

FROM SCIENCE DIPLOMACY TO EDUCATION DIPLOMACY: THE BRAZILIAN CASE

Da Diplomacia da Ciência à Diplomacia da Educação: o caso brasileiro

Gabriela Gomes Coelho Ferreira¹
Amancio Jorge Silva Nunes de Oliveira²

Introduction

Actions of science diplomacy are typically described in literature as related to developed countries. This is due to a perspective in which science is a hard power resource or, even when it is perceived as a soft power resource, it is an extension of a country's hard power. Because of that, science diplomacy has been normally related with developed countries, especially during the last century. Therefore, it seems quite unusual to picture a developing country like Brazil pursuing such an elaborate strategy. Nevertheless, Brazil has been signing Cultural Agreements since 1930's, using science as a diplomatic tool to overcome regional frictions. We also briefly show its development into a complex education diplomacy strategy that lasts until today.

We intend to demonstrate the smart strategy deployed by Brazil, a developing country, in using the soft power of science since the 1930's not only despite its lack of hard power, but as an alternative to it. The Brazilian diplomatic body used the legitimacy given by science to establish important dialogues with key countries, starting from those in Latin America—therefore, using science diplomacy to overcome regional frictions since the beginning of the last century.

We present an historical approach, using two primary sources: official documents from a digital platform held by the Brazilian government with its collection of international acts, the Concordia Platform; and internal communications from the Brazilian diplomatic body found at the Brazilian Foreign Ministry—Itamaraty—official archives, regarding the Cultural Agreements and the educational policy created based on them: the Student Agreement programmes.

¹ PhD in International Relations (USP/KCL) and member of InnSciD SP's Executive Committee. Email: gabrielaferreira@usp.br

² Full Professor of the University of São Paulo and Scientific Coordinator of Caeni/USP. Email: amancioj@usp.br

To present this case, we developed this article in three sessions. The first one analyses the concept of soft power and its special quest for legitimacy when not accompanied by hard power. The second session presents the concept of science diplomacy in order to place the bilateral Cultural Agreements signed by Brazil with an expressive number of countries as an early case of science diplomacy. In the third session, we demonstrate that Brazil is an interesting early case of science diplomacy, and its development into an education diplomacy programme. Finally, we present a conclusion that encompasses our main findings.

Soft power without hard power: the quest for legitimacy

The definition of power on which this research is grounded is given by Dahl (1957), as being A's ability to cause B to do something B would not otherwise do, plus Baldwin's emphasis (1979) on the fact that power is a capacity related to the existence and mobilization of specific resources to achieve certain results. As pointed out by Keohane (2013), the various controversies about the concept of power try to indicate which capacities are relevant and which are the causal mechanisms that connect capacities to the desired results.

Hurrell (2013) states that the nature and dynamics of power are changing to re-signify the concept of *having power*: the ability of attracting, related to soft forms of power, has become more used than those of repelling or threatening, related to the idea of coercive and coercive power, in view of the cost they represent.

In the same path, Naim (2013, pp. 1–2) also addresses these transformations that affect world politics by announcing the *decay of power*. For the author, material power was of great importance in the twentieth century; however, the trend of the twenty-first century would be the opposite³, as it values other aspects of power over those related to coercion and co-option. According to Naim, coercive power has given decreasing and short-term returns, which makes its maintenance very costly⁴.

One of the consequences of this new configuration of the transnational arena is the opening of opportunities for countries without military or economic power comparable to that of great powers to exploit institutional procedures and political debates grounded on civil society in order to influence the international agenda (HURRELL, 2006) and to modify the distribution of power, that is, to *emerge*.

Therefore, understanding power as the ability to obtain a certain conduct from others in order to achieve certain results, soft power would then be the ability to shape the preferences of others, causing them to perform certain actions without the use (or threat of use) of economic or military force to coerce them. This means using influence and attraction, instead of coercion and payment⁵—hard power.

³ Rostoks (2015) argues that, even if Naim is right, most countries would rather having material capabilities of power than not, indicating that, despite the trend, there are limitations of other forms of power as compared to hard power.

⁴ Naim (2013, pp. 1–2), however, also warns of possible harmful consequences of this new trend in which power is more diluted: “a world where players have enough power to block everyone else’s initiatives, but no one has the power to impose its preferred course of action, is a world where decisions are not taken, taken too late, or watered down to the point of ineffectiveness.”

⁵ “Payment”, here, refers to the payment of pecuniary advantage against specific advantages. The problem of legitimacy of monetary incentive will be dealt with on the basis of Grant (2006; 2011). According to Grant, incentives have varying degrees of legitimacy, since “I can also give you something that you want in exchange for your compliance with what I want. Coercion, persuasion, and bargaining are alternative forms of power. Each is sometimes legitimate and sometimes not” (GRANT, 2006, p. 30).

The contemporary approach to power includes building long-term relationships, especially with key individuals⁶, who can create a positive environment for government policies at a relatively low cost of deployment and maintenance: it is easier to convince those with whom we have previous relationships based on shared perspectives and experiences. Consequently, the *effectiveness* of this capacity rests on the attraction for the creation of shared values between the issuer and the recipient, which guarantees the *legitimacy* of these policies⁷.

