotiating common positions for the creation of the Free Trade Area of the Americas (FTAA). The U.S. also discussed on regional issues with Brazil, e.g., about the financial crisis in Argentina.

The positive correlation from 2003 to 2004 is related to the more conflictive bilateral events of the U.S. with Brazil and China. Despite the cooperation between Brazil and the U.S., such as the joined dialogues on regional issues, the negotiations about the FTAA's creation deteriorated their relationship. Moreover, the increasing Brazilian disagreement with the U.S. actions in Iraq and its anti-terrorism foreign policy also played a role. In the case of the China-U.S. relations, it was a period of mainly conflictive events. Among the conflicts, North Korea positioned into the China-U.S. agenda. North Korea avoided an agreement with the U.S. on nuclear weapons. The U.S. signaled that China was not cooperating enough in Iraq and North Korea issues. There were also commercial issues that made this bilateral relationship difficult. Most notably, the U.S. voiced its criticism of allegedly deliberate

undervaluation of the Chinese Yuan. China suspended some imports of agriculture products from the U.S, which in return imposed some tariffs to Chinese textiles. Finally, to deepen their conflictive events, the U.S. called upon China to respect Taiwan's independence.

The correlation between these bilateral relationships turned negative in 2005 when the relationship between Brazil and the U.S. saw conflicts whereas China and the U.S. acted more cooperatively. Brazil and the U.S. maintained their commercial conflicts around the establishment of the FTAA. Brazil decided not to support the creation of the FTAA, whereas the U.S. refused any negotiations with the Mercosur. Brazil and the U.S. were also involved in a conflict at the WTO. There was also a dispute over the patents of medicines of U.S. pharmaceutical companies.

In 2005, China and the U.S. looked more predisposed to cooperate with one another. China and the U.S. reached an agreement to give further impetus to the trade between both the countries, with the Chinese consenting to reduce the exports of textiles to the American market. One of the points of their commercial trouble was the growing negative trade balance for the U.S. China took some measures to revalue the Yuan and abandoned the parity of the Yuan with the U.S. Dollar. Hu Jintao visited the U.S. to strengthen the relationship of China with the U.S. and Bush also visited China. Finally, China and the U.S. reached a commercial agreement, under which China agreed to buy 70 Boeing aircraft from the U.S. Parallel to these commercial issues, the North Korea situation forced the U.S. to ask for Chinese mediation.

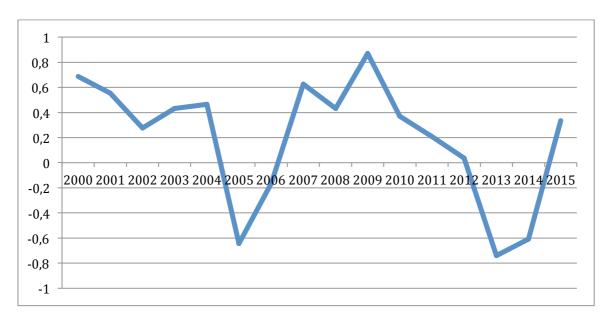
The positive correlation from 2007 to 2009 is a result of the presence of conflicts in the bilateral relations of the U.S. with both Brazil and China. In the case of Brazil and the U.S. relations, both countries showed interest to cooperate with one another, such as the bilateral dialogue for possible common positions in the Doha Round, the visits of President G.W. Bush to Brazil and Lula da Silva's visit to the U.S., announcing cooperation in ethanol production and the signing of agreements in energy cooperation. They also announced the establishment of an international space station in Brazil, and agree to cooperate in climate change and clean energies. However, conflicts started to appear and deteriorated their bilateral relationship. Among commercial issues, it was the recurrent the Brazilian claims against U.S. subsidies that took a toll on the relationship. Brazil also criticized the war on drugs of and called upon the U.S. to solve the problem in its own territory by combating drug consumption. But the major conflict was caused by the U.S. proposition to install military base in Colombia

as a part of their war on drugs. Brazil openly opposed this decision and called a meeting with the presidents of South America to avoid this kind of U.S. military intervention in the region. Moreover, on global issues, Brazil deplored the U.S. commitments during the UN Conference on Climate Change in Copenhagen as insufficient measures for greenhouse gas reduction.

As regards the China-U.S. relation, from 2007 to 2009 both countries maintained several conflicts. The conflicts were diverse and complex rising from political, security, commercial and financial areas. Among the conflicts, China conveyed its accusations of cyber-espionage to the Pentagon, the U.S. received the Dalai Lama on a visit, Bush criticized the violation of human rights in China, there were some naval incidents in the China sea, Obama visited Hu Jintao in China but they did not reach a commercial agreement for solving the financial crises, and the U.S. offered to sell weapons to Taiwan. Moreover, during the UN Climate Conference in Copenhagen, China confronted the U.S. policies on climate change and criticized the U.S. proposal of greenhouse gas reduction.

In 2013 and 2014, the Brazil-U.S. and China-U.S. bilateral relation are negatively correlated. Brazil and the U.S. maintained a conflictive relationship. Meanwhile, China and the U.S. looked to re-enforce cooperation. A major conflict between Brazil and the U.S. was the WikiLeaks revelation about the intensive U.S. interception of Brazilian government phone numbers. The U.S. interceptions included the surveillance of President Dilma Rousseff and top officials, including her secretary and her chief of staff. According to the documents, the U.S. spies were in Brazil searching information for economic-commercial benefit.

On the other side, China and the U.S. confronted commercial conflicts, also on Chinese cyber-espionage. Nevertheless, both countries opted to strengthen cooperation. Thus, during this period, President Xi Jinping visited Washington, and President Barack Obama visited Beijing. For the first time, China and the U.S. conducted joint naval military exercises, agreed to cooperate on cyber-terrorism; both countries also agreed to cooperate in information technology (ATI), and they signed a bilateral agreement on climate change for reducing CO2 emissions.



Graph VII.2: Correlation Between Brazil-U.S. and China-U.S. Events 2000-2015

Source: Author's own codification and calculation, based on data from the Media.

The bilateral relation between China and the U.S. is the most complex relationship. This complexity is represented by the overlapping areas that they use to interact. However, it is this complexity and overlapping issues that facilitate the negotiations between these two countries. Thus, China and the U.S. used some of these issues to deescalate conflicts in some areas, such as the Taiwan issue, Dalai Lama, etc. by offering benefits in other areas. The events show that mainly commercial deals have been both a reason for conflicts and also a good safeguard to deescalate conflicts in other areas.

4. Correlation Between Brazil-China and China-U.S. Bilateral Events

The third and last vertex of the triangular relation is the correlation between China-Brazil- and China-U.S. bilateral relations. The outcomes show positive correlation only in 2003 and 2008. The years 2004, 2007, and the period from 2009 to 2010 are marked by negative correlations.

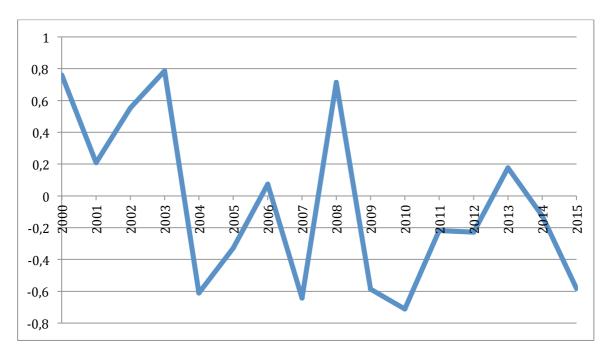
In 2003 we observe a positive correlation between China-Brazil and China-U.S. bilateral relations. China maintains a mainly cooperative relation with its bilateral partners, Brazil and the U.S. On one hand, Brazil and China diplomatically reinforced their bilateral strategic partnerships and diversified their areas of cooperation. In technological cooperation, they also launched their second joined satellite. They also signed an accord to install a production plant of EMBRAER in China. Similarly, China conveyed its support for a more important role of Brazil in the UN Security Council. There is also a bilateral proposal to cooperate in nuclear energy. Brazil and China reinforce to expand their cooperation in agriculture. On the other hand, despite the numerous conflicts between China and U.S. in 2003, such as the North Korea issue, the disagreement on Iraq, and financial and commercial conflicts, this bilateral relation correlated positively with the Brazil-China relation because the U.S. intensively searched for cooperative opportunities with China. It is the U.S. that sought a dialog with China on North Korea and Iraq. Moreover, it was also the U.S. that insisted on giving a new impulse to its commercial with China.

In 2004, Brazil and China, as already mentioned, engaged their relationship around mutual global interests. Meanwhile, for the China-U.S relationship, it was a period of mainly conflictive events. Among the conflicts, North Korea positioned into the China-U.S. agenda. North Korea avoided an agreement with the U.S. on nuclear weapons.

In 2007 we again witness a negative correlation, during this period the relations between Brazil and China are more distant. Brazil questions the slow development of projects with China and China criticizes the lack of patience of their Brazilian partners. The trade balance is negative for Brazil in its commercial exchange with China. In the China-U.S. relationship, in 2007, as expected both countries maintained several conflicts. The conflicts were diverse and complex, ranging from political to commercial and financial areas. However, China shows more disposition to negotiate with the U.S. in topics as diverse as the regulation of the Yuan, North Korea acceptance of an IAEA inspection and Chinese decommissioning of software worth 500 million.

The positive correlation in 2008 of China's bilateral relations with Brazil and the U.S. seems to be a result of the decreasing Chinese interest in Brazil and its increased concerns to cooperate with the U.S. in a year of financial crisis in the U.S. China-Brazil extended their bilateral distance, specially due the lack of materialization of agreed upon Chinese projects and investment in Brazil. In 2008 China and the U.S. were mainly cooperating. They agreed in commercial aspects, such as when China increased the value of the Yuan and both the countries initialized negotiations in investment. No less important is that China and the U.S. started a dialogue about outer-space security and their common responsibility. However, there still were some bilateral commercial conflict, and in diplomatic issues, Taiwan tensed their relationship due to the U.S. possibility to sell weapons to Taiwan.

The negative correlation from 2009 to 2010 between the two bilateral relationships is the result of more cooperation of China with Brazil, and more conflicts between China and the U.S. Lula da Silva visited his counterpart Hu Jintao in China, which gave a re-impulse to their bilateral strategic partnership. During Lula's visit, their talks focused on commercial, financial, mining, satellite and defense cooperation. For its part, China and the U.S. experienced both cooperative and conflictive events. However, the conflicts are represented by a handful of issues, such as North Korea, Dalai Lama, and Taiwan. There was a dispute involving Google that ended with Google deciding to shut down its operations and leave China. Then some other diplomatic events deepened their conflicts, such as the Obama proposal to the U.S. Congress to sell weapons to Taiwan, an un-precedent concrete possibility that produced a strong reaction from China. Concerns were also expressed by the Chinese about a possible meeting of President of the U.S. with the Dali Lama. China and the U.S. reinstalled their dialogue on Defense, and the U.S. suspended its bilateral military exercises with South Korea. Hu Jintao visited the U.S., but the visit did not turn out to be a success, and Sino-American relations took a turn for the worse when the U.S. accused China of piracy in information technology. China responded by criticizing the military exercises of the U.S. in the Chinese Sea and the U.S. followed up on its complains about the Yuan devaluation.



