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POLITICAL ANALYSIS OF THE PURCHASE AND TECHNOLOGY TRANSFER PROCESS FOR GRIPEN FIGHTERS

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Introduction

This article aims to present a descriptive study from a qualitative perspective through a bibliographical analysis, according to Coutinho (2014), which aims to discuss the political process of purchase and Technology Transfer (TT) of GRIPEN NG fighters. For this, we resort to the study of the decision-making process involving interrelationships between the main actors, consensus, interests and values. The goals is to present some reflections about the results of the political game that had taken place during the FHC, Lula and Dilma governments, to verify their relationship with the neoliberal political-social project and its actors in the international sphere. As a guide for this study, questions are presented, which must be answered throughout the text referring to political actors: Who were these actors? How did political actors act? What are the reasons for their actions?

In Political Analysis (PA), beliefs, values, ideas and political objectives are variables that must be taken into account, in order to explain, among other aspects, the reasons why they undergo changes over time (Sabatier and Jenkins-Smith 1993). Thus, it is considered that belief systems determine the direction of public policies (PP). Political groups, here called *advocacy coalitions*, eventually use political strategies, technical and scientific information to change the views of other political groups (coalitions), according to a certain system of beliefs, interests, and values.

This work rescues aspects pointed out by Ham and Hill (1993), regarding the way of carrying out the Political Analysis, as it discusses how

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the process of purchasing GRIPEN NG fighters emerged historically, how this PP was implemented and what results or consequences were reached because of this process. As for the concept of ideology used in this research, the view of István Mészáros is considered, a theme extensively analyzed in his work "The power of ideology", being understood by him as a form of social consciousness specific to a social class or political group (Mészáros 2012).

In Brazil since the beginning of the 21st century, S,T&I (Science, Technology and Innovation) policies, despite showing a certain appreciation of public policies (PP), maintain a preponderance guided by the emphasis on market mechanisms (Viotti 2008). According to Dagnino (2010), the BDI, due to its particularities, Latin America and the Caribbean (LAC) has a low adherence to the logic of innovation centered on the private company, despite defending it in its political-ideological discourse.

For Dardot and Laval (2016), neoliberalism cannot be explained only as a type of economic policy, but also as a normative system, which has expanded its influence in a systemic way, in all social relationships and spheres of life. This system governs behavior, and relationships with others and with oneself, which orders all relationships (including between institutional actors) to follow the market model. For more than 30 years, this rule of life has also governed public policies.

The criticisms of most heterodox economists regarding the efficiency of neoliberal policies for the social and economic development of a country are widely known. In particular in Brazil, an ideological legacy of military governments, especially since the 1964 military coup, materializes in pressures characterized by this belief system mixed with authoritarianism. In this way, it is observed in the political-ideological discourse of increment of the national defense industry, through the purchase of imported weapons, the fragile democratic character that this would represent. However, it is necessary to understand the complexity of the political game involved in public policies, because according to Serafim and Dias (2012) the State is not completely dependent on society, but there is also no complete autonomy, which is considered normal in modern democracies. So, the question would be: what kind of democratic participation would we be talking about? Certainly, it does not refer to a conception of direct democracy, but a type of democracy that would depend on a kind of "proxy" given to a group that defends an ideology to achieve social and economic development, which would be in favor of a majority. It would remain for society to verify the effectiveness of this policy in the long run.

According to Dagnino (2010) the Defense Industry Revitalization Network (DIRN) was the main political-ideological element that acted in

the form of a *lobby*, and that gained ample space in the media during the Lula government. His belief system was mostly published in major national newspapers.

As a deepening in the understanding of these specificities, other studies such as Dagnino (2009); Dagnino and Dias (2007); Dias (2005) highlight the problem of accepting a triumphalist view of Science and Technology (S&T), as well as the need to reorient S,T&I policies towards a democratizing bias, considering the social and economic development of peripheral countries, especially Brazil. According to this view, the mere investment of huge resources in science and technology would already be capable of generating social and economic development, disregarding the existence of economic growth without employment or with the generation of unemployment. This is a very controversial and complex topic that has always required attention, especially in the field of Science, Technology and Society studies, since its origins in the 1960s and 1970s. In this sense, this article goal is to present some reflections for the case study of the purchase process and TT of the GRIPEN NG fighter jets, which aims to contribute to the strategic intelligence of the Armed Forces and to the interests of the Brazilian sovereignty.