At this point, we can see the specification made as to soft power being a capacity and the difference between resource and result become essential for the analysis, and the quest for legitimacy: if the contents of power resources (in the case of soft power, culture, values and policies) are not perceived as attractive, it does not produce soft power—and perhaps produces the opposite effect⁸.

Perception, therefore, is an important concept in the analysis of decision-making and, consequently, of power in international relations, especially when related with the legitimacy of power. In this sense, Robert Jervis, in *Perception and Misperception in International Politics* (2015), analyses the perception of decision-makers about themselves, about other actors, and about the environment, and how these perceptions can influence how decisions are made in international politics.

The author describes four levels of analysis applicable to theories of international politics: the individual; that of the government bureaucracy; that of the nation-state; and that of the international environment. Jervis emphasizes the importance of the individual level of analysis since other approaches propose that the environment *determines* how actors behave, ignoring the role of individual factors—such as beliefs and experiences—as vectors acting on decision-making. Thus, for the author, it would be impossible to explain crucial political decisions without referencing the decision-makers beliefs about the world and their images about others (JERVIS, 2015, p. 28).

We argue in this article that the cultural agreements are a governmental strategy of power that seeks to increase the influence of one country over another through key individuals, who are or will become elites, opinion-makers and decision-makers: scientists and higher education students. In this sense, considering the importance of the perception of key individuals in political decision-making, it is important to analyse the perceptions of these foreign students about the position of Brazil in the transnational arena. For this thesis, it is especially important to verify the existence of a correlation between the granting of scholarships and the positive perception about the country.

Therefore, the actions have to be perceived as legitimate to achieve its objectives. It brings the concept of legitimacy into this discussion paper: we use in this work is that given by Suchman (1995, pp. 573–574): “legitimacy is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs and definitions.” From this definition, two observations arise: (a) being a perception, it is enough that it is seen as legitimate, denoting a

⁶ In this research, key individuals are not strictly those who occupy strategic positions in governments of other countries, but also those capable of spreading information or worldviews in a legitimate and persuasive way, such as teachers, decision-makers of companies and institutions, etc.

⁷ Shared values are an assumption of legitimacy that will be addressed later as the foundation of authority and incentives.

⁸ In epidemiology, the term “iatrogenesis” describes a healing activity that produces undesired effects.

subjective construction of who perceives it—and an objective construction of who has it; (b) being socially constructed, it is related to a social group—not to individual actors—and to shared values, norms and beliefs between those who perceive it and those who have it.

The question of legitimacy is central in any discussion about long-lasting, cost effective power. It becomes much more clear when discussing the contemporary transnational order since there is an intensification of information and communication processes, increasing interdependence between actors (KEOHANE; NYE, 1998), as well as the channels that enforce the responsibility and accountability of agents, both within institutions and in civil society—strategies called *name and shame* and accountability processes.

However, legitimacy is also crucial while elaborating about international actors without substantial hard power capabilities who want to create a narrative that can be understood and reverberate in the global arena—as Brazil. This gives us a hint why science is one of the most important and effective soft power tools: it has an aura of objectivity, transparency and universality, able to create common knowledge and, therefore, allowing a legitimate dialogue between different groups of people. Consequently, it fosters long-term relationships based on legitimacy, without strappingly relying on hard power.

This is why when it comes to establishing long-term relationships, the use of policies related to education, science and technology seem to be common. Here, we can highlight three factors that may explain this option. The first, political factor relates to the very history of modern education: the constitution of the modern State. According to Hamilton (2012, p. 69), the idea that school training was an instrument of great value to the Church and the State comes from de Hoole (1660), in *A New Discovery of the Old Art of Teaching Schoole*. Schools would give political support to the State and the Church, causing their members to perform their “correct” function, according to the assumptions of these institutions.

The second factor concerns the logic of knowledge and technology development itself. Education, science and technology are eminently collective activities, which depend on prior knowledge to be developed as either continuity or rupture. Finally, the third factor: these policies focus on higher education (undergraduate and graduate) and science and technology activities, which form teachers and decision-makers who will occupy strategic positions in schools, universities, companies, institutions and governments. These individuals are key to the dissemination of ideas to groups of people in their countries, and therefore can be considered vectors of soft power. Also, it builds on common interests and values to attract, persuade and influence (NYE, 2004).

The smart use of soft power resources

Therefore, the concept of soft power—and its distinction from hard power—put forward the better understanding of policy actions combining a myriad of soft and hard power resources and capacities: the smart power. The rationale behind the concept is that “the logic of confrontation does not disappear to the benefit of the logic of influence, but is integrated into a continuum which deeply renews diplomatic action” (RUFFINI, 2017).

In this light, science appears as a power resource that can be linked with hard and soft power abilities. As Ruffini stresses, when related to defense policies, science is historically linked to hard power. However, to the author, “the center of gravity has shifted” to include the recognition of the knowledge society importance towards a “diplomacy of knowledge”. Science diplomacy, therefore, is linked with the logic of influence and persuasion. Not only to promote interests and values, but also to create shared interests and values. Science comes to complement diplomacy through influence.