Graph VII.3: Correlation Between Brazil-China and China-U.S. Events 2000-2015

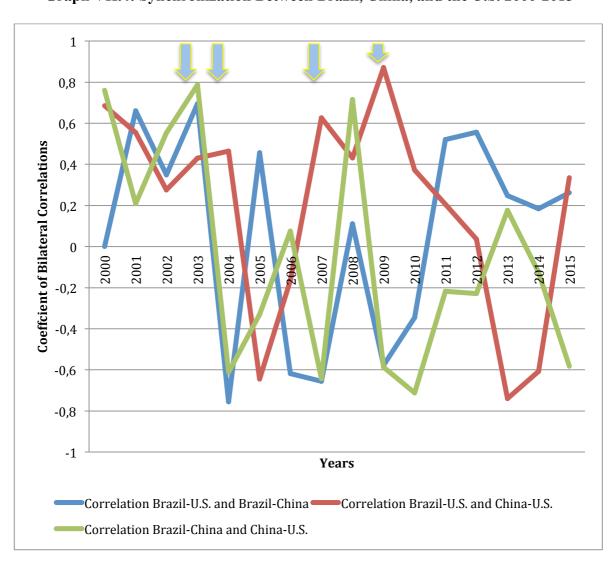
Source: Author's own codification and calculation, based on data from the Media.

5. Synchronization of the Triangular Relation Between Brazil, China, and the U.S.

Having established that there are correlations between the cooperation and conflicts of the bilateral relationships under analysis, this section addresses a test of synchronization between Brazil, China, and the U.S. The synchronization takes place when the bilateral correlations between the three vertices of this triangular relation are simultaneously correlated, suggesting mutual influences among them. We found that Brazil, China, and the U.S. have been involved in a synchronization process from 2003 to 2009, with high simultaneous correlations picks in 2003, 2004, 2007 and 2009 (see Graph VII.4 below).

At the moments of simultaneous correlations in this triangular relation, in some periods China and the U.S. have played the role of "third mechanism" or third state. As mentioned above, the third state leads the communication between the other two states, producing effects on their choices for cooperating or generating conflicts with each other. This leading of communication means that the third state reinforces the choices of the other two states to either cooperate or enter into conflicts with one another.

At this point, it is important to remember that synchronization does not mean that one of the countries is the cause of the cooperation or conflicts between the other two states, but that the interactions with them reinforce their tendencies to cooperate or counteract each other and, thus, influences their bilateral relationship. As in physics, so in international relations, it is not realistic to confirm hundred percent causality between variables. Moreover, there is also not a single cause that explains the behaviors between states. One can find tendencies and influences, but such findings do not discard other factors.

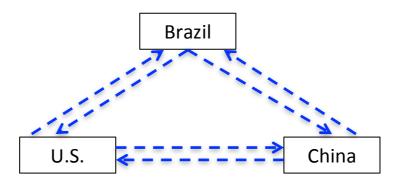


Graph VII.4: Synchronization Between Brazil, China, and the U.S. 2000-2015

Source: Author's own codification and calculation, based on data from the Media.

The data shows that in 2003 there are simultaneous correlation of the bilateral events between: (1) the mainly cooperative approach of Brazil to both China and the U.S.; (2) the congenial reach of the U.S. to Brazil and China; (3) and the cooperative posture of China to Brazil and the U.S. As observed in graph VII.5, the blue arrows represent the cooperative interactions in all directions between the three states. We refer to mainly cooperative approaches because there are high levels of cooperation but also high presence of conflicts; in this case, the results show that the correlation is due to their cooperation.

Graph VII.5: The Brazil-China-U.S. Synchronization Process in 2003



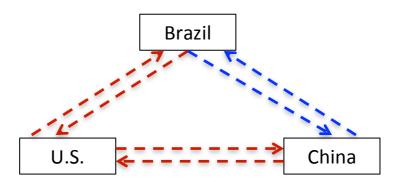
Source: Author's own design.

It is only in the year 2003 that the three countries' bilateral relationships are correlated due to their cooperative approach to each other. Despite the multiple, and one can also say chronic conflicts among them, e.g., North Korea, Taiwan, Dalai Lama, and the multiple commercial disagreements, their motivation to dialogue is still present. It is a period where the war against terrorism positioned as a global interest to fight. It is also interesting to note that 2003 is also the year when the U.S. invaded Iraq without a consensus decision at the UN Security Council. However, looking at the complete relationships, this U.S. action did not have an immediate effect on the cooperative correlations on the bilateral events with Brazil and China.

In 2003, we observe what is called the perfect cooperative synchronization. This perfect cooperative synchronization is in some way, the calm before the storm. In 2004 it turned to another kind of synchronization, the double conflictive synchronization. In this period, Brazil continues its cooperation with China, but the Brazilian relations with the U.S.

entered into a conflictive period. On the other vertex, the U.S. approaches to Brazil and China are also more conflictive. Thus, not surprisingly, China interacts cooperatively with Brazil, but more confrontative against the U.S. The graph VII.6 represents this double conflictive synchronization, where the red arrows symbolize the conflicts and the blue arrows the cooperative events.

Graph VII.6: The Brazil-China-U.S. Synchronization Process in 2004



Source: Author's own design.

In the double conflictive synchronization, there are two countries actively cooperating with each other and opposing the interests of the third state. This synchronization seems to be produced by the choices taken by the two states that cooperate with each other, but also because the third state actively refuses to cooperate with the other two. Thus, there is not only one way, but two-way oppositions. The third state in this synchronization is not a "victim" of the other two; it is also an active actor producing this constellation in the triangular relation.

In our case, the U.S. takes the place of the third state that facilitates the communication between Brazil and China for cooperation. This is the result of previous U.S. decisions, e.g., the decision to invade Iraq that is the initial point of an offensive U.S. foreign policy. The U.S. ignores the Brazilian aspiration to be a global player. Brazil was acting to reach a status of global player, especially as mediator, but the U.S. repeatedly ignored this Brazilian aspiration and maintained cooperation with Brazil on regional issues.

For its part, Brazil used regional issues as its responses to the U.S. Thus Brazil evaded advances on the negotiation on the FTAA. The Brazilian aspiration made them look for other partners that take them seriously as a potential partner in global issues and China they found one. China and Brazil reinforced their relationship around mutual global interests and joined together the call for self-representation of developing countries -the so-called South-South cooperation. The essence of the South-South cooperation has been the establishment of relations based on equal partnerships, where the countries share common interests due to their conditions as developing countries with similar necessities and aspirations (Cesarín and Moneta 2005; Altemani de Oliveira E. 2006; Soares Leite 2011; Fernández Jilberto and Hogenboom 2012).

Similarly, as with Brazil, the U.S. also recognized China mainly as a regional actor but criticized its insufficient participation of China on the North Korea issue. The U.S. also used regional threats to pressurize China, by expressing its support to Taiwan or the Dalai Lama. For its part, China, as well as Brazil, did respond regionally, in the most conflictive way by supporting the tensions between North Korea and the U.S., but also sought to increase its global leadership stature, thus collaborating with Brazil on South-South cooperation. This, moment of the synchronization between Brazil, China, and the U.S. took place when the expectations of global leadership aspirations coincided between two of the states and the third one did not realize it.

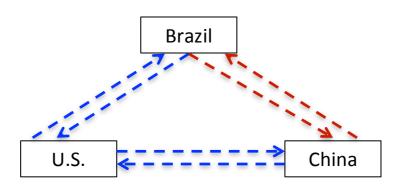
The synchronization process in 2004 is followed by a lack of peaks of simultaneous correlated events in 2005 and 2006. The absence of simultaneous correlated events is important to analyze as a part of the dynamic of this triangular relation. In 2005 and 2006, the constellation entered into a period of changes, where Brazil and the U.S. started a more cooperative approach, and the relations between Brazil and China suffered some setbacks. There is an opposition in the intensity of their relationships, and some kind of disenchantment between the Chinese and Brazilian expectations is observed.

The synchronization in 2007 is the result of Brazil's growing conflicts with China and a more cooperative Brazilian approach to the U.S. In the second vertex, the U.S. returned to a more cooperative approach to both Brazil and China. In the case of China, we witness a predisposition to negotiate with the U.S., but a conflictive and distant relation with Brazil. In an important way, this period of the synchronization is produced by the lack of satisfaction of Brazilian expectations from its relationship with China and the strengthened cooperation between Brazil and the U.S.

In 2007 we observe a double cooperative synchronization. Still, the U.S. maintains its position as the third state (see Graph VII.7 below). Brazil maintains conflicts with China, but a cooperative relationship with the U.S. For its part, the U.S. maintains cooperative relations with Brazil and China. Meanwhile, the Chinese approach the U.S. cooperatively but the Brazilians are not treated in the same manner. In this period of synchronization, Brazil and China entered into bilateral commercial conflicts; there is a lack of the materialization of promised projects and the expectations from South-South cooperation are deteriorate.

For its part, in 2007 the U.S. offers Brazil more cooperation at the Doha Round, where they agree to cooperate on climate change and in clean energies. Thus, there is a notorious change of the role of China and the U.S. with Brazil. Brazil swings from a partnership with China on global issues to a partnership with the U.S. Simultaneously, China shows more disposition to negotiate with the U.S. in diverse topics, such as the regulation of the Yuan, North Korean acceptance of an inspection by the IAEA, and China reacted to the recurrent U.S. claims against piracy and intellectual property rights by confiscating pirated software worth 500 million USD in China.

Graph VII.6: The Brazil-China-U.S. Synchronization Process in 2007



Source: Author's own design.

In 2008 we observe again an absence of numerous of simultaneous correlated events. The U.S. financial crisis can be the reasonable reason for the fall back of the U.S. in the international arena, focusing on solving their domestic troubles. However, in this period the three states change positions that lead to the high pick of simultaneous correlated events in 2009.

The synchronization process in 2009 between Brazil, China, and the U.S. is the result of the improved cooperation of Brazil with China, but a resurgence of conflicts with the U.S., the U.S. has more conflicts with both, Brazil and China. And, China cooperates with Brazil but takes an increasing conflictive position with the U.S. (see Graph VII.7 below). It is again a double conflictive synchronization.

Brazil shows again a swing behave between China and the U.S. The financial crisis of the U.S. re-organizes the priorities of the U.S. and Brazil loses relevance. Brazil and the U.S. experience several conflicts on commercial, but also on important political and regional issues. The major conflict comes with the U.S. proposition to install military bases in Colombia. Moreover, on global issues, Brazil criticizes the U.S. commitments for CO2 emission reductions during the UN Conference on Climate Change in Copenhagen.

Brazil and China re-energize their bilateral strategic partnership, focusing on commercial, financial, mining, satellite, and defense cooperation. Brazil and China strengthened their strategic partnership as a way to improve their advantages in the face of the global financial crisis. Moreover, Brazil and China agreed to partially trade in local money, meaning Yuan and Real, by replacing the use of the U.S. Dollar.

China confronted the accusations of cyber-espionage of the Pentagon, the U.S. received the visit of the Dalai Lama, Bush criticized the violation of human rights in China, there were some naval incidents in the China sea, Obama visited Hu Jintao in China, but they did not reach a commercial agreement for solving the financial crises, and the U.S. offered to sell weapons to Taiwan. Moreover, during the UN Climate Conference in Copenhagen, China, as well as Brazil, criticized the U.S. proposal of CO2 emission reductions.

Brazil U.S. China

Graph VII.7: The Brazil-China-U.S. Synchronization Process in 2009

Source: Author's own design.

The synchronization process between Brazil, China, and the U.S. from 2003 to 2009 suggests some tendencies in this triangular relation. Brazil swung between China and the U.S., indicating that Brazil in one period cooperated with China, then with the U.S., and then back to China. Brazil is, in any case, the third state, meaning that Brazil does not significantly influence the bilateral relation between China and the U.S.

Both China and the U.S. play the role of the third state in their relationship with Brazil. That role depends on the more or less cooperative or conflictive relations that both countries simultaneously have with Brazil, producing the effect that Brazil swings between China and the U.S. as partners. Thus, when the U.S. maintains conflicts with Brazil, Brazil turns to China as its alternative partner. In this way, the U.S. directly influences that Brazil and China cooperate with each other. On the other hand, when the relationship with China has not been effective, Brazil has returned to cooperate with the U.S.