In addition to other relevant aspects, according to Dias (2014), this controversial view that was raised by PLACTS (Latin American Thought in Science, Technology and Society) in the 1970s, with Renato Peixoto Dagnino as one of its main representatives, provides an important counterpoint to microeconomic studies focused on experiences. of private companies that characterize the conventional approach of the countries of Europe and North America. In fact, this vision constitutes an inconsistent basis for the formulation of public policies, considering the peripheral condition of Latin America and the Caribbean (LAC), which results in a different behavior of private companies in relation to innovation. As a result, Brazilian private companies do not see innovation as something important and profitable for their businesses, as they prefer to import foreign technology. This different behavior of Brazilian industry is called peripheral condition, which is historically unfavorable in relation to central countries (Dagnino 2020).

Table 1 presents the two conceptions dealt with in this study: the predominant and hegemonic conception that governs S,T&I policies for the IDB (Industrial Defense Base) and the vision close to PLACTS, associated with the belief system with a democratizing and social bias, which this work shares.

Table 1: Comparison between the concepts discussed in the present study

Belief Elements	Hegemonic conception	PLACTS
Overview	Conception based on the Theory of Innovation, entrepreneurship, and meritocracy.	Society is determinant in science and technology and not the other way around.
Design of technology	Emulation of S,T&I in relation to the so-called advanced countries.	Emphasis on technology developed with democratic participation and social inclusion. Technologies focused on problem solving.
Who should produce S,T&I	Scientists, engineers, entrepreneurs and businessmen	Scientists, social groups, public companies, or individuals.
Protagonists of policy	Scientists, government and business	Scientists, government, companies, NGOs, organized civil society.
Strategy of Implementation	Entrepreneurial vision of the free market (neoliberal), with the support of the "strong" non-interventionist State.	Emphasis on cooperativism or associativism
Technological Diffusion	Technology transfer	Sociotechnical adequacy

Source: Rodrigues et al. (2020) with adaptations.

From the perspective of PLACTS, according to Galante and Mari (2020), especially the one from the intellectual Jorge Sábato, who despite valuing the participation of the State and state-owned companies in the economy, was a critic of what he called the "military party", when referring to the US military-industrial complex. This was due to Sábato´s democratic convictions and his belief that science and technology should address the social and economic needs of the population through a national developmental path. According to Dias (2014), the members of PLACTS have the understanding that the scientific and technological backwardness of Latin America would be a consequence of its economic and social problems, as opposed to the linear offerist vision that understands science (and technology) as being deterministic of economic and social development. This vision takes into account the need for a national development project that opposes the S,T&I

policy oriented exclusively to private interests, as is the case of the Innovation Law (Law n. 10.973/2004) . As an example, this law emulates US policies and favors private companies, to the detriment of the particularities of Latin America in its peripheral condition. Another point is the lack of distinction between national and foreign companies, both having the same prerogatives and rights (Dias 2014).

According to Dagnino (2016), the following excerpt explains how the relationship between "quality" and "relevance" works in technoscientific production in advanced countries, while in peripheral countries, the scarcity of signs of relevance from civil society results in a fragile and almost non-existent National Innovation System. The dysfunctionality of the Brazilian university is a reflection of the emulation of "quality" and "relevance" that is given to scientific and technological research in so-called advanced countries.

> The United States, in the 1980s, spent 70% of public resources on research in the military area. Added to the expenditure that went to nuclear and aerospace energy, it reached 85%. The remaining 15% was for agriculture, health, etc. But there was no doubt that the American public (or the *establishment* that represented it) at that time believed this to be important. There was a sign of relevance and scientists did with quality what was considered important. That is, in developed countries, relevance is essential, necessary and ex ante. Quality is supplementary, not necessary and ex post. Quality, therefore, is not universal: it is socially constructed. In our case, we have a situation and a peripheral condition, where companies do not carry out research and the State and social movements do not demand new knowledge, strong signals of relevance are not emitted. Currently, the public university orients its teaching and research in an exogenous way. The research agendas and criteria are attempts to emulate what is done in the most prestigious universities in developed countries. This takes place as an imitation of what is called "dynamics of exploration of the world frontier", but which in reality is a process that produces an increasingly monopolized knowledge, which is seen as universal and neutral (Dagnino 2016, 40).