Interestingly, in countries like Brazil that lack some hard power resources, such as a strong economy or military power, the choices tend to fall in strategies that privilege the mobilisation of power resources aiming to build cooperation through different channels. Consequently, to attract by building common ground as opposed to the ability to coerce. Here, we will deal with the use of science as a power resource to create connections and to foster collaboration. In this sense, the Brazilian science diplomacy appears as part of the Brazilian smart power, by choosing soft power strategies to enhance cooperation through legitimacy—not as a demonstration of hard power.

Science and Education Diplomacy: defining the concept and placing the object

Is clear in Nye’s (2004) rationale that soft power is normally seen as a result of other power resources and, therefore, would be more likely to be deployed both by developed countries. However, using the smart power framework as the ability to choose the right tools depending on their availability and the situation, we here present a case that shows the strategic use of soft power resources by a country without considerable military or economic power: the Brazilian Cultural Agreements consistently signed since the 1930’s.

Therefore, the Brazilian Cultural Agreements are part of a smart power strategy based on the creation of common ground by mobilising power resources as culture, science and education, wearing a cooperation suit. But not only: it presents an historically known interplay between science, education and diplomacy which, nevertheless, has emerged only recently in the literature as the concept of *science (and education) diplomacy*.

In this paper, we are going to use science diplomacy as our main framework, even though education diplomacy is also brought into light as a development of what we advocate as Brazilian science diplomacy, and because we believe they are complementary concepts and practices in real life. Ruffini broadly defines science diplomacy as the “practices in which actions of researchers and of diplomats interact” (RUFFINI, 2017, p. 16). Turekian and Lord (2009) define scientific diplomacy as the “scientific cooperation and engagement with the explicit intent of building positive relationships with foreign governments and societies.”

In the same sense The Royal Society-AAAS (2010) report indicates that science diplomacy is a fluid concept, which can be applied to the role of science, technology and innovation in three complementary dimensions of policy: a) science *in* diplomacy, informing foreign policy objectives with scientific advice; b) diplomacy *for* science, when it is used to facilitate international science cooperation; and c) science *for* diplomacy, using science cooperation to improve international relations between countries.

As already stated, science can be a soft power tool due to its attractiveness and influence not only as a national asset, but also as a universal activity that transcends national interests (THE ROYAL SOCIETY; AAAS, 2010). This is the reason why science diplomacy is “an effective emissary of essential values such as evidence-based learning, openness and sharing” (TUREKIAN, 2015). The understanding lays on the perception of legitimacy given by science and its aura of universality in search of true. We advocate that this narrative allows its effectiveness even when hard power is not backing the policy, as the case of Brazil.

Here, since the concept is quite stretchable, it is worthwhile to present two key levels of science diplomacy distinguished by Ruffini (2017) in order to draw an important line between the internationalisation of research and the science diplomacy itself. Science diplomacy has to do with the visible interactions between issues of science and issues of diplomacy as an attribute of sovereign states. It shall not be confused as with the practice of research actors on the global arena, where the internationalisation of research lies, diffusely as the diplomacy of influence.

Important historical examples of science diplomacy brought up by the literature often focus on developed countries' actions to rise above the military conflicts regarding the Second World War and its developments (THE ROYAL SOCIETY; AAAS, 2010). Skolnikoff, for instance, presents the North Atlantic Treaty Organization (NATO)—through its Scientific Committee—efforts to create a new educational institution for the training of scientists and engineers from Eastern European countries in years following the Cold War⁹ (SKOLNIKOFF, 2001).

In this sense, the Brazilian Cultural Agreements appear to be an interesting early case of science diplomacy not only due to the fact they exist since 1930's, but especially due to its development into National Exchange Programmes for international students as what we can define as education diplomacy: a) Program for Undergraduate Students (PEC-G), officially established by Decree No. 55613 (1965). According to official webpages, the idea of creating a government programme to support students from other countries followed the massive increasing number of foreigners in Brazil under the Cultural Agreements acting as a juridical umbrella to them.

The objective was to regulate the status of the students under these agreements that were in Brazil by unifying their conditions and ensuring that universities would give similar treatment to them. Following the PEC-G, the Program for Graduate Students (PEC-PG) was officially established as a development of the first. Within this context, the main question of this paper arises: can Brazilian Cultural Agreements be considered an example of science diplomacy?

To answer the question, this research uses two main sources: the content of the agreements from the 1930's and the official diplomatic communication from the 1960's¹⁰ regarding the cultural agreements and the institutional consequence of them: the PEC programmes. The diplomatic communications enlighten the

⁹ Although the institution recognized science and technology as a tool for social development, its true goal was to increase European integration, connecting the countries of the East with those of the West in order to increase the power of the capitalist bloc. The institution was never created, but this spirit of integration would have contributed to the formation of the European Union

¹⁰ There are two reasons of these constraints: a) in Brasilia, there are only documents from 1960, the year the city was founded, before that, the documents are in the National Library in Rio de Janeiro, previous capital of the country—and we could not travel there; and b) not all books were available, and few were organised, what impacted on the effectiveness of the research.

processes and real objectives aimed by the government with the agreements since their creation, even though these specific communications were from 1960s.