From 2010 to 2015 these three countries did not synchronize. It seems that Brazil did not actively swing its cooperative or conflictive approach between China and the U.S. The reasons for this can be many. It can be that during this period Brazil turned to another alternative partner or that Brazilian domestic issues obligated this South American country to postpone its aspirations of global leadership. Another aspect to consider is that China gradually lost interest in key projects of the bilateral strategic partnership with Brazil, such as the CBERS program.

6. Concluding Remarks

This chapter has described the methods used in this investigation and has empirically tested synchronization between Brazil, China, and the U.S. There is some evidence that there have been periods of synchronization in this triangular relationship.

The findings indicate that the periods of major interactions between Brazil and China, Brazil and U.S., and China and U.S., have not always produced periods of correlations between these bilateral relationships. The same applies to the periods of synchronization. It suggests that the synchronization is not a result of numerous or several interactions between states, but is about coincidence in the content of the interactions, producing more or less cooperation and conflicts among them.

The synchronization is possible because states are complex systems that do not respond in a linear way, meaning that they interact in multiple areas simultaneously. For instance, when countries maintain commercial conflicts, the responses or negotiations are not exclusively in commercial terms, but can also include other areas such as political or security issues. Moreover, their interactions are not limited to bilateral issues, also encompassing regional and global interests. It has been a recurrent behavior, especially between China and the U.S.

There are more periods of correlation between Brazil-China and Brazil-U.S. bilateral relations, as one of the vertices of the triangular relation indicates. In the other two vertices, correlations exist but are not as numerous as in the aforementioned. We found that Brazil in the synchronization process has been swinging between the partnerships offered by China and the U.S.

Another finding is that Brazil has not really affected the bilateral relationship between China and the U.S. The South American country has not played the role of the third state in any period. Only the U.S. have played the role of the third state in different periods of the synchronization between Brazil, China, and the U.S. Meaning that during these periods, the U.S. have reinforced the cooperation or conflicts with Brazil with regard to one China. A key factor of the synchronization has been the expectations that states have among them. Brazil effectively sought a partnership with one or the other country in order to satisfy its own necessities and aspirations.

Finally, as chapter III already mentions synchronization as a theoretical framework, synchronization between states is not something new as a phenomenon. The significance of this chapter is that it empirically tests the synchronization between Brazil, China, and the U.S., including their issues in concrete periods of time. In the chapter that follows, we continue to test synchronization in our next case in order to compare results. Let's us now turn to the Venezuela-China-U.S. triangular relation.

Chapter VIII

The Triangular Relation between Venezuela, China, and the United States

In the chapter that follows, we empirically test synchronization of the triangular relation between Venezuela, China, and the U.S. similar to what we did in the case of Brazil-China-U.S. The main goal of this chapter is to quantitatively verify whether China's engagement with Venezuela has affected the bilateral relationship between this South American country and the U.S. from 2000 to 2015. As explained earlier, because it is a study on the triangular relation, the analysis also includes the other two vertices of possible influences: (1) the viable effects of Venezuela's engagement with the U.S. in China-U.S. relations, and (2) the viable effects of China's engagement with the U.S. in Venezuela-China relations.

Since Hugo Chávez's assuming of the presidency of Venezuela in 1999, the diversification of political partners and markets for Venezuelan oil has become one of the main objectives of Venezuelan foreign policy. Venezuela intensified its political and economic exchange with non-regional partners, such as China, establishing bilateral strategic partnerships with them. Among these new partners, China achieved the most extensive engagement with Venezuela, becoming the second biggest market for Venezuelan oil, the main foreign investor, and the main creditor of the country. This diversification of political and economic partners was in line with the aspirations of the Venezuelan government for achieving greater autonomy and reducing its dependency on the US. Despite the official Chinese position of not intervening in any political and/or economic conflict between Venezuela and the U.S., the fact is that China and Venezuela deepened their bilateral relations. We will test whether these three countries have been synchronized.

This chapter is divided into two sections. The first section presents the synthesis and evaluation of the main findings on the correlations between the bilateral relationships of Venezuela-U.S., Venezuela-China, and China-U.S. The first section examines the correlations of every state with the other two that form part of the three vertices of this triangular relation under study. The second section of this chapter tests the presence of synchronization by adopting event synchronization analysis.

1. Correlations Between Venezuela-U.S. and Venezuela-China Bilateral Events

In this section, we describe the periods of positive and negative correlations of Venezuela's bilateral events with China and the U.S., respectively. According to the data, these bilateral relations were positively correlated only in 2008 and negatively correlated in 2001, from 2005 to 2007 and again in 2015.

As mentioned above, Venezuela's bilateral relations with China and the U.S. were negatively correlated in 2001. This negative correlation is the result of Venezuela's cooperation with China and the initial disappointments and conflicts between Venezuela and the U.S. from the Hugo Chávez era. Venezuela and China established their bilateral strategic partnership in 2001. At this time, commercial exchange and another kind of interactions between Venezuela and China were almost non-existent. But Venezuela was actively looking for alternative partners for exporting oil, which coincided with increasing Chinese interest in South America, reflected by the visit of Jiang Zemin to the region, including Venezuela.

In 2001, Venezuela and the U.S. fractured their bilateral relations. Venezuela criticized U.S. foreign policy in the region, but also its actions in Afghanistan. The South American country also distanced itself from important programs with the U.S., such as the war on drugs. And, finally, some rumors of a possible military coup supported by the U.S. in Venezuela increased the mistrust between the two governments.

From 2005 to 2007 the correlation between the bilateral events of Venezuela with China and the U.S. were still negative. Venezuela deepened its conflicts with the U.S., while intensively looking to cooperate with China. China and Venezuela strengthened their political-diplomatic cooperation, economic and commercial exchanges, and the mutual investment climate, among others. They favored official visits in China and Venezuela, such as the visit of the vice-president of China Zeng Qinghong to Venezuela the visit of energy minister of Venezuela Rafael Ramirez as well as the visit of Hugo Chávez to China to China.

This was taking place while the conflict with the U.S. was reaching higher peaks. Venezuela even threatened to cut its oil supply to the U.S. In this period, Venezuela pronounced its support for the sovereignty of China over Taiwan. They signed several agreements on energy, agriculture and technology. The cooperation on technology included the establishment of Chinese companies in Venezuela for producing computers and home appliances. They established cooperation on satellite technology, and China built a satellite for Venezuela. The Chinese cell phone producer ZTE set-up a plant in Venezuela. The agreements on agriculture cooperation permitted China to indicate what kind of agriculture products were to be produced in Venezuela, for instance in Lara State in Venezuela 10 thousands hectares of sisal were planted due to the Chinese demand. In the area of energy, Venezuela gave the patents for orimulsion to China, including the clients it had, permitting the building of infrastructure for the processing of orimulsion in Venezuela. Venezuela also agreed to purchase Chinese oil tanker ships for transporting oil from Venezuela to China. For its part, China provided loans to Venezuela that were dedicated to providing finance for social housing in Venezuela. Interestingly, the contracts were awarded to Chinese companies for the execution of these projects. Moreover, China invested in infrastructure in Venezuela, such as the construction of railways.

On the other side, Venezuelan relations with the U.S. deteriorated during this period. Among the political and diplomatic issues between the two countries, Venezuela strongly denounced U.S. intervention in Venezuela's domestic affairs. There are several declarations by Venezuelan officials about the U.S. threats to invade Venezuela, making the U.S. as the main threat to Venezuelan sovereignty. Moreover, Hugo Chávez claimed that the U.S. wanted to kill him. In practice, Venezuela initialized military training and undertook exercises to confront a U.S. invasion. During this period, the government of Venezuela finalized the cooperation with the U.S. established before the presidential mandate of Hugo Chávez. The U.S. Drug Enforcement Administration (DEA) operating in Venezuela was accused of spying and Venezuela ended its cooperation with the DEA, expelling them from the country. Venezuela also ended the military cooperation in education between both countries. There were accusations of espionage against U.S. diplomats and Venezuela expelled them. In regional and global issues, Hugo Chavez called against the FTAA – a project of the U.S. for the Americas. Venezuela decried that the U.S. had blocked its candidature as a non-permanent member of the UN Security Council. Venezuela relinquished its memberships of the

International Monetary Fund and the World Bank, accusing these institutions to be instruments of U.S. hegemony.

As a response to the Venezuelan offensive, the U.S. expressed its concerns on the negative influence of Venezuela in the region, such as Venezuelan influencing of electoral processes in Latin America. The U.S. saw Venezuela as a destabilizing factor in the region, not only because the of its alleged meddling in Latin American elections, but also because Venezuela bought 100,000 Ak-47 rifles, and there were suspicions that Venezuela was supporting subversive groups in Colombia. The U.S. also accused Venezuela of being an enclave of narcotraffic. Thus, the U.S. forbidden to sell weapons to Venezuela. However, in commercial terms, both countries still developed business in energy, e.g., the U.S. company, Chevron Texaco announced its plans for investment in the Orinoco faja in Venezuela. The U.S.-Venezuela Trade increased, but this increase was because of the rising price of oil and not in proportion to the real demand for oil.

Surprisingly, there is a positive correlation of the bilateral interactions of Venezuela with China and the U.S in 2008. This can be explained, on the one hand, by some disposition of the Venezuelan government to have a dialogue with the U.S. government. On the other hand, the relationship between Venezuela with China was still cooperative, but the intensity of the interactions had decreased. Despite this, there were several disputes and conflicts between Venezuela and the U.S. in 2008, such as the disputes between Exxon Mobil and PDVSA, the Venezuelan government swung to help reach a dialogue with the U.S. and diplomatic afferents. For instance, Venezuela incinerated more than 3 tons of drugs. Hugo Chávez declared that he would like to have good relations with the next presidential administration in the U.S., but not with Bush. But at the same time, Venezuela expelled the U.S. ambassador in Venezuela, as a measure to support Bolivia. They also expelled the U.S. NGO Human Rights Watch from Venezuela. Then, Hugo Chávez announced his willingness to cooperate again with the DEA.

In 2008, Venezuela and China still had a highly cooperative relationship; they signed new agreements in energy, such as the building of a refinery in Venezuela, where China could process the Venezuelan oil. There was exchange of official visits, such as the meetings between the congressmen of China and Venezuela and the visits of Hugo Chávez to China. During this year the exchange was not so intense as in the previous years, but they reached important milestones in their cooperation, such as the purchase of Chinese military aircraft by

Venezuela, the duplication of the Chinese loans to Venezuela and the launching of the satellite Simón Bolívar built by a Chinese company for Venezuela.

In 2015, Venezuela returned to a negative correlation in its bilateral events with China and the U.S. During this period, the president of Venezuela Nicolás Maduro visited China, looking for more cooperation and financial support. China offered more loans to Venezuela, but the loans were accompanied by a bilateral plan of development for the next ten years. They also strengthened their military cooperation, including bilateral meetings between officials of the Chinese People Liberation Army and the Venezuelan Minister of Defense. The China National Aero-Technology Import & Export (CATIC) confirmed that it would train the personnel of the Air Force of Venezuela.

In 2015 the relations between Venezuela and the U.S. were still extremely tense. The U.S. criticized the democracy in Venezuela and announced a national emergency in Venezuela, including sanctions against the South American country. Venezuela responded to the CIDH that the declaration of the U.S. was a declaration of war against Venezuela. Moreover, the minister of foreign affairs of Venezuela denounced at the OAS that the U.S. wanted to intervene militarily in Venezuela. There were some official meetings, at the foreign minister-level and between Presidents Maduro and Obama, but the situation escalates. The U.S. initialized an investigation for narcotics against the President of the Venezuelan Congress, Diosdado Cabello. Meanwhile, curiously Nicolas Maduro affirmed that the negotiations with the U.S. were going well. The U.S. also started an investigation against PDVSA for corruption. Then, family members of Nicolas Maduro are detained and accused of narcotrafficking. Venezuela harshly criticized the U.S. for hatching conspiracies against the country and accused its diplomats of being spies. To complete this scenario, the trade between the two countries decreased by almost 40 % in one year.