In the US, for example, the military-industrial complex was constituted in the period of the Second World War, as it showed its relevance for society. Society and the government understood that there was a need to stop the advance of fascism and Nazism that was awakening in Europe, in addition to which this could harm the expansion of international trade in this country. In LAC, these signs of relevance would not be effective enough to be identified by universities and public teaching and research institutes, given their peripheral condition.

Technology Transfer, Actors and Political Forces

A "state-of-the-art" TT process can be highly complex and demands several negotiations in which a multitude of variables are at stake. If these variables are not properly equalized, these can lead to negative results for both parties in play, or one of them simply can achieve no advantage in that matter. The licensed technology must be transferred without limitations, and still maintain other advantages for the company that owns the patents. It is essential that the technological parts can be transformed into other products capable of generating innovations in the civil area (Barbosa 2010).

Some important authors such as De Souza et al. (2019) state that technological projects of a military nature, such as the acquisition of Swedish fighter jets (GRIPEN NG), can generate technological autonomy (contributing to the export of Defense Material -DM), inserting Brazilian companies in the development processes and production and would be able to generate thousands of jobs. It is enough to know if in fact these results will be consolidated in the coming years, since data on this issue have not yet been found.

On the other hand, a more detailed analysis, based on Dagnino's (2010) view, the IDB has been moved much more in terms of a theoretical discourse based on a belief system. This condition should be rethought because the insertion of Brazilian private companies in the manufacture of defense technologies is very small when considering the Brazilian Gross Domestic Product (GDP). Thus, this situation has resulted in great technological dependence on the so-called advanced countries and the jobs generated by the IDB have been small or, in some cases, non-existent (Dagnino 2010). In this sense, it is reasonable to say that the TT can only fully occur, on the supplier's side, if the technological race is won.

It would be naive to think that this would be easily sold at the cost of just a pecuniary sum, but it actually comes at the expense of military and strategic advantages, as a function of the principles of national sovereignty of foreign powers. Typically, TT occurs when the supplier country already has more advanced technology than the one being sold. The technological gap, even if small, is an inexorable reality to the TT process, this is easily verified, in the case of the purchase of GRIPEN fighters by Brazil, in the delay of the purchase process, starting in 2010 and only completed in 2020 with the signature of the contract. Table 2 below presents the chronology of the planning and negotiation, culminating with the purchase of the Swedish fighters, until the present TT process (in progress) with a current delivery

deadline until 2024.

Table 2: Comparison between the concepts discussed in the present study

Government	Date	Main Events
FHC	1995	**Policy arena/ Problem identification / PP Planning Phase. Conformation of the agenda in the FHC government.** The FHC government creates the FX project with the aim of replacing the outdated FAB F 2000 mirage fighters.
LULA	2003	**Policy arena/ PP Planning Phase/ Agenda setting in Lula's government.** Cancellation of the FX project by the Lula government
	2006	**Policy arena/ Formulation of the PP/ Planning Phase of the PP/ Conformation of the agenda in the Lula government.** Lula government announces FX2 project
	2008	**Policy arena/ PP Planning Phase/ Agenda setting in Lula's government.** Title of article: Instead of buying, FAB will build hunting. Source: O Estado de São Paulo, 05/18/2008, Nacional, p. A8
	July 2009	**Policy arena/ PP Planning Phase/ Agenda setting in Lula's government.** Brazilian parliamentarians travel to France to get to know the Rafale fighter up close. President Lula publicly declares that this is the only company interested in talking about a possible TT.
	September 2009	**Policy arena/ PP Planning Phase/ Agenda setting in Lula's government.** A series of negotiations take place between Brazil as an interested party in the purchase and the other countries as bidders: Sweden, US and France.
	October 2009	**Policy arena/ PP Planning Phase/ Agenda setting in Lula's government.** With the statement by Minister Nelson Jobim, at a political level, Brazil's perception of the importance of Technology Transfer increases after Sweden's offer at a lower price and with the fact that 40% of the planes can be manufactured in Brazil.
	November 2009	**Policy arena/ Setting the agenda in Lula's government.** New expanded offers from France postpone the decision and intensify competition between the countries offering the technology.
	January 2010	**Policy arena/ Setting the agenda in Lula's government.** A technical report is issued by the FAB declaring the Swedish fighter Gripen NG as the best purchase option.