The programmes and the cultural agreements are especially complementary since the programmes act as a juridical umbrella for the bilateral cultural agreements after the increase in the number of international students under their regulation. Therefore, this allows to use the findings from the diplomatic correspondence to better understand the development of both, shedding a special light in the mechanism behind the signature of the cultural agreements.

Documental research: na early case of Science diplomacy embedded in cultural agreements

As already stated, the first source of material is the Concordia platform, a digital collection of international acts signed by the Brazilian government with a search mechanism that allowed us to have access to the list of the cultural agreements. By typing “Cultural”, “Acordo Cultural” e “Convênio Cultural”, the search mechanism brought an extensive list of Cultural Agreements. Not surprisingly, the first Agreements Brazil signed were with Latin American countries¹¹: Argentina, Bolivia and Paraguay, according with Table 1.

Table 1 – Cultural agreements signed by Brazil during the 1930's

Countries	Date	Situation
Argentina	10/10/1933	Substituted
Bolivia	23/06/1939	Substituted
Paraguay	24/06/1939 (1941)	Substituted

Elaborated by the authors.

The first issue that arises is the word “cultural” naming the agreements: it can lead to a misinterpretation of their objectives, creating the idea that science was not directly in their scope. However, in every one of the agreements aforementioned the word “science”—or “scientific”—was expressly used along with the idea of cooperation between “universities”, as instruments to create common ground and generating mutual understanding between the countries. Cultural diplomacy, therefore, explicitly encompassed science and education.

This view is in line with the French notion about culture and cultural diplomacy generally including university policy, science policy, and language diffusion. In his book about science diplomacy, Ruffini shows two major sets of approaches: the French, which considers “...science as one of a number of vectors of a country’s cultural policy and of its influence on the global scene, is justified by the ultimate purpose of influence. Science diplomacy is part of soft power, and so are the international promotion of national language or cinema, etc.” (RUFFINI, 2017, p. 15).

In this sense, culture and science can be combined in a single analysis, using the same tools. This is different from what is common in countries like the UK and the US as they clearly differentiate science

¹¹ The information at the Concórdia Platform indicated that the first agreement was signed with Lebanon in 1933. However, when looking into the documents available, the correct date pointed its signature to 1948.

diplomacy from their cultural diplomacy, treating both autonomously what must be taken into consideration during any analysis as Ruffini (2017) pointed.

It is important to bring to light here that Brazil received a considerable amount of influence from France through its cultural diplomacy during the 1920's and 1940's. The policy worked "as an instrument of political propaganda generating cultural dependence and repercussions at the economic level" (SUPPO, 2000, p. 309). Focusing on Brazilian elites through universities, this policy was based on a view that science is essential to the society's development.

The influence was so intense that, in the 1930's, a group of French professors came to Brazil with the responsibility of helping in the creation of the University of São Paulo, today's biggest university of Latin America, and the most important in Brazil. This deep influence—simultaneously to the first Brazilian cultural agreements—appears to explain the Brazilian cultural diplomacy itself as a reflection of the French one, that was adequate to the country's possibilities. Therefore, it must be analysed using the same logic, at least during a considerable period of time¹².

Secondly, it is important to stress that Brazil started to sign cultural agreements with Latin American countries as instrument of regional integration in the search for development and economic autonomy from the major global powers (SANTOS, 2009). This perspective is aligned with the advocated by the League of Nations during the 1920's regarding the amplification of the mutual cultural knowledge among nations to foster their pacific coexistence.

Specially regarding Argentina, the counterpart of the first agreement, its signature along with other agreements meant a shift in the disruptive political and economic relationship between the two countries, filled with rivalry (SANTOS, 2009).

Brazil also signed other two agreements during the 1930's with Bolivia and Paraguay¹³. Here, the background is the Chaco War between Paraguay and Bolivia (1932-1935). The peace process in Chaco gave rise to the signing of the Peace Protocol, which ended the war and to close agreement between Brazil and Argentina - together with Chile and Peru (ABCP), to act as mediators of the conflict, contrary to the United States' intention to institute an arbitration procedure (CANDEAS, 2005; GRANATO, 2012).

It becomes clear the use of the cultural agreements by Brazil as an important tool to overcome tensions between countries. The Brazilian cultural diplomacy, which encompassed science diplomacy, intentionally aimed to use language, science, higher education and other cultural assets¹⁴ to improve international relations between countries in line with the "science for diplomacy" dimension stressed by The Royal Society-AAAS report. In this regard, Ruffini points to the use of science "when political tensions between countries do not allow for traditional diplomacy to express itself" (RUFFINI, 2017, p.12). Even though this practice showed itself as a strong tool after the Second World War, its genesis happened before.

¹² Here, we point to a period of time since Brazil seems to have been under an approach transformation lately. However, this claims for a specific research.

¹³ With Paraguay, however, the agreement was a compilation of other agreements that were signed in different dates: the cultural agreement itself was signed in 1941.

¹⁴ Specifically targeting elites.