8,0 0,6 0,4 0,2 0 -0,2 -0,4 -0,6-0,8

Graph VIII.1: Correlations Between Venezuela-U.S. and Venezuela-China Bilateral **Events 2000-2015**

Source: Author's own codification and calculation, based on data from the Media.

In summary, it has been shown from this review that the bilateral events of Venezuela with China and the U.S. are correlated in some periods. The main correlations have been negative, as a result of the permanent Venezuelan efforts to strengthen its relations with China and almost permanent conflictive interactions of Venezuela with the U.S.

2. Correlations Between Venezuela-U.S. and China-U.S. Bilateral Events

The bilateral relations of the U.S. with Venezuela and China correlate positively in 2003, from 2006 to 2007 and in 2010. However, these relationships experienced negative correlation in 2001 and 2011.

The negative correlation in 2001 is due to the U.S. search for negotiations with China and its confrontative position with Venezuela. That year China and the U.S. experienced a mixture of diplomatic, commercial and defense issues, such as the U.S. criticism of the Chinese violations of human rights, discussions about the membership of China to the WTO, Chinese claims against the U.S. anti-missile system installation meant to protect Taiwan, and the increasing defense budget of China, the diplomatic crisis due to the retained U.S. aircraft, and the U.S.' welcoming of Chen Shui-bian, President of Taiwan on a visit to the U.S, as well as Bush's public support of the Dalai Lama. It is the U.S. that finally extended a hand of friendship to China. President Bush offered a commercial deal to China. Bush and Jiang Zemin initialized conversations and China returned the U.S. aircraft. The U.S. proposed a new dialog on human rights that China accepted. Finally, the U.S. formalized its commercial relations with China.

In 2001, the U.S. experienced tense relations with Venezuela. The U.S. approach to Venezuela was clearly against the developments in Venezuela taking place under the government of Hugo Chávez that some saw as a kind of "cubanization" of Venezuela. The U.S. excluded Venezuela from the benefits of the Andean Trade Promotion and Drug Eradication Act (APTA) because the U.S. alleged that Venezuela has not supported the war on drugs and did not reach goals in the fight against drug trafficking.

In 2003, the U.S. events were positively correlated with both countries, China and Venezuela. In 2003, there were several conflicts between China and the U.S., such as the difficulties for the U.S. to reach an agreement with North Korea on nuclear weapons. The U.S. accused China of not cooperating with them on the North Korea issue, neither with the war in Iraq. In commercial terms, the U.S. called to regularize the exchange regime of the Yuan and imposed some tariffs against Chinese textiles. For its part, the U.S. maintained a conflictive position against Venezuela. In 2003, Venezuela was experiencing a general strike of PDVSA workers. The U.S. threated Venezuela to look for another provider to buy oil if the situation with the strike was not normalized. Additionally, the U.S. suspended military cooperation with Venezuela and accused PDVSA of corruption.

From 2006 to 2007 a positive correlation of the bilateral events of the U.S. with China and Venezuela is observed. China and the U.S. experienced some conflicts, especially in commerce, cyber-attacks and political-diplomatic affairs. The U.S. denounced China at the WTO for piracy. The U.S. also accused China of sending computer viruses against the U.S. and the Chinese intention to sabotage the computational system of the U.S. Pentagon. There were also some diplomatic disputes on the U.S. support to Dalai Lama.

In this period from 2006 to 2007, Venezuela and the U.S. escalated their conflicts. The U.S. reciprocated the expulsion of U.S. diplomats from Caracas, expelling Venezuelan diplomats from Washington. The U.S. was concerned about several issues in Venezuela, e.g.,

the Venezuelan influence in electoral processes in Latin America, the increasing antisemitism in Venezuela, Venezuela being an enclave of drug trafficking and concerns about the nationalization process of companies in Venezuela. As a concrete action, the U.S. decided to forbid the selling of weapons to Venezuela. In commercial terms, the U.S. indicated that it would no longer depend on Venezuelan oil.

In 2010 we observe a positive correlation, China and the U.S. experiencing both cooperative and conflictive interactions, but mainly strong conflicts. There is a dispute about Google that ended with Google going out from China. Then some other diplomatic events deepen their conflicts, such as the Obama proposal to the U.S. Congress to sell weapons to Taiwan, an un-precedented concrete possibility that produced a strong rejection from China. Moreover, President Barack Obama met with the Dalai Lama, which opened another diplomatic dispute with China.

Venezuela and the U.S. had still a conflictive relationship in 2010. The U.S. denounced several problems in Venezuela, such as the restrictions on the Venezuelan media, violations of the Human Rights in this South American country, the persisting lack of Venezuelan cooperation in the war on drugs. During this period, both countries also were left without ambassadors, when Venezuela vetoed the U.S. designation of Larry Palmer as the American envoy and the U.S. revoked the visa to the Venezuelan ambassador in Washington.

The negative correlation in 2011 of the U.S. bilateral events with China and Venezuela is due to the interest of the U.S. On the one hand, to reach more cooperation with China; on the other hand, the continuing disagreements with Venezuela. Despite the multiple conflicts between China and the U.S., both the countries reestablished the bilateral dialogue on human rights and the dialogue on Defense. Moreover, the U.S. suspended its bilateral military exercises with South Korea as a symbol of its readiness to cooperate with China.

Contrary to this, the relationship of the U.S. with Venezuela in 2011 could not have been worse, they initialized the year without having ambassadors in each other's capitals. The U.S. imposed more sanctions against PDVSA for its trade with Iran. The U.S. re-affirmed its decision not to sell weapons to Venezuela. During this year, both the countries maintained almost no diplomatic relations.

Graph VIII.2: Correlations Between Venezuela-U.S. and China-U.S. Bilateral Events 2000-2015

Source: Author's own codification and calculation, based on data from the Media.

During this period, we observed mainly positive correlations of the bilateral events of the U.S. with China and Venezuela. It is a result of the parallel conflicts that the U.S. maintained with both countries.

3. Correlations Between China-Venezuela and China-U.S. Bilateral Events

The bilateral relations of China with Venezuela and the U.S. have been positively correlated in 2001, 2004, 2009 and from 2012 to 2013. On the other hand, they experienced negative correlations in 2006 and 2011.

The positive correlation in 2001 between China bilateral events with Venezuela and China follows the most cooperative approach of China to Venezuela and its interests to deescalate conflicts with the U.S. Venezuela and China established their bilateral strategic partnership in 2001 during the visit of Jiang Zemin to Venezuela. At this time, commercial exchanges and another kind of interactions between Venezuela and China were almost non-existent. But China was searching for new partners in Latin America, both in political and commercial domains. Meanwhile, China and the U.S. negotiated on several issues during 2001, when China finally accepted a commercial deal with the U.S., a new dialog on Human Rights, and on defense cooperation.

There is a positive correlation in 2004, due to the Chinese cooperation with Venezuela and the interest to de-escalate conflicts with the U.S. China and Venezuela signed an agreement that gave Chinese companies the permission to invest in infrastructure in Venezuela. Chinese officials appreciated the re-election of the president Hugo Chávez and both countries announced their support to multilateralism in the international system. Hugo Chávez visited China, signing several agreements focused mainly on energy trade and investment. In 2004, China called the U.S. to maintain stability in their relationship because needed each other.

There are only two periods of negative correlations; the first is in 2006. This is the result of the continuing cooperative Chinese approach to Venezuela and the conflictive situations with the U.S. In 2006, Venezuela agreed to buy eighteen Chinese oil tankers ships for transporting Venezuelan oil to China. China received permissions to build social houses in Venezuela, to participate in the perforation of oil at the Orinoco belt and all of this was made possible because of Chinese loans to Venezuela.

In the case of China and the U.S., both countries experienced as usual, several conflicts in 2006. During this period, China accused the U.S. of politicizing the commerce between the two countries.

In 2009, we observe a positive correlation of the bilateral events of China with Venezuela and the U.S. On one side, China maintained its intensive interactions with Venezuela, at the same time it looked to de-escalate the multiple conflicts with the U.S. In 2009, the Vice-President of China visited Venezuela, they signed more bilateral agreements and expanded their joint findings. During this year both countries intensified cooperation and investment to transport more Venezuelan oil to China. The projects included the building of a Venezuelan refinery in China, the creation of a bi-national shipping oil company, and the building of railways in Venezuela. It is interesting to note that in the same year, the Venezuelan government shared with China the idea to build a bi-oceanic channel in Nicaragua.

China and the U.S. however, witnessed a slow-down of their trade as a result of the financial crisis of 2008. China maintained a cooperative approach to the U.S., they proposed to improve military and commercial cooperation with Obama as the new President of the U.S. They exchanged high-level visits, such as when Obama and Hillary Clinton visited China.

The second period of negative correlation is in 2011. China and Venezuela still had a cooperative relationship in diverse areas. In technology, both countries agreed to build a second satellite for Venezuela; the Chinese ZTE was permitted to create the automatization and support of the Ministry of Basic Industries and Mining in Venezuela. The Chinese loans are expanded to finance the building of social houses in Venezuela, to finance projects in the Orinoco belt and in general to finance the economy of Venezuela. Despite the strong support of China to the Venezuelan government, it is the first time that China said that they expected better planning of the projects in Venezuela with the loans that they had been granted. For their part, China and the U.S., despite the multiple conflicts between them in 2011, both restarted the bilateral dialogue on human rights, as well as the dialogue on Defense and the U.S., suspended its bilateral military exercises with South Korea as a symbol of its readiness to cooperate with China

The positive correlation from 2012 to 2013 is due to the still cooperative approach of China to Venezuela and its cooperative approach to the U.S. In this period, the Chinese presence in loans, trade, investment, made China the most important trading partner of Venezuela. Chinese loans and investment were directed to electricity, mining, and oil. After the death of Hugo Chávez, the official visits between the two countries multiplied. But China showed concerns on the Venezuela economy, the Vice-President of China visited Venezuela, asking for more efficiency in the projects. Then some Venezuelan officials visited China, including the Minister of energy, Rafael Ramirez; the President of the National Assembly of Venezuela, Diosdado Cabello; the Vice-president of Venezuela, Jorge Areaza, all of these culminating in the visit of the new President of Venezuela Nicolás Maduro.

The China-U.S. relationship from 2012 to 2013 is characterized as a period where China recurrently called for a stable relationship. The main approach was that despite the several conflicts and issues between them, it was better to negotiate and cooperate. China and the U.S. agreed to strengthen their cooperation to impulse the recuperation of the global economy. They re-opened negotiations on protections of investments. They maintained permanent dialogues between high-level officials, including their presidents, on cybersecurity, military cooperation, among other areas.

1,2 1,0,8 0,6 0,4 0,2 0 -0,2 0,0,4 0

Graph VIII.3: Correlations Between Venezuela-China and China-U.S. Bilateral Events 2000-2015

Source: Author's own codification and calculation, based on data from the Media.

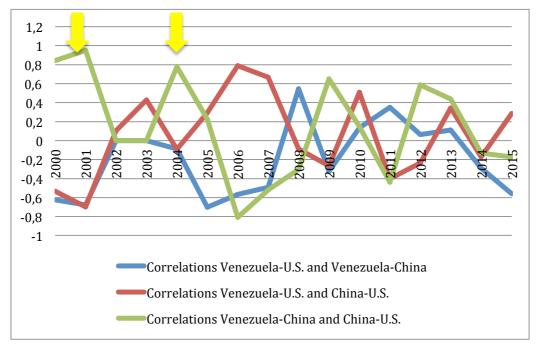
The main positive correlations that China had with both, Venezuela and the U.S. suggest the special attention that China has been taking in its relationship with Venezuela in order to not openly and directly challenge the U.S.