DILMA	November 2013	**Policy arena/ Setting the agenda** Budget proposal worth 8.4 billion dollars is sent with the National Congress
	December 2013	**Policy arena / Setting the agenda** The budget reporter informs that there is no forecast for the purchase since it is not considered a priority as a political project for that moment.
	December 18th, 2013	**Phase of the formal process of the PP/Conformation of the agenda** "The Gripen was selected after analysis of operational, technical, logistical, cost and technology transfer aspects. The report prepared by the Brazilian Air Force had 33,000 pages and included analyzes of industries, projects and a team made up of pilots, engineers, logistics officers and other specialties." (Revista Asas, 2020)
	October 27th, 2014	**PP Formal Process Phase/PP Execution.** Signing of the contract, published in the Official Gazette of October 24, 2014. (Revista Asas, 2020) and (Defesanet, 2015)
	September 20th, 2020	**Phase of the formal process and PP Execution.** Arrival of the first fighter jet in Brazil (Revista Asas, 2020)
	Term of the TT contract	**PP execution** 2024

Source: Own elaboration based on data from Jornal Estadão (2013); Vasconcelos (2019, 282); Wings Magazine (2020); Aero Magazine (2014); Defensenet (2015), Monteiro and Nogueira (2008).

According to Serafim and Dias (2012), the policy cycle is supported by many authors as consisting of five phases, the first three being the most important because they characterize the rationality of a PP and involve disputes (policy policy). arena): 1. problem identification; 2. setting the agenda; 3. formulation; 4. implementation and; 5. Policy evaluation. Therefore, in the PA of the purchase process of GRIPEN NG fighters, according to Table 2, the identification of the problem in mid-1995 in the FHC government and the conformation of the agenda in the sense of postponing the expenditure, due to the strong posture of "reduction" of the State in that government.

The conformation of the agenda is identified in Lula's government from the year 2003 onwards, when it cancels the old FX Project, started in the FHC government. It is believed that this decision already provided for a modification in this PP, pointing to a possible increase in spending in this sector, certainly due to pressure from the DIRN. However, the change in the name of the project (from Project FX to Project FX2) would have occurred

as a form of explicit policy, since in essence the genesis of the previous government remained the same, which was the modernization of the old FAB Mirage F2000 fighters by more modern jets. However, it was, to a certain extent, with a bias contrary to the idea of the Minimum State, which advocates the reduction of public spending. Before 2013, the competition would have occurred between the Rafale F3 fighter of the French company Dassault, the Super Hornet F-18 of the American Boeing and the GRIPEN NG of the Swedish Saab.

According to Ferreira and Medeiros (2016a), it is not possible to think about the implementation of PP independently of the policy formulation, and in different circumstances such processes may be intertwined. This results in the fact that, regarding the period of formulation of the PP, it can be said that it started in the Lula government in 2003, but in the previous government (FHC) there was already some incipient planning, but the pressures for the acquisition of the fighters may not have were sufficient to face the strong neoliberal discourse prevailing at that historical moment, this is confirmed by the low value initially proposed in the FX Project, (US$ 700 million), when compared to the expenditures foreseen in the Lula and Dilma administrations (Jornal Estadão 2013).

It is noteworthy that the Swedish company Saab has offered a compensation agreement worth US$9 billion in company investments in Brazilian factory facilities for the production of fighter jets (Vasconcelos 2019, 282). It remains to be seen what the posture of future governments in relation to these investments will be, more precisely in terms of the increase in new technologies, policies to protect the national defense industry and the DM export policy, in the sense of compensating for the high expenses in the purchase of GRIPEN NG fighters. These results would need to be closely monitored by civil society, since it pays the taxes that allow these PPs to exist.