From Science to education: a smart interplay

At the second source of materials, the diplomatic archive in Brasília, we had access to the communication between diplomatic departments just before the creation of the first programme (from 1960), explaining the motivation behind the Cultural Agreements and the creation of the PECs. To have access to these documents, an appointment has to be made at the General Coordination of Diplomatic Documentation (CDO) at the Brazilian Ministry of Foreign Affairs in Brasília (Coordenação-Geral de Documentação Diplomática do Ministério das Relações Exteriores).

The research focused on the Ministry of Foreign Affairs' Intellectual Cooperation Division books¹⁵, responsible for all the activities that encompassed educational, scientific and technical international cooperation. Since the first programme, PEC-G, was created in 1965¹⁶, the documental research started looking for documents from this period backwards, at the Itamaraty's Central Archive to understand the transformation of the cultural agreements into Programmes.

The documents are rich in information about the agreements stressing their objectives and the biggest difficulties related to them. Most of the documents are communications between the Foreign Policy Secretary, the Chief of the Intellectual Cooperation Division, and the Chief of the Cultural and Political Department, and the Chief of the Cultural and Information Department. The Foreign Ministry had (and still have) a special division to take care of cultural, scientific and educational matters. Since 1960, those documents consistently show that Brazil uses culture, science and education as foreign policy tools aiming to spread the Brazilian culture, to create bonds, and to build a good image in foreign countries. As already stressed, it is aligned with the French cultural diplomacy (RUFFINI, 2017) that targeted Brazil as well (SUPPO, 2000).

Among the most important expedients of the Brazilian cultural diplomacy are publications (e.g. Brazilian Foreign Policy, doc.8¹⁷), Brazilian Centers (doc.18) and the Cultural Agreements (eg. docs.3, 4 and 5) that encompassed science and education, in line with the French cultural diplomacy. As a result of those agreements, the Foreign Ministry normally used to give scholarships to international higher education students, and many of these documents show a considerable influx of these students coming from various countries, especially from Latin America and Africa (e.g. docs.5 and 12).

It's worthy to stress that Brazil had four different Presidents from 1960 to 1965, the interregnum this part of the documental research at Itamaraty could cover. Juscelino Kubitschek, (1956-1961), Jânio Quadros (1961), João Goulart (1961-1964), and Humberto Castelo Branco (1964-1967) and, even having all these changes, including a Military Government, this policy approach was a constant in the internal communications—and points to a constant since the first agreements were signed.

The research showed the Brazilian cultural diplomacy as not only quite old, coming consistently from 1930's, but as a smart foreign policy move that encompassed science and education perspectives in a broad

¹⁵ Predecessor of the Education Division at the MRE.

¹⁶ Both programmes were created during the dictatorship: the PEC-G programme was created in 1965, soon after the military coup in 1964; and the PEC-PG was created during the last military government of the dictatorship, in 1981.

¹⁷ The documents appear in the Annex 1 in a Summary Table, and their picture are annexed in the same order.

vision aiming to build common ground between Brazil and other countries. Culture, science and education were diplomatic tools, and the policy of celebrating Cultural Agreements appeared steadily with the concern of binding them to “the political and economic interests of the country” (Annex 1, doc.5). In 1964, the Educational Commission of the Itamaraty is clear about the political orientation of these Cultural Agreements and the scholarships, since the Foreign Ministry is a “political organism that has its attention towards education as a mean for a foreign policy promotion and not as an end in itself” (doc.24).

The aim of promoting a positive image of Brazil abroad is also clear when the Chief of the Cultural and Information Department stresses his concern to the Foreign Policy Secretary about the difficulties Nigerian students under Cultural Agreements had when trying to enrol in Brazilian universities (doc.17). The importance of the perception of legitimacy is clear as he states that this “could cause the worst impression on Nigeria, turning the scholarships counter-productive”, highlighting the policy requirement of legitimacy in order to be effective.

Another important indicative of the use of science and higher education as foreign policy tools is the communication of Albino Peixoto that stressed the need to prevent the students that came under the agreements of practicing their career in Brazil, or the “spirit of the Agreement would be perverted” (doc.20). The same subject appears when the Cultural Division Chief asks for a new Cultural Agreement with Colombia, since Colombian institutions weren’t recognizing Brazilian degrees (doc.2). Since the objective was to build a positive image of the country abroad using the scientists and students as vectors and links, the Foreign Policy Ministry aimed to create mechanisms that could prevent these students under these agreements to stay in Brazil, and that their degrees would be recognized in their origin country.

The documents also show the significant increase in the number of students since 1960. This led the Foreign Ministry’s departments claim for the creation of Committees to give assistance to the students and to celebrate de Cultural Agreements in a standardized way. The difficulties of managing those students without a legislation that could give order to this crescent influx of international students coming from different agreements is related in a communication to the Chief of Intellectual Cooperation Division in 1964 (doc.25). In this document, Albino Peixoto affirms Brazil brings 600 students per year from the Latin America under Cultural Agreements, according to the policy designed by the Cultural and Information Department – if the students stay around 5 years, the number of students-agreement in Brazil totalise 3.000 to be managed by the Department, revealing the necessity of systematisation since the signature of the Agreements.