4. Synchronization between Venezuela, China, and the U.S.

The analysis of the data shows that this triangular relationship has synchronized only in two periods: 2001 and 2006 (see Graph VIII.4 above). In 2001, Venezuela's bilateral relations with China and the U.S. were negatively correlated. This negative correlation is a result of Venezuela's cooperation with China and the initial disappointments and conflicts between Venezuela and the U.S. from the Hugo Chávez era. A key point is the Venezuelan search for alternative partners to the U.S. The Venezuelan government considered the U.S. as a threat to its sovereignty, and China represented no threats to Venezuela. On the contrary, Venezuela saw in China the perfect partner that could replace its dependency for trade and political influence from the U.S.

At the same time, the U.S. foreign policymakers looked for opportunities to negotiate with China due to their multiple conflicts. Despite the fact that in 2001 China and the U.S. discussed several diplomatic, commercial, and defense issues, the U.S. looked to deescalate its conflicts with China. It was key the U.S. proposal of a commercial deal with China that defused the situation between both the countries. Diametrically opposite to this was the U.S.' position with Venezuela - confrontative and demanding. The U.S. wanted Venezuela to adhere to U.S. interests. The U.S. took decisions that seemed to be penalties against Venezuela, such as the exclusion of the country from the benefits of the Andean Trade Promotion and Drug Eradication Act (APTA).

Meanwhile, China's bilateral events with Venezuela and the U.S. follow, for the most part, the cooperative approach of China to Venezuela and its mutual interests with the U.S. in deescalating their conflicts. The potential that China saw in its relation to Venezuela in 2001 is key to understanding this relationship. It also showed a lot of pragmatism with the U.S. in accepting a commercial deal following their diplomatic disputes with Taiwan, Dalai Lama and Human Rights.

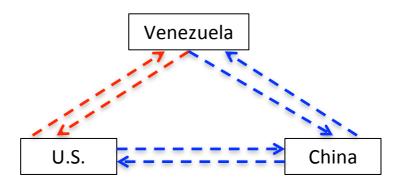


Graph VIII.4: Synchronization Between Venezuela, China, and the U.S. 2000-2015

Source: Author's own codification and calculation, based on data from the bilateral events correlations.

In 2001, Venezuela, China and the U.S. experienced a double cooperative synchronization (see Graph VIII.5 below). In this kind of synchronization Venezuela and the U.S., simultaneously cooperate with China that plays the role of the "third state", but Venezuela and the U.S. maintain a mainly conflictive relationship. This synchronization seems to be produced by (1) Venezuela choosing to cooperate with China as its alternative partner, signaling the U.S. as a threat; (2) the U.S. still maintaining its conflicts with Venezuela and looking to de-escalate the conflicts with China; and (3) China, as the third state, supported the escalation in the conflicts between Venezuela and the U.S.

Graph VIII.5: The Venezuela-China-U.S. Synchronization Process in 2001



Source: Author's own design.

In 2006, Venezuela, China, and the U.S. also synchronized. During this year, the correlations of the bilateral events of Venezuela with China and the U.S. were also negative. In a relatively short period, Venezuela and China strengthened their bilateral relations in political-diplomatic cooperation, economic and commercial exchange, and investment. The impressive complementarities were a result of continuous diplomatic interactions, they maintained a constant exchange of official visits by high and middle-ranking officials in Venezuela and China. The bilateral agreements multiplied by hundreds and opened new cooperative enterprises, such as those in the technology. On the other side, Venezuelan

bilateral relations with the U.S. suffered strong deterioration in the same period. The Venezuelan government identified the U.S. as the most dangerous threat to Venezuela.

In the case of the U.S. approach to Venezuela and China in 2006, there is a positive correlation between the bilateral events of the U.S. with China and Venezuela. China and the U.S. experienced some conflicts during this year, especially on issues related to commerce, cyber-attacks and political-diplomatic affairs. Despite the bilateral dialogue between these two countries, the U.S. observed the increasing threat of Chinese cyber attacks. For its part, the U.S. position toward Venezuela maintained a confrontational posture. Venezuela was viewed as a threat to western-hemisphere values, such as the democracy, freedom of the press, etc. The U.S. continued imposing new penalties against Venezuela, such as the embargo to sell weapons to the country.

China in 2006 has a cooperative approach to Venezuela and conflictive situations with the U.S. during this period, China showed a lot of interest to strengthened its relations with Venezuela, issuing more credits and investing in the country. Meanwhile, China accused the U.S. of politicizing the commerce between the two countries. China also asked the U.S. to use their relationship to solve the problems of the global economy.

In 2006, Venezuela, China and the U.S. experienced a double conflictive synchronization (see Graph VIII.6 below). In the double conflictive synchronization, China and Venezuela actively cooperate with each other and oppose the interests of the third state. This synchronization seems to be produced by the choices taken by the two states that cooperate with each other, but also because the third state actively refuses to cooperate with the other two. Thus, there are not only one-way but rather two-way oppositions. In our case, the U.S. takes the place of the third state that facilitates the communication between Venezuela and China for cooperation.

Venezuela U.S.

Graph VIII.6: The Venezuela-China-U.S. Synchronization Process in 2006

Source: Author's own design.

After these two points of synchronization have been analyzed, however, we have to highlight that there are some delays between the correlations between the three vertices of correlations (see Graph VIII.1 above). These delays also have a pattern that is interesting to observe. The correlations between bilateral relations are not simultaneous between them, and, therefore, synchronization is observable only in 2001 and 2006. However, there is a constant: the correlations between the bilateral relations are subsequently present every year. It seems that these three countries behavior is informed by looking at each other, but it does not mean that they are synchronized. The main difference is that the correlation tracks an individual behavior that one country has in front of other two countries. It can have effects on the other states or not. Meanwhile, synchronization looks at the fact that effects are produced in certain circumstances when three states interact. Thus, the effects can be voluntary or not for one of the states, and the simultaneous interactions between three states can produce effects among them, even when they are not looking for this.

4. Concluding Remarks

This chapter began by describing the main bilateral events correlations between Venezuela and China, Venezuela and U.S., and China and U.S. The findings indicate that the periods of major interactions between them have not always produced periods of correlations, but also different types of correlation. There are more periods of correlation between Venezuela-China

and Venezuela-U.S. bilateral relations, as one of the vertices in the triangular relation. In the other two vertices, correlations exist but they are not as numerous as in the aforementioned.

The period of synchronization, however, has been short, and was clearly prevalent in 2001 and 2006. During the period of synchronization, Venezuela has evidently cooperated with China, irrespective of whether China or the U.S. was the third state. Venezuela has not really affected the bilateral relationship between China and the U.S. The South American country has not played the role of the third state in any period. China and the U.S. have played the role of the third state in different periods of synchronization. This means that, during some periods, China and the U.S. have reinforced the cooperation or conflicts with Venezuela with regard to one of them.

Most interesting in this case is the finding that synchronization as a simultaneous process has not occurred frequently, but there is a constant delay of correlations between the bilateral relations that is subsequently present every year. It is important to note that it seems that these three countries have been interacting by looking at each other. Thus, it was not only Venezuela that applied a clear strategy to strengthen its relations with China against U.S. interests, but also, in some periods, the U.S. considered in its behavior the relationship between China and Venezuela, whereas China observed the relationship between Venezuela and the U.S. It is neither synchronization nor a simultaneous synchronization, but clearly a triangular relationship.

In the chapter that follows, we continue to test synchronization in our next case in order to compare results. Now we will turn to Argentina, China, and the U.S. triangular relation.

Chapter IX

The Triangular Relation between Argentina, China, and the United States

In this chapter, we empirically test the synchronization of the triangular relationship between Argentina, China, and the U.S. Our main goal is to quantitatively verify whether China's engagement with Argentina has influenced the bilateral relation between this South American country and the U.S. from 2000 to 2015. But because this is a study on triangular relations, our analysis also includes the other two vertices of possible influences: (1) the effects of Argentina's engagement with the U.S. on China-U.S. relations, and (2) the effects of China's engagement with the U.S. on Argentina-China relations.

This chapter is divided into two sections. The first section presents the synthesis of the main findings of the correlations between the bilateral relationships of Argentina-U.S., Argentina-China, and China-U.S. The second section tests the presence of synchronization with the event synchronization analysis as its method.

1. Correlations between Argentina-China and Argentina-U.S. Bilateral Events

The analysis of the data shows that there have been positive and negative correlations between the bilateral events of Argentina with China and the U.S., respectively. Positive correlations are present in 2006 and 2013; meanwhile, negative correlations are noticeable in 2003, 2007, and 2011.

The negative correlation of Argentinean relations with China and the U.S. in 2003 is the result of the distant interactions with China and some cooperative measures with the U.S. During 2003, Argentina and China did not maintain many interactions; only at the end of the year did they announce a strengthening of their relationship. On the other side, Argentina and the U.S. gave new impetus to their relationship in multiple sectors: they gave push to a new investment regime, agreed to cooperate on satellite energy, software development and military

cooperation. Argentina reformed its intellectual property laws that favored the U.S., some Argentinean products were to be exported to the U.S. free of tariff and the U.S. strongly supported the negotiation of Argentinean bonds in the IMF. Moreover, Nestor Kirchner also visited George Bush in Washington in 2003.

In 2006 we witness a positive correlation between the bilateral events of Argentina and China, and Argentina and the U.S. Argentina increased its cooperation with China, while still cooperating with the U.S in several sectors. In the case of Argentina-China relations, Argentina opened its doors to Chinese investment and trade. China invested mainly in infrastructure, specifically in railways. The export of soybeans to China increased, but there were some Argentinean concerns about a potential negative trade balance with China. On political affairs, they started a dialogue on defense cooperation with the visit of high-level officials to the Ministry of Defense in Buenos Aires. On the other side, Argentina and the U.S. still maintained cooperation in several sectors, but there were also latent conflicts. Argentina received the visit of Thomas Shannon, U.S. Adjunct Secretary of Hemispheric Affairs. Both countries agreed to cooperate in some issues, such as the adoption of a similar regulatory environment for medium and small enterprises, agreed to combat money laundering and Argentina promised to apply more fiscal control on its exports.

The scenario changed in 2007; the difference is that the Argentina-U.S. relationship became more explicitly conflictive. During this year Argentina had trouble for paying the coupon payments on its debt bonds, also called the "fondos buitres", to the main creditors in the U.S. China supported Argentina and bought debt bonds of Argentina, which led to the further strengthening of their relationship. The cooperation included the first agreement on military cooperation and educational exchange. However, in the commercial sector, the negative trade balance for Argentina with China led Argentina to impose some tariffs against Chinese products. Meanwhile, Argentina and the U.S. entered in a conflictive period. U.S. official declarations against Argentina's corruption and vice-versa are constant. An iconic case is the "suitcase" scandal, a case of corruption that also involved Venezuela. A suitcase with approximately 800,000 USD in cash was caught at the Buenos Aires airport, without someone having declared it. According to U.S. Justice Department, this money was being sent by Venezuela to Argentina for supporting the presidential campaign of Cristina Fernández de Kirchner

In 2011, Argentina's bilateral events with China and the U.S. were negatively correlated. Argentina and China supported their cooperative interactions. They maintained permanent official exchange, mainly at ministerial level. China invested in several sectors in Argentina, such as mining, agriculture, etc. They signed a bilateral plan 2013-2017, in order to focus the areas of cooperation. In the area of technological cooperation, both countries established cooperation for building electrical motors in Argentina, and cooperation between the Argentinean factory of aircraft (FADEA) and the Chinese CATIC, to work together and share knowledge in building helicopters. On the other side, the relations of Argentina with the U.S. deteriorated. In 2011, Argentina withheld an American military aircraft at the airport in Buenos Aires. The Argentinean authorities detained this aircraft, accusing the U.S. of violating Argentinean norms. Afterwards, Argentina returned the U.S. military aircraft, but the political and diplomatic relations between both countries were extremely damaged. It is not a surprise that in 2011 during Obama's visit to South America, Argentina was not one of his destinations, which produced a visible Argentinean diplomatic frustration. During the period, the U.S. accused Argentina of its corruption, lack of a free press, and of having narcotic networks with Venezuela. Another problem was the unpaid Argentinean bonds and the U.S. suspension of some trade benefits with Argentina.