In the opinion of Unicamp researcher Dr. Marcos José Barbieri Ferreira, the possibility of completing the technological development in the construction of the fighters in Brazil, with the engineers of the FAB, would make the TT even more promising for Brazil. According to Table 3 below, Embraer's participation in the partial assembly of 23 fighters in São Paulo countryside is highlighted, with 13 units being assembled with the participation of 46 engineers from FAB, trained to work in partnership with Saab in Sweden. As of 2021, 15 units will be assembled entirely at Embraer (Vasconcelos 2019, 282). The efficiency and effectiveness of the TT process in the purchase process of GRIPEN NG fighter jets was closely linked to the existence of EMBRAER as a public and national company, and less of the private capital IDB, since according to Ferreira (2016b) this company alone is

responsible for more than 80% of the revenues of the group of companies in the sector, making the production chain of the Brazilian aeronautical industry highly dependent on EMBRAER.

Table 3: Final results of the purchase of Gripen fighters.

Total units	Models	Offset program	Amount
Pack of 36 jets Gripen NG (Delivery of the last jet in 2024)	28 Gripen E single-seaters 8 Gripen F two-seaters	Saab's investment in manufacturing companies in Brazil; Training of engineers and pilots in Sweden.	US$ 4.1 billion (BRL 15.5 billion)

Source: Vasconcelos (2019, 282).

Table 3 shows the results of the purchase of Gripen fighter jets, representing an investment far beyond what was initially budgeted in the FHC administrations (R$ 700 million) and in Lula´s government (R$ 2 to 3 billion). This would perhaps have caught the attention of newspapers and representatives of the judiciary and would have led to contestable versions of possible embezzlement of resources in the Workers' Party governments. This fact illustrates the importance of the PA and of considering the aspects linked to the peripheral condition of Latin American countries pointed out by PLACTS, since a review of these data explains that the greatest damage would not be in the possible damages to the treasury due to corruption, but to the serious political actors associated with the game of global power, in a context of growing neoliberalism, with the expansion of hunger and social inequality.

The DIRN (lobby), which according to Dagnino (2010), is a network formed by public (mainly military) and private actors (businessmen, journalists, and researchers) who participated of the DIRN 's political game since the beginning of the Lula government. Borelli and Dos Reis Peron (2017) discuss the reasons for the return of this discourse from the year 2000.

One piece of evidence that characterized this political game of the GRIPEN NG fighter purchase process as being almost exclusively of a political-ideological nature, according to Magalhães (2016), was that the two actors that established contradictory relationships were the Itamaraty and the Ministry of Defense, which would point to a political fragility of that period:

> He called "Imperfect Synthesis" the relations between the Itamaraty and the Ministry of Defense during the Fernando Henrique Cardoso

> administration. That is, the interaction between defense and diplomacy was mainly characterized by the absence of an integrating element that manifested itself through a comprehensive political consensus and capable of producing long-term guidelines on the role to be played by Brazil in the world. The National Defense Policy (PDN) of 1996, according to Alsina, constituted a document that cannot even be classified as a Policy, since, in the absence of clear guidelines emanating from the political power, the PDN only reflected traditional positions of the Chancellery and the Armed Forces: "The PDN did not represent, therefore, any significant constraint to the continuity of poorly articulated sectoral policies pursued by diplomats and military personnel. In the end, an imperfect synthesis was produced between foreign policy and defense policy". (Magalhães 2016, 84).

The fragility of the articulation between foreign policy and defense policy seems to be very clear at that historical moment, which would lead to a difficulty for the State to benefit from the process of purchasing GRIPEN NG fighter jets, either for the defense of its national sovereignty, or for the defense of your military industry.

In the process of purchasing GRIPEN NG fighter jets, a more formal and technical part of the policy (planning) was assigned to the Brazilian Air Force (FAB), while the politics was influenced by several different bodies, such as EMBRAER, the National Congress, the mainstream media, the Public Ministry, the Presidency of the Republic, internal actors of the Judiciary and especially the DIRN.

According to Dagnino (2010), the IDB consisted of a group of 100 to 150 companies in the 1980s. According to the Ministry of Defense (2014a) this is defined as "the set of state or private companies that participate in one or more stages of research, development, production, distribution and maintenance of strategic defense products - goods and services that, due to their peculiarities, which can contribute to the achievement of objectives related to the security or defense of the country." To date, it is still unknown how these companies will be stimulated, benefited or involved in any process of generating innovation and economic and social development. With the research carried out by this article, it was possible to verify that no objective data was clearly exposed on this point until the year 2022, the researched journalistic sites do not make more in-depth comments on this point.