These numbers indicate the size and the importance of the cultural diplomacy, which encompassed science and educational diplomacy, led by the Brazilian government. The first Program Student Agreement¹⁸—to undergraduate students—was created in 1965 as an answer to Brazilian interests in using education and science as foreign policy tools embodied in the Cultural Agreements since the decade of 1930. It was created as a juridical umbrella to the successful policy of bilateral Cultural Agreements aiming not only to tackle management issues, but also to standardize and integrate the educational foreign policy with the

¹⁸ The Program for Partner Undergraduate Students (PEC-G) was officially established by Decree No. 55613 (BRASIL, 1965), and is currently governed by Decree No. 7948 (BRASIL, 2013), which was designed to provide further legal force to PEC-G’s regulation.

political and economic interests of the country. And its Soft Power, or influence features, not only appear since the celebration of the individual Agreements, but also in the creation of the Program – remaining until nowadays, as it will be shown in the next item.

PEC-G is currently administered by the Ministry of Foreign Affairs (MRE), through the Division of Educational Themes, and by the Ministry of Education (MEC), in partnership with higher education institutions throughout the country. After the first programme, a second programme was created focusing on Graduate students, denoting the success of first initiative. The Program for Graduate Students (PEC-PG) was officially established in 1981, with its first protocol, and updated in 2006¹⁹.

The programs' guiding documents indicate that their main objective is to cooperate in the training of human resources in developing countries. However, the Brazilian National Graduation Plan, hereafter PNPG 2011-2020 (CAPES, 2010), and official statements from Itamaraty authorize the understanding of PEC-G and PEC-PG as scholarship programs that do not only have development/assistance goals, but also political goals, for they intend to build long-term bilateral relations and positive perceptions regarding Brazil. In other words, they are expected to influence the transnational arena through individuals.

Brazil dedicates an entire chapter of the PNPG 2011-2020, an integral part of the National Education Plan (PNE), to the internationalization of Brazilian graduate studies and international cooperation focused on the exchange of researchers: foreigners coming to Brazil, as well as Brazilians going abroad. The official objectives of the Plan are the development of researchers, the institutions they belong to, and their respective countries. Besides, the internationalization of higher education is expected to “increase Brazil's role in the international scenario” (CAPES, 2010, p. 303).

The page of the Ministry of Foreign Affairs of Brazil presents a discourse consistent with that of PNPG, as it depicts educational cooperation as a political instrument, whose objective of projecting Brazil internationally with a solidarity image is expressly stated:

Cooperation in educational matters is a political instrument to promote the rapprochement between States through their societies. Brazilian initiatives in this area in partnership with other developing countries contribute to project Brazil as a country whose international action is solidary. Additionally, coexisting with other cultures, learning foreign languages and exchanging experiences lead to the formation of an environment of integration and mutual knowledge, fostering greater understanding, respect for diversity and tolerance (BRASIL, 2018²⁰).

Historically, the Brazilian position towards other countries has been consistent as to the non-strengthening of military power—the most traditional source of material power according to the realists; the

¹⁹ The program is currently administered by three agencies: Ministry of Foreign Affairs (*Ministério das Relações Exteriores—MRE*), through the Division of Educational Themes (*Divisão de Temas Educacionais—DCE*); Ministry of Education (*Ministério da Educação e Cultura—MEC*), through the Coordination for the Improvement of Higher Education Personnel (*Coordenação de Aperfeiçoamento de Pessoal de Nível Superior—CAPES*); and the Ministry of Science, Technology and Innovation (*Ministério da Ciência, Tecnologia, Inovações e Comunicações—MCTIC*), through the National Council for Scientific and Technological Development (*Conselho Nacional de Desenvolvimento Científico e Tecnológico—CNPq*) (BRASIL, 2006).

²⁰ Translated from Portuguese: *A cooperação em temas educacionais é um instrumento político para promover a aproximação entre os Estados por meio de suas sociedades. Iniciativas brasileiras nessa área em parceria com outros países em desenvolvimento contribuem para projetar o Brasil como país cuja atuação internacional é solidária. Ademais, a convivência com outras culturas, o aprendizado de idiomas estrangeiros e a troca de experiências levam à formação de um ambiente de integração e conhecimento mútuo, propiciando maior compreensão, respeito à diversidade e tolerância* (BRASIL, 2018).

development of soft power (SOARES DE LIMA; HIRST, 2006); and the influence of the international agenda through *institutional* environments (MELLO, 2012, 2011). In this sense, Mello (2012), for example, affirms that the Brazilian aspiration to a permanent seat in the United Nations League in the 1920s was a historical antecedent in the country's diplomatic behaviour, marked by its insertion in multilateral fora as a mediator between strong and weak actors.

This mediating role between the strong and the weak is consistent with its long-lasting intermediate position in the hierarchical system of international power. This position also means that Brazil has to deal with different pressures, expectations and demands from different directions and from various international actors: on the one hand, it has a commitment to defend the rights of the smaller countries that it supposedly represents; on the other hand, it individually claims recognition equivalent to that of great powers.