Surprisingly, in 2013 we observe a positive correlation between the bilateral events. This is the result of the intensive cooperation between Argentina and China and the decreasing conflicts between Argentina and the U.S., as well as some cooperation. Argentina and China cooperated in nuclear energy, nanotechnology, aerospace technology. Argentina received Chinese loans and investment in railways. Meanwhile, Argentina and the U.S. deescalated their conflicts but maintained distant interactions. On commercial terms, YPF and Chevron signed an agreement for joint exploration of gas and oil in the "Vaca Muerta" in the region of Neuquén.

0,8 0,6 0,4 0,2 0 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 -0,2 -0,4 -0,6 -0,8 -1

Graph IX.1: Correlations Between Argentina-China and Argentina-U.S. Bilateral Events 2000-2015

Source: Author's own codification and calculation, based on data from the Media.

2. Correlations Between Argentina-U.S. and China-U.S. Bilateral Events

The bilateral events of the U.S. with Argentina and China, respectively, are positively correlated in 2011 and from 2013 to 2014; and negatively correlated in 2001, from 2005 to 2007 and 2010. The negative correlation in 2001 responded to the U.S. cooperative approach to Argentina and the search to de-escalate conflicts with China looking for understanding and cooperation. For instance, the U.S. and Argentina experienced a cooperative relationship; Argentina had a favorable position to negotiate the FTAA with the U.S. and stood for strengthening the relationship between Mercosur and the U.S.

However, in 2001 China and the U.S. experienced a mixture of diplomatic, commercial and defense issues, such as the U.S. criticism of the Chinese violations of human rights, discussions about the membership of China to the WTO, the Chinese claims against the U.S. anti-missile system installation to protect Taiwan and the increasing defense budget of China in Defense. Both the countries faced a diplomatic crisis due to the detained U.S.

aircraft by China and the U.S. welcoming the visit of Chen Shui-bian, President of Taiwan, as well as Bush's public support to the Dalai Lama. It is the U.S. that finally extended a hand of friendship to China. President Bush offered a commercial deal to China. Bush and Jiang Zemin initialized conversations and China returned the U.S. aircraft. The U.S. proposed a new dialog on human rights that China accepted. Finally, the U.S. formalized its commercial relations with China.

The negative correlation from 2005 to 2007 is due to the U.S.' mainly conflictive approach towards Argentina and the search to deescalate its conflicts with China. Despite the signing of accords between Argentina and the U.S. in the energy sector, in technological cooperation, in agriculture, in the fight against terrorism and in combating money laundering, the conflicts between both the countries multiplied. There were many instances of conflicts between these countries, for instance, the verdict of the International Centre for Settlement of Investment Disputes (ICSID) that favored the U.S. company CMS Energy Corp against Argentina, the previous U.S. support to the negotiations in the IMF disappeared and the failure of the FTAA in the Americas in the Mar del Plata Summit; the scandal of the "suitcase"; the retained U.S. military aircraft in Argentina, among others.

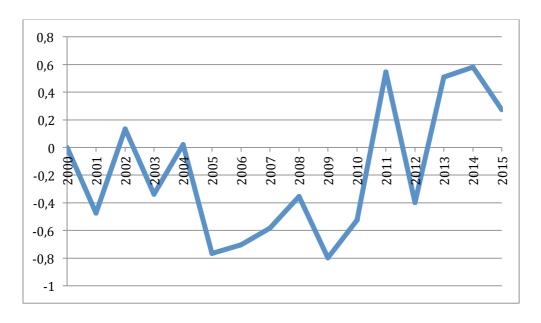
China and the U.S. experienced numerous conflicts among themselves from 2005 to 2007, but there existed a clear U.S. predisposition to deescalate their disputes and cooperate with China. During this period, China and the U.S. reached an agreement to reinvigorate the trade between both countries, with the Chinese compromise to reduce the exports of textiles to the American market.

The negative correlation in 2010 between the bilateral events of the U.S. with Argentina and China follows the U.S. struggles with Argentina and the continuing deescalation approach towards China. In 2010, the U.S. started to question the freedom of the Media in Argentina, as well as the country's respect for Human Rights. The U.S. also denied the extradition of a retired Argentinean military official that the Courts in Argentina claimed to be a criminal of the dictatorship period. The U.S. concerns on these issues deepened the conflicts between the two countries. In the case of U.S. approach to China, despite their multiple conflicts, the U.S. and China reached an understanding on the reestablishment of their bilateral dialogue in human rights and on defense matters. Moreover, the U.S. suspended its bilateral military exercises with South Korea as a symbol of its willingness to cooperate with China.

The U.S. bilateral events with Argentina and China in 2011 correlated negatively. The U.S. took a less flexible position in front of the conflicts with both countries. During this year, the U.S. maintained its accusations against Argentina for its corruption, lack of a free press and of having narcotic networks with Venezuela. Another problem was the unpaid Argentinean bonds and the U.S. suspension of some trade benefits with Argentina. For its part, the U.S. accused China of piracy, cyber-attacks, which lead to commercial disputes between them, despite the deescalation at the end of their conflicts.

There is a positive correlation from 2013 to 2014, due to the U.S. conflicts with both the countries – Argentina and China. Although there was some Argentina-U.S. cooperation during this period, the conflicts between these countries increased. Among their conflicts, the U.S. accused Argentina of corruption, of not doing enough to fight drug trafficking and their dispute on the "fondos buitres". The conflictive side of the China-U.S. relationship was the U.S. claims against Chinese cyber attacks, piracy and the human rights situation in China.

Graph IX.2: Correlations Between Argentina-U.S. and China-U.S. Bilateral Events 2000-2015



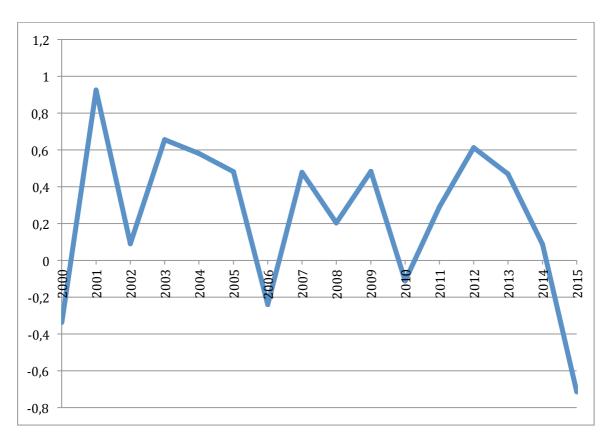
Source: Author's own codification and calculation, based on data from the Media.

3. Correlations Between Argentina-China and China-U.S. Bilateral Events

China's bilateral events with Argentina and the U.S. correlated mainly positively. There are positive correlations in 2001, from 2003 to 2005, 2007, 2009, and from 2012 to 2013.

The positive correlations are the result of the Chinese approach to negotiate and deescalate conflicts, as a better strategy for China. The instrument of choice to de-escalate conflicts and cooperate with both countries were commercial deals. Therefore, it is not surprising that the most correlations of China with its other two bilateral relationships correlate positively. This is due to the standard Chinese position to not to escalate disputes but to search for cooperation that would benefit China.

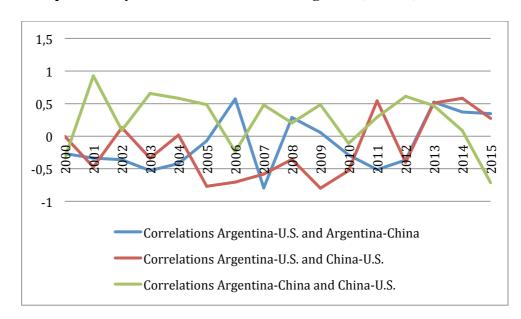
Graph IX.3: Correlations Between Argentina-China and China-U.S. Bilateral Events 2000-2015



Source: Author's own codification and calculation, based on data from the Media.

4. Synchronization Between Argentina, China, and the U.S.

The data shows that in 2007 and 2013 Argentina, China and the U.S. synchronized (see Graph IX.4 below).



Graph IX.4: Synchronization Between Argentina, China, and the U.S.

Source: Author's own codification and calculation, based on data from the bilateral events correlations.

We found that in 2007 there are simultaneous correlations of the bilateral events between (1) the mainly cooperative approach of Argentina to China and the conflictive interactions with the U.S.; (2) the conflictive posture of the U.S. with Argentina, and the search of cooperation with China; (3) and the congenial reach of China to Argentina and the U.S. As observed in graph IX.5, the blue arrows represent the cooperative interactions, and the red arrows represent the conflictive interactions. We refer to mainly cooperative approaches because there is high level of cooperation but also a high presence of conflicts.

Argentina

Graph IX.5: The Argentina-China-U.S. Synchronization Process in 2007

Source: Author's own design.

The synchronization in 2007 between these three countries took place thanks to several factors. Argentina confronted the risk of default on its so-called "fondos buitres", due to the impossibility to pay the coupon yields. This situation tensed extremely its relations with the U.S. because the main creditors were in the U.S. Other factor was the increasing concerns of the U.S. that the Argentinian government was strengthening its relations with Venezuela. It also voiced its concerns about the corruption in Argentina and its lack of cooperation in combating drug trafficking. In this scenario, China entered to play the role of the third state. China bought Argentinean bonds and offered to invest in the country. Argentina welcomed China and the Chinese loans, trade, and investment, but also explored the possibilities for establishing bilateral strategic cooperation with China. In the region, Brazil and Venezuela already had the status of strategic partners of China that Argentina was also looking to be. For its part, China maintained its strategy to negotiate all kind of issues with both the countries – the U.S. and Argentina but did not attempt to disturb or invite U.S. attention to its interactions with Argentina.

The data shows that in 2013 there are simultaneous correlations of the bilateral events between: (1) the mainly cooperative approach of Argentina to China and the effort to not escalate conflicts with the U.S; (2) the conflictive posture of the U.S. with Argentina and China; (3) and the congenial reach of the China to Argentina and the U.S (see Graph IX.6 below).

U.S. China

Graph IX.6: The Argentina-China-U.S. Synchronization Process in 2013

Source: Author's own design.

5. Concluding Remarks

There is some evidence that there have been periods of synchronization in this triangular relationship. The findings also indicate that the periods of major interactions between Argentina and China, Argentina and the U.S., and China and the U.S., have not always produced periods of correlations between these bilateral relationships. The same applies to the periods of synchronization.

China has again been the third mechanism that has mainly supported the conflicts between Argentina and the U.S. This was not a part of the Chinese strategy in the region, but in some periods Argentinean conflicts with the U.S. and the U.S.' position of non-cooperation with this South American country confluences with China's interactions with Argentina, producing the synchronization.

Chapter X

Conclusions

The main goals of this thesis were, first, to introduce a conceptual framework for triangular relations between states and, second, to present a systematic study of the triangular relations among China, Latin American countries, and the U.S. in terms of cooperation and conflict.