Means of Communication

For some reason, when the FX project was created by the FHC government in 1995, there was some pressure from the media and FAB. However, nothing compares to the pressure exerted during the following Lula and Dilma administrations, since there are no studies with the objective of to clarify the political game that involved the IDB and the FHC government. Perhaps the defense coalition mentioned by Dagnino (2010) was not yet formed, but it is necessary to consider that the party in power was aligned with the thinking of those who formed the coalition in the Lula government, with a view to acquiring weapons (DIRN).

According to Barbosa (2010), FAB already had the intention of continuing the FX2 project from 1998 onwards. However, in early 2010, already under Lula´s government, the newspaper Folha de São Paulo had access to a report by a FAB technician, which indicated the preference of this military institution for Swedish fighters. The purely journalistic controversy arose from the fact that a few months earlier the president had made a statement to the media of his political preference for the French Rafale fighter jet (Barbosa 2010). This would have triggered a series of newspaper articles that culminated in the accusation that PT governments had the intention of diverting financial resources from the process of buying the fighter jets. This process culminated with the judicialization of the acquisition process against President Lula and that also involved President Dilma.

In 2013, some controversy persisted in the newspapers (Table 2). In an article published by Jornal Estadão (2013) there is an attempt to explain to the reader what actually happened and what are the possibilities of Lula´s government involvement in corruption in this case. In view of the critical position of the aforementioned Journal, it becomes evident that the controversy still persisted until the year of the aforementioned article and that it was possibly the result of a system of neoliberal beliefs, which contested the high expenses with the purchase of fighters, something atypical in federal government policy up to that time.

According to Berdu (2016), in June 2013, the British newspaper The Guardian released information leaked by Edward Snowden. Such information mentioned the existence of espionage in the form of recordings that took place at meetings of President Dilma Rousseff. Certainly, this influenced decision-making in some public policies in Brazil, and one of them was the choice to purchase Sweden's Gripen NG fighter jets, which came about at the expense of purchasing North American fighter jets from Boeing, at the conclusion of

the FX Project. -two.

According to Berdu (2016) the decision to buy Gripen fighters followed several technical, operational, logistical parameters, final and maintenance costs, TT and job creation, with reports of about 33 thousand pages with opinions from pilots, engineers, and other experts. However, according to the theoretical framework adopted in this article, it is undeniable that there was also a decision of an eminently political nature by President Dilma at that time. Here, we emphasize the importance of the format of this decision, which took place before the report was prepared. Despite also being based on a more "progressive" system of beliefs, it seems obvious to see that political-ideological interests permeated them, even if not identifiable under a given study perspective.

Furthermore, as stated by Mészáros (2012) and Albornoz (1997), in addition to numerous other authors, there is no neutrality in the institutions that represent the State, much less on the part of the newspapers that, mostly, represent the interests of the oligarchies and the capital. The approach defended by Albornoz (1997) has as one of its assumptions the defense of the concept of "social innovation", since it understands that innovation is the result of a much more complex process than that defended by a hegemonic and exclusively economic vision, or innovationist. This process depends not only on purely economic actors such as companies and States, but also on a vast social fabric capable of sustaining innovation, for which greater democratic participation in the elaboration of public policies in S,T&I would be essential. S,T&I policies in Latin America have been created according to an uncritical transport of models that correspond to the reality of the so-called advanced countries, which are part of different realities in relation to Latin American countries.

International Defense Material Trade

For Dunne and Uye (2014) the influence of the arms trade and military spending on the economic growth of countries is very complex and depends on several channels, such as training of human resources, factors related to capital investments, type of technology, relationships external. In line with Ambros (2017), studies in general do not present a clear consensus regarding the real economic advantages for countries, and some authors consider that defense activities are capable of even inhibiting economic growth. Even so, these channels can have positive or negative effects, depending on a variety of factors, often uncontrollable by governments and their policies, which make

investments in the defense industry something uncertain and risky.

In this sense, Dagnino (2010) argues that the IDB has an eminently deficit character, so that it is always linked to a political decision and never an economic one. Spending on Defense Material (DM), in most countries, causes them to be moved to export in order to amortize military spending.