Brazil's desire to influence the international order and regimes should be understood mainly in terms of smart strategies using mostly soft resources of power, based on strategies of attraction, especially avoiding the use of military power in its demands (SOARES DE LIMA; HIRST, 2006). Thus, it is possible to affirm that Brazilian foreign policy historically has favoured processes of persuasion and attraction, building cooperation channels.

Conclusion

Power is a complex concept, and its exercise involves the interplay of behaviours and resources available to each actor, depending on the evaluation of each situation through cost-benefit estimation. The literature explains patterns by creating concepts of power; soft power, hard power, and the most recent, *smart power*, as the smart choice between the tools at our disposal—or combination of tools—depending on the situation.

This definition seems to fit perfectly in the Brazilian foreign policy approach during the last century by smartly using culture, science and education as soft power resources available to build strong and strategic relationships, to project a good image abroad, and to overcome regional frictions. The Brazilian smart strategy paved the way for regional integration, and for making Brazil an important player in the world, especially influent in the region.

Recently, the literature has increased its attention to the use of education, science and technology as foreign policy/diplomatic tools, and to the use of cooperation programmes as assets to create connections in different levels. We advocate that Brazil has been largely using this *modus operandi* since the decade of 1930's, by signing bilateral agreements expressly aiming science, cultural and educational cooperation in order to maintain or to restore links between countries when political tensions did not allow traditional diplomacy to express itself fully.

Given the massive number of international researchers and students in Brazil as a result of these agreements—therefore, the steady success of the policy—the cultural agreements were developed into higher education programmes, the PECs, to standardize procedures and to allow an effective management of such cooperation. The programmes are still functioning in Brazil, despite the many ideological changes in the Brazilian governments.

These findings, far from closing any perspective regarding the theme, points to the importance of more research: a) to measure the impact of this foreign policy—based on Cultural Agreements and the National Exchange Programmes; and b) to analyse the historical moment around the signature of each bilateral agreement to better understand eventual specificities. Also, more research about other developing countries' science diplomacy seem much needed to enlarge the concept, showing a multidimensional approach beyond the developed countries' perspective normally found in the literature.

REFERENCES

- BALDWIN, D. A. Power Analysis and World Politics - New Trends versus Old Tendencies. **World Politics**, v. 31, n. 2, p. 161–194, 1979.
- CAPES, FUNDAÇÃO COORDENAÇÃO DE APERFEIÇOAMENTO DE PESSOAL DE NÍVEL SUPERIOR. **Plano Nacional de Pós-Graduação - PNPG 2011-2020**. Brasília: CAPES, 2010.
- BRASIL, MINISTÉRIO DA CIÊNCIA E TECNOLOGIA, MINISTÉRIO DA EDUCAÇÃO E MINISTÉRIO DAS RELAÇÕES EXTERIORES. **Protocolo do Programa de Estudantes-Convênio de Pós-Graduação (PEC-PG)**. Brasília, 2006. Available at http://www.dce.mre.gov.br/PEC/PG/Protocolo_PECPG.pdf. Access on 20 may. 2016.
- BRASIL, MINISTÉRIO DAS RELAÇÕES EXTERIORES. **Cooperação educacional**. Brasília, DF. Available at: <http://www.itamaraty.gov.br/pt-BR/politica-externa/cooperacao/3687-cooperacao-educacional>. Access on 25 jun. 2018.
- BRASIL, PRESIDÊNCIA DA REPÚBLICA DO BRASIL. **Decreto no 55.613**. 20 jan. 1965.
- BRASIL, PRESIDÊNCIA DA REPÚBLICA DO BRASIL. **Decreto no 7.948**. 12 mar. 2013.
- CANDEAS, Alessandro Warley. Relações Brasil-Argentina: uma análise dos avanços e recuos. **Revista Brasileira de Política Internacional**, v. 48, n. 1, p. 178-213, 2005.
- DAHL, R. A. **The Concept of Power**. Behavioural Science, v. 2, n. July, p. 201–215, 1957.
- GRANATO, Leonardo. As relações bilaterais argentino-brasileiras no quadro da integração regional: de um quadro de rivalidade ao despertar de uma efetiva cooperação. **Cadernos de Estudos Sociais e Políticos**, v. 1, n. 2, p. 69-95, 2012.
- HURRELL, Andrew. Hegemony, liberalism and global order: what space for would-be great powers?. **International affairs**, v. 82, n. 1, p. 1-19, 2006.
- HURRELL, Andrew. Narratives of emergence: Rising powers and the end of the Third World?. **Brazilian Journal of Political Economy**, v. 33, n. 2, p. 203-221, 2013.
- JERVIS, R. **Perception and Misperception in International Politics**. [s.l.] Princeton University Press, 2015.
- KEOHANE, Robert O. Stephen Krasner: Subversive Realist. **Back to Basics: State Power in a Contemporary World**. Oxford: Oxford University Press, p. 28-53, 2013.
- KEOHANE, Robert O.; NYE JR, Joseph S. Power and interdependence in the information age. **Foreign Aff.**, v. 77, p. 81, 1998.
- SOARES DE LIMA, Maria Regina ; HIRST, Monica. Brazil as an intermediate state and regional power: action, choice and responsibilities. **International affairs**, v. 82, n. 1, p. 21-40, 2006.