This thesis argued that the interactions between China and the Latin American countries and the latter's encounters with the U.S. are triangular relations. Given that there are three sides interacting, which in the conduct of their apparent bilateral relations, produce almost simultaneous effects on the three sides. Therefore, our analysis also included the other two vertices of possible effects: (1) the effects of Latin America's engagement with the U.S. in China-U.S. relations and (2) the effects of China's engagement with the U.S. on the relations between the Latin American countries and China.

We found that, in the IR literature, little effort has been devoted to study triangular relations. There has been a lack of a proper conceptual framework to understand triangular relations. Traditional IR theories do not offer a comprehensive understanding of state interactions in triangular relations. Traditional IR theories tend to ignore the quasisimultaneous interactions and the effects between three states. There is also a deficiency in traditional IR theories to analyze state relations as dynamic phenomena, where phases of cooperation and conflict are always present.

Triangular relations are interactions between three states, interacting with each other in complex processes. This thesis proposed a conceptual framework for triangular relations known as synchronization. It is based on the adoption of the synchronization theory of physics in IR. Synchronization theory offers a way of conceptualizing three-way interactions and contains in itself a method that could be applied to analyze triangular relations between states.

This thesis defined synchronization between states as a process where three states interact constantly and mutually affect each other, where one of them plays the role of the "third mechanism" or third state. The mutual effects of their interactions are the presence of either more conflicts or cooperation.

Synchronization provided guidance on when the quasi-simultaneous interactions occur. It also showed us the dynamics of the interactions in triangular relations. By dynamics of the interactions, we refer to the presence of cooperation and conflicts between the three states. Additionally, this thesis proposed a method for testing synchronization in triangular relations. This thesis applied event synchronization as a method to test for synchronization.

In our empirical analysis, we saw that China has deepened its political and diplomatic engagement with countries that were considered of strategic value for Chinese interests. In Latin America, China has established so-called bilateral "strategic partnerships" with certain states. These bilateral strategic partnerships are diplomatic instruments that strengthen economic relations and political cooperation in line with the broader strategic goals of the parties involved. These strategic partnerships distinguish these bilateral relations as a priority and transform them into comprehensive relationships that involve many different areas of political, economic, and social life. In our analysis, we focused on the Chinese bilateral strategic partnerships with Argentina, Brazil, and Venezuela.

In the first vertex of the triangular relation, the impression that these Chinese-Latin American bilateral relationships produce only bilateral effects is extremely limited in face of the foregoing analysis, especially in the case of the bilateral strategic partnerships. China not only provided an opportunity to these Latin American countries to turn to alternative sources of finance, commerce, and investment, but it also presented itself as an alternative partner in political and strategic cooperation on regional and global issues. China has been investing in strategic areas with a view toward its long-term goals in this region. Chinese investment and cooperation has been crucial to the technological sector, especially in the areas of satellite building, nuclear energy, software development, and biotechnology.

On the second vertex, there are several ways to characterize the relationships between Latin American countries and the U.S. The U.S. orientation toward Latin America characterized as a "sphere of influence" creates a presumption that the U.S. is both attentive to the activities of other powers in the region and considers actions with its partners to attempt to limit them. Thus, a basis has been created for perceiving these relationships as triangular.

Viewed through this lens, on one hand the U.S. has behaved as the protector of the region, spending political, economic, and military efforts and resources for promoting and protecting western values such as democracy, human rights, and free trade. On the other hand, on several occasions, most of the Latin American countries have de facto accepted and behaved as countries in a region that relies on U.S. resources.

The relationships between Latin American countries and the U.S. have been much more complex and diversified as compared to the relationships between the former and China. On the one hand, the complexity was due to the sphere of influence approach and the paternalistic U.S. presence in the region. On the other hand, Latin America and the U.S. have been traditional partners with multiple areas of mutual interest that the U.S. and the region have been engaged in. However, in the eyes of some Latin American countries, China offered an alternative to the western style of cooperation, which often required adherence to fiscal or other policy requirements as a precondition for providing of funds.

On the third vertex, the bilateral relationship between China and the U.S. has been diverse and complex. The thesis argued that China and the U.S. interacted with each other in a transitional international system. However, it is not yet clear whether the conflicts between China and the U.S. in this transitional order are the predictable conflicts that arise between a rising power and a declining superpower. In this transitional international system, strategic partnerships have been an important instrument of Chinese diplomacy for expanding its network. The strategic partnerships also represent an attempt to influence the system by collaboratively pushing for a more comprehensive multipolar order.

As mentioned above, the bilateral relationship between China and the U.S. has been extremely complex and conflictive, but the analysis of the events suggests that both countries finally chose stability - a kind of rational stability to mark their relationship. This rational stability has been possible because both countries have numerous resources to negotiate on, which is associated with their numerous conflicts within the several areas that both countries have been interacting in. Thus, when one issue threatens the existence of the bilateral relationship, e.g. Taiwan, North Korea, or the Dalai Lama, another area of the relationship offers a way to resolve the crisis, such as their vast trade relationship.

The observations above create the basis for the analysis of the triangular interaction summarized in the subsequent paragraphs.

Empirical Results of Synchronization

This thesis examined the main findings of the bilateral correlation events in three sets of relationships: (1) Argentina, China, and the U.S; (2) Brazil, China, and the U.S; and (3) Venezuela, China and the U.S. The results may be summarized as follows:

First, the periods of major interactions between all these cases of bilateral relationships analyzed have not always produced periods of synchronization between them. There is no evidence that the relationships between the two players strongly affect the other during all of the time period that was examined. This implies that the synchronization has nothing to do with the quantity of the bilateral interactions, but with the effective simultaneous interactions between three states.

Second, Brazil and Venezuela experienced synchronization with China and the U.S. in 2001, respectively. Then, from 2005 to 2007, Argentina, Brazil, and Venezuela are correlated with both China and the U.S. It suggests that Brazil and Venezuela in 2001, and the three South American countries from 2005 to 2007, were simultaneously interacting with China and the U.S. and were considering both the countries in their decisions. The period from 2005 to 2007 was specially the period of generalized opposition to the U.S. actions in Iraq and Afghanistan, and the problems of the FTAA for the region, among other issues that the South American countries had similar stances on. It was during this period that China seemed to be an attractive partner. And it is in this period that the three South American countries attained the status of strategic partners for China.

Third, there are more periods of correlation between South American countries' bilateral relations with China and the U.S., as one of the vertices of the triangular relation, especially in the case of Brazil. In the other two vertices, correlations exist, but they are not as numerous as in the aforementioned case. It could indicate that the South American countries have been interacting with China and the U.S. and considering both relationships simultaneously in their behavior, which is not the case of China and the U.S.

Fourth, synchronization is possible because states are complex systems that do not always respond in a direct way, meaning that they interact in multiples areas simultaneously, such as politic, trade, investment, etc. For instance, when countries maintain commercial conflicts, the responses or negotiations are not exclusively in commercial terms, but can also include other topics such as political or security issues. Moreover, their interactions are not limited to bilateral issues, but also incorporate their regional and global interests. This has been a recurrent behavior specially in the relationship between China and the U.S. But we also witness similar behavior in the relationships of Brazil and Venezuela with China and the U.S., respectively. In the case of Argentina, the periods of synchronization show that Argentina responded less flexibel resolving its conflicts. This could be one reason why among the three South American countries studied in this thesis, Argentina maintained the most number of conflicts with China.

Fifth, we found in the synchronization process that Brazil has been swinging between the partnerships offered by China and the U.S. It has periods of more cooperation with China and then returns to the U.S., and vice-versa, oscillating between different types of synchronization. In the case of Venezuela, we see a definite and clear position against U.S. interests in the synchronization with China; similar to that of Venezuela is the case of Argentina.

Our sixth finding is that the South American countries, including Brazil, have not really affected the bilateral relationship between China and the U.S. The South American counties have not played the role of the third state in any period. In the case of Brazil, China U.S. triangular relation, the third mechanism has been only the U.S. in different periods. But in the case of Venezuela and Argentina, it is China that has been the third mechanism in both the cases. thus, in some periods, China and the U.S. have reinforced the cooperation or conflicts of Latin American countries with one of them. Specifically, the U.S. have reinforced the cooperation or conflicts of Brazil with one of them, and China has reinforced the conflicts of Argentina and Venezuela with the U.S.

Seventh, the only South American country that has had a comparatively longer period of synchronization among them has been Brazil. This period of synchronization seems to be the result of an active Brazilian engagement in global issues that directly positioned it to interact with China and the U.S. simultaneously. In the case of Venezuela, the synchronization is in some way also produced in regional issues in South America. Argentina is the only country that synchronized with China and the U.S. due to its domestic issues.

Eighth, the periods of synchronization that the South American countries experienced with China and the U.S. do not coincide among them. The synchronization took place in different periods. One factor to consider can be that the issues between them are on different dimensions: global, regional, and domestic.

Ninth, the country that experienced the first synchronized period was Venezuela in 2001, and the last was Argentina in 2013. The first intensive Chinese approach to the region was with Venezuela in 2001. At the same time, the conflicts between Venezuela and the U.S. were also exposed. In the case of Argentina, it follows the later development of the relationship between Argentina and China. Comparing the establishment of the strategic partnerships of China with the three South American countries, it was Argentina that was the last to establish and strengthen its relationship with China.

Tenth, an interesting finding is that synchronization between China, Venezuela, and the U.S. as a simultaneous process has not really taken place; there is a constant delay of correlations between the bilateral relations that are present every subsequent year. It is important to note that it seems that these three countries have been interacting by looking at each other. Thus, it was not only Venezuela that applied a clear strategy to strengthen its relations with China against U.S. interests, but also, in some periods, the U.S. considered in its behavior the relationship between China and Venezuela. China observed the relationship between Venezuela and the U.S as well. This is not synchronization or simultaneous synchronization, but it clearly shows a triangular relationship.

Future Research

As this thesis has argued, the relationship between China and the respective Latin American countries cannot be analyzed without the U.S. being considered as an important variable in this relationship. Similarly, the contemporary Latin America-U.S. relationship would be incomplete by not taking into account China's engagement with the region. Therefore, triangular relations matter to international relations, and an interdisciplinary approach, such as synchronization, offers a useful way of studying triangular relations. This work is also an invitation to enrich the dialog between sciences; it is not looking for a new theory that can overshadow the pre-existing IR theories.

This thesis also does not argue that there is a unique method of synchronization. As in physics, there exist multiple methods to prove synchronization. This thesis uses event synchronization as one of many available and legitimate methods. Nevertheless, further researches should apply other methods of synchronization according to their data.

The main research question of this thesis was principally answered, in the sense that the triangular relationships under our analysis have synchronized in some periods and in diverse types of synchronization. However, as in every research, new research questions appear, such as why does the synchronization change from one to another type, or what is the mechanism for altering between synchronizations types? Therefore, there are paths for specific research on synchronization, and it remains a work that needs to be expanded.

We began this thesis with a quotation by General John Kelly, Commander of the U.S. Southern Command: "As in other regions around the world, China has growing influence in Latin America and the Caribbean [...]. In my view, just as we have 'pivoted' to the Pacific, China has pivoted to the Western Hemisphere. It views good relations with the region as useful for two reasons: to gain access to natural resources and to increase its global influence" (2015). If the idea of a "pivot" also includes the fact that China has been playing a role in the relations of the Latin American countries with the U.S., he was partially right.

ABSTRACT

This dissertation analyses the triangular relations between China, Latin America, and the United States. The research question is to what degree has China's advance in Latin America produced effects on the relations of Latin American countries with the U.S.? Effects refer to more or less conflict or cooperation between selected Latin American countries (Argentina, Brazil, and Venezuela) and the United States as a consequence of changing Chinese-Latin American relations. The investigation covers the period 2000 to 2015. In an innovative approach the author proposes the adaptation of the study of synchronization from physics to the analysis of triangular relations between countries. Moreover, the author argues that triangular relations are not sufficiently analyzed and theorized in IR.

The dissertation is organized in 10 chapters. In the first chapter the author starts with a broad introduction into the topic by describing China's advances in Latin America, including its strategic partnerships. It comprises some brief remarks on the U.S. engagement in Latin America and Chinese-U.S. relations. It contains some reflections about the potential analytical value of the concept of triangular relations. The chapter also includes the research question and describes the research design; and it explains the case selection of the Latin American countries

Chapter two gives a cursory overview of different IR theories (realism, neoliberalism and interdependency theory, and constructivism), and how they might relate to triangular relations. In the chapter three the author develops the conceptual framework for the analysis of triangular relations based on synchronization theory. Synchronization is defined as periods of strong quasi-simultaneous interactions and effects between three states, where one of them play the role of the "third mechanism or state".

Chapter four deals with China's engagement in Latin America. In the next chapter the author discusses the U.S. influence and engagement in Latin America. Chapter six analyses the relations between China and the United States.

Chapter seven, eight, and nine analyze the triangular relations between Brazil (respectively Argentina and Venezuela), China, and the United States. The last chapter summarizes the main results in regard to the triangular relations between China, the U.S., and Latin American countries, on the relations between the U.S. and these countries.

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Appendix 1: Codebook of Events	231
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Appendix 1: Codebook of Events

This codebook consists of three sections. It begins by describing the selection criteria for data collection: the events and articles types. In Section 2, it clarifies the codification of events into the following five dimensions: (1) political and diplomatic interactions; (2) economic and commercial interactions; (3) defense and security interactions; (4) strategic interactions; and (5) soft and other interactions (see Table 1 below). Finally, it explains the conflict and cooperation framing of the events and presents some examples.

Every event is codified as a positive or negative event. An event is codified as positive when the bilateral action or interaction between the countries manifests as cooperative exchanges, such an official visits, investment, and joined of military exercises, among others. An event is considered negative when there is a conflictive situation between the two countries, such as negative official declaration about their bilateral partner, cancelled visits and imposition of trade barriers, among others. The positive and negative events are codified as 1 or -1 respectively in a spreadsheet.

The events are also codified into five dimensions: (1) political and diplomatic interactions; (2) economic and commercial interactions; (3) defense and security interactions; (4) strategic interactions; and (5) soft and other interactions (see Appendix 1). At this point, the mention of these bilateral events between Brazil and China offers a concrete and summarized view of periods of cooperation and conflicts and their issues.

1. Data Collection

All news items that contain a reference to one of the bilateral relations must be searched for events in entirety. This thesis considers as an event every bilateral action or interaction between the countries subject to this study, which are detailed in section 2. The news sections included and not included are listed in Table 1 below.

Table 1: News Sections

News included in these sections	Sections not included
Politics	Sports
Business and Economy	Celebrity News
International	Weather and letters from the readers

2. Determining the dimension to which the news have to be placed

Every news item contains more than one event. For instance, an official visit normally contains in itself several events, as such as: signing of bilateral agreements, official declarations and, of course, the official visit per se, among other possible events. From point 2.1 to point 2.5 below, this codebook clarifies how to determine the number and kinds of events (to which dimensions have to be placed).

2.1. Dimension 1: Political-Diplomatic Interactions

The dimension 1 includes the following events:

- Official declarations of presidents, vice-presidents, prime ministers, and ministers about their:
 - o bilateral relations,
 - o strategic partnerships,
 - o specific reference to global common interests,
 - specific reference to regional common interests, and
 - specific reference to regional integrations.
- Official visits of presidents, vice-presidents, prime ministers, and ministers.
- Signing of bilateral agreements.
- Declaration by sectoral interests, such as political parties and NGOs about their bilateral relations.

The news that contain several events have to be codified as following:

- The signing of some bilateral agreement, e.g. telecommunication agreement is an political-diplomatic event and therefore has to be placed in the first dimension, but also in dimension 4, because it is also a strategic event. The same applies to every bilateral agreement. They are political-diplomatic events besides being economic, defense, strategic, or soft events in the sectors they pertain to. Notice, that in some cases leaders of two or more countries sign several agreements in one occasion, in such a case, the signing is one event, and then we look for the content of the agreements to classify them into their respective dimensions.
- When the signing of bilateral agreements are accompanied by an official declaration on them, then they are considered two events in dimension 1. Declaration is an event that publicly highlights their main interests and goals of their bilateral relationships.

2.2. Dimension 2: Economic-Commercial Exchanges

The dimension 2 consists the following events:

- Publication of official reports on trade.
- Official declarations of presidents, vice-presidents, prime ministers and ministers on bilateral trade.
- Official declarations of industrial sectors on trade and investment.
- Publication of official report on investment.
- Official declaration of presidents, vice-presidents, prime ministers and ministers on investment.
- Declarations on WTO, Doha Round and safeguard measures by presidents, vicepresidents, prime ministers and ministers.
- References to the Chinese currency, swap and credits in Yuan.
- References to investment in infrastructure.
- References to property rights.
- References to the IFM.

2.3. Dimension 3: Defense-Security Fields Interactions

The dimension 3 comprises the following events:

- References to a joint exercise between military forces.
- References to war against international terrorism.
- Reference to war against narcotics and drugs
- Conflicts on military issues.
- Official references to North Korea.
- Official references to Taiwan.
- Official references to India, Pakistan, Tibet.
- Migration and extradition issues.
- Allegations of espionage and hacking.

When the reference to a joint exercise between military forces is accompanied by an official declaration of presidents, vice-presidents, prime ministers and ministers, the events are coded under both dimension 1 and dimension 3.

When a reference to each of these events is accompanied by a signing of a bilateral agreement, the events are coded under both dimension 1 and dimension 3.

2.4. Dimension 4: Strategic Interactions

The dimension 4 relates to occurrences of the following events:

- Interactions on telecommunications.
- Interactions about Satellite cooperation programs.
- Interactions on aviation and airports.
- Interactions dealing with Technology.
- Interactions pertaining to Research and medicine.
- Interactions on Energy.
- Interactions that relate to the Mining sector.
- Interactions in Agriculture.

When a reference to these events are accompanied by a signing of a bilateral agreement, the events are coded under both dimension 1 and dimension 4.

2.5. Dimension 5: "Soft" and Other Interactions

The dimension 5 consist of the following events:

- References to cultural and educational exchanges.
- References to tourism.
- References to Human Rights.
- References to Democracy.

When the reference to each of these events is accompanied by a signing of a bilateral agreement, the events are coded under both dimension 1 and dimension 5.

3. Conflict and Cooperation Framing

The events are coded as -1 (negative) and +1 (positive). The events are not coded as 0 (neutral), because there are no neutral actions or interactions. This thesis assumes that every action and interactions between states has either a positive or negative effect. We have to keep in mind, that synchronization searches for the effects of the state's interactions that have either direct and/or collateral effects.

A simple way of coding an event as positive or negative, is asking the question: is the event good or bad for one of the states in the bilateral relationship?

Relevant for the coding decision is the evaluation of sufficiently explicit positiviness or negativines contained in the news item. It reduces the possibility of subjective interpretations. The following questions offer guidance on how to evaluate an event as positive or negative:

Questions	Yes	No
Does the event reflect disagreement between the two states?	-1	
Does the event show that one state reproaches the other?	-1	
Does the event include a problem or issue?	-1	

Does the news mention that one's state has disadvantages from the other	-1	
state?		
Does the event mention that one state has benefited from its relationship		1
with the other country?		
Does the event present statistics that indicate that both states have		1
benefited from their bilateral relation?		
Does the event reflect agreement between the two states?		1
Does the event show that one state acclaims its relationship with the		1
other state?		

Examples of negative events and determining to which dimension the news have to be placed

"China and	the US just	had a	Reuters, 21 May 2015		
confrontation ov	er the South Chi	na Sea"			
"The Chinese nav	y warned a U.S. s	urveillance	e plane flying over artificial islands that Beijing		
is creating in the	disputed South C	hina Sea to	e leave the area eight time, according to CNN,		
which was on boa	rd the flight on W	ednesday"			
Dimensions:	Dimensions:				
3	This is only one	e event plac	ced on dimension 3. It is not included into the		
dimension 1 as well, because there is no official declaration by the					
	presidents, vice-	presidents,	prime ministers, and ministers to this effect.		

Example of positive events and dimensions chosen:

China, US milita	ries bolster ties	Chinadaily, 20 August 2013			
"Chinese and US militaries have agreed to further strengthen cooperation and exchanges to boost mutual trust and understanding and avoid possible miscalculations and unintended conflicts". Dimensions:					
3	This is only one event placed on dimension 3. It is not included into the dimension 1, because it does not mention an official declaration by any of the presidents, vice-presidents, prime ministers, or ministers.				
Brazil and China	Brazil and China agree currency swap Financial Times, 26 March 2013				
"Brazil and China sealed a \$30bn currency swap agreement on Tuesday that is expected to act as a backstop to growing trade between the two countries".					
Dimensions:					
2	This is only one event placed on dimension 2. It is not included into the dimension 1 as well, because there was no official declaration by the respective presidents, vice-presidents, prime ministers, and ministers.				

Table 2: Dimensions and Indicators

Dimension	Politic- Diplomatic Interactions	Economic- Commercial Exchanges	Defense- Security Field Interactions	Strategic Fields Exchanges	Soft and others interactions
	Official Declarations of Presidents, Vice- Presidents, Prime Minister, and Ministers.	Official report on Trade. Official declarations on trade.	Join exercises of Military Forces.	Telecommunications.	Cultural and Educative exchange. Tourism.
	Official Visits of Presidents, Vice- Presidents, Prime Minister, and Ministers.	Official report on Investment. Official declarations on investments.	War against Terrorism.	Satellites cooperation programs.	
	Announcement of signed agreements.	Announcement of bilateral credits.	Drug War.		
Indicators	Official Declarations with specific mention to the bilateral Strategic Partnership.	Declarations, positions, negotiations, mediations at the WTO, Doha. Safeguard	Conflict on Military Issues.	Aviation, airports.	Human Rights.

	measures.			
Official	Currency.	Official		
Declarations		references to		
	Swap in Yuan,			
with specific	official	the case of		
reference to	declaration on	North		
Global	Chinese	Korea.		
common	currency,			
interests: UN,	credits in			
Security	Yuan.			
Council.				
Official	Investment in	Official	Technology.	
Declarations	Infrastructure.	references		
with specific		and to the		
reference to		case of		
Regional		Taiwan.		
common				
interests:				
Cuba,				
Mercosur,				
CELAC,				
Military bases,				
Venezuela's				
crisis,				
Declaration of	Official	Official		Democrac
Sectors:	reference to	references to		Democrae
industry,	Property	their	Research. Medicine.	
political	Rights,	relations	resourch, wieufellie.	
parties,	_	with India,		
parties,	agreement on	with illuia,		

academics,	property right,	Pakistan,		
ONGs.	conflict.	and Taiwan.		
		Migrations	Energy.	
		and		
		Extradition		
		Issues.		
		Allegations	Mining. Agriculture.	
	IMF. Credits.	of		
		Espionage.		
		Hackers.		
		Internet.		

Eidesstattliche Versicherung:

Ich, Ana Martha Soliz Landivar de Stange versichere an Eides statt, dass ich die Dissertation mit dem Titel: "Triangular Relations: China, Latin America, and the U.S." selbst und bei einer Zusammenarbeit mit anderen Wissenschaftlerinnen oder Wissenschaftlern gemäß den beigefügten Darlegungen nach § 6 Abs. 3 der Promotionsordnung der Fakultät Wirtschaftsund Sozialwissenschaften vom 08. November 2000 verfasst habe. Andere als die angegebenen Hilfsmittel habe ich nicht benutzt.

Hamburg, Januar 2018	