- MELLO, Flávia Campos. O Multilateralismo na Política Externa Brasileira. **Carta Internacional**, v. 7, n. 2, p. 163-173, 2012.
- MELLO, F. DE C. **O Brasil e o multilateralismo contemporâneo**. [s.l.] Texto para Discussão, Instituto de Pesquisa Econômica Aplicada (IPEA), 2011. Available at: <http://www.econstor.eu/handle/10419/91092>. Access on 26 out. 2015.
- NAIM, M. **O Fim do Poder**. Brazil: Leya, 2013.
- NYE JR, Joseph S. **Soft power: The means to success in world politics**. Public affairs, 2004.
- ROSTOKS, T. **Forms of Russian and EU power in the New Eastern Europe. In: The different faces of soft power: the Baltic States and Eastern Neighbourhood between Russia and the EU**. Riga: Latvian Institute of International Affairs, 2015. p. 8-29.
- RUFFINI, Pierre-bruno. **Science and Diplomacy: a new dimension of international relations**. New York City: Springer International Publishing Ag, 2017. Available at: <https://doi.org/10.1007/978-3-319-55104-3>. Access on 17 jun. 2020.
- SUPPO, H. A política cultural da França no Brasil entre 1920 e 1940: o direito e o avesso das missões universitárias. **Revista de História**, n. 142-143, 2000: p. 309-45.
- SANTOS, Raquel Paz dos. Relações Brasil-Argentina: A cooperação cultural como instrumento de integração regional. **Estudos Históricos (Rio de Janeiro)**, v. 22, n. 44, p. 355-375, 2009. Available at: <https://doi.org/10.1590/s0103-21862009000200003>. Access on 17 jun. 2020.
- SKOLNIKOFF, Eugene B. The political role of scientific cooperation. **Technology in Society**, v. 23, n. 3, p. 461-471, 2001.
- SUCHMAN, Mark C. Managing legitimacy: Strategic and institutional approaches. **Academy of management review**, v. 20, n. 3, p. 571-610, 1995.
- THE ROYAL SOCIETY, & AAAS. (2010). **New frontiers in science diplomacy**. 2010. Retrieved from https://royalsociety.org/-/media/Royal_Society_Content/policy/publications/2010/4294969468.pdf. Access on 17 jun. 2020.
- TUREKIAN, V. et al. **The Emergence of Science Diplomacy**. In: LLOYD, D.; PATMAN, R. (Eds.). Science Diplomacy: New Day Or False Dawn? Singapore: World Scientific, 2015. p. 3-24.
- TUREKIAN, Vaughan; LORD, Kristin M. The science of diplomacy. **Foreign Policy**, v. 5, 2009.

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ABSTRACT

The use of soft power resources in smart strategies, has been usually linked by the literature with developed countries due to a perspective in which—especially—soft power is seen as an extension of hard power. However, Brazil, a developing country, has been signing Cultural Agreements since 1930s aiming to use science and education as diplomatic tools. This paper aims to give an historical perspective to the Brazilian science diplomacy through the signature of these bilateral cultural agreements since de 1930's, and its development into education diplomacy in the 1960's. We show in this paper that Brazil created a strong science diplomacy, embedded into its cultural diplomacy, by relying on the creation of a legitimate narrative based on culture, science and education as an alternative for its lack of hard power. These cultural agreements were developed into national exchange programmes focusing mainly on higher education students since 1965, and they exist still nowadays—as one of the world longest science (and education) diplomacy strategies of its kind, creating a successful and steady foreign policy managed by the Brazilian diplomatic body.

Keywords: Foreign Policy; Power; Science Diplomacy; Education Diplomacy.

RESUMO

O uso de recursos de soft power em estratégias inteligentes, geralmente tem sido vinculada pela literatura aos países desenvolvidos devido a uma perspectiva em que - especialmente - soft power é visto como uma extensão do hard power. No entanto, o Brasil, um país em desenvolvimento, assina Acordos Culturais desde a década de 1930, com o objetivo de usar a ciência e a educação como ferramentas diplomáticas. Este artigo tem como objetivo dar uma perspectiva histórica à diplomacia científica brasileira através da assinatura desses acordos culturais bilaterais desde a década de 1930 e seu desenvolvimento na diplomacia educacional na década de 1960. Mostramos neste artigo que o Brasil criou uma forte diplomacia científica, incorporada à sua diplomacia cultural, baseando-se na criação de uma narrativa legítima baseada na cultura, ciência e educação como alternativa à sua falta de força. Esses acordos culturais foram desenvolvidos em programas de intercâmbio nacional focados principalmente em estudantes do ensino superior desde 1965, e ainda existem hoje em dia - uma das estratégias de diplomacia da ciência (e da educação) mais longas do mundo, criando uma política externa bem-sucedida e estável, administrada pelo órgão diplomático brasileiro.

Palavras-chave: Política externa; Poder; Diplomacia Científica; Diplomacia da Educação.

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