Interestingly, and in order to confirm the view presented here, a study by Dunne and Perlo-Freeman (2003) points out that there was little change in military spending in developing countries during and after the Cold War, even those countries that had non-hostile neighbors. This can be considered an indication of the merely political-ideological character (which could be linked to the legacy of the Cold War) regarding the State's actions with regard to policies related to the IDB. On the other hand, this could lead to some reflections about the real interests under the cloak of the Cold War concept, which can be much more linked to the economic interests of certain military groups, whether private or political.

This data can also point out that, as in Brazil, the political and ideological motivations for the growing global ID have not regressed and that they can move through mechanisms of compensation of expenses through exports and imports. Therefore, these compensation mechanisms can be very profitable for countries. However, as Dagnino (2010) points out, they have been much more interesting for the US and less interesting for Latin American countries. Brazil buys more than it sells and has no major reasons for this, as is the case with Venezuela, which has reason to buy, as it is a country that needs to invest in military defense due to its enormous geopolitical and strategic potential in oil, and the international political disputes arising from its characteristics.

Dunne and Perlo-Freeman's (2003) reflections on keeping military spending at similar levels before and after the Cold War, analyzed together with Dagnino's (2010) studies, lead us to think about how much the countries of the South (mainly Latin Americans) are guided by the foreign arms export policy adopted by the US. In a way, this shows another side of the cultural and technological dependence experienced by peripheral countries. For Dunne and Perlo-Freeman (2003), there were no significant changes in this regard after the fall of the Berlin Wall, which shows the prevalence of US economic interests due to its military-industrial complex.

Following the study carried out by Dagnino (2010), from 1989 to 1999, the participation of the United States of America (USA) as an exporter of Defense Material (DM) has always been the highest in the Americas. According to Herrera-Lasso (1987, 129) between 1977 and 1980, Brazil imported US$ 641 million compared to exports of US$ 421 million in armaments. According to data from USACDA (2000) cited by Dagnino (2010), from 1997 to 1999

Brazil was the largest importer of DM in Latin America, ranking first with US$ 980 million. Curiously, the second place went to Venezuela, which always had as a political motivation the fact that it is one of the countries with one of the largest oil deposits in the world. In view of its greater economic strength in relation to other Latin American countries, due to its size and natural resources, Brazil's higher expenditures are justifiable. However, there was not necessarily a greater development of the IDB and the development of autonomous military technology in this period.

According to Mészáros (2012), the US military-industrial complex caused an international historical influence to the point of being an important supplier of weapons to many countries with which it had closer relations, and this fact would still persist to the present day. As a result, there was an important economic compensation for this country when a part of the countries became important importers of DM. On the other hand, cases in Latin America, such as Brazil, export less than they should in terms of DM, in order to compensate for the exorbitant expenditures of ID, which have not generated spin-off spillovers.

FHC, Lula and Dilma Governments

According to Dias (2012), the FHC government was marked by a S, T&I policy of emulating practices used in developed countries, dismantling a large part of the state structures implemented in previous periods, aligning the legal framework with that practiced at the international level, in particular in countries of the global North. The discourse of technological innovation (innovationism) gained strength with the expressions "entrepreneurship", "business incubators" and "technology parks". Concomitantly with these approaches, the emphasis on the idea of "increased spending on R&D activities" and "university-company partnership" especially defended by the research community (Dias 2012) was strengthened at an explicit policy level. In that historic moment there was a significant rise of the neoliberal project.

In Lula´s government, regarding the IDB, the Theory of Innovation was also a predominant discourse, despite criticisms of neoliberalism made by the PT, mainly to embody arguments in favor of an increase in military spending (Dagnino 2010).

Following the approach of Bachrach and Baratz ([1962]2011), in view of the approach of these authors on the pluralist face of power and considering the political procedures and established rules of the game according to Dagnino's (2010) view, it can be inferred that, during the FHC administration, a kind of

non-decision-making was possibly configured .

The pluralist theory, according to Dahl (1961), cited by Ham and Hill (1993, 47), points out that "the sources of power are unevenly but widely distributed among individuals and groups". In the case of the PA in the process of purchasing the GRIPEN NG fighter jets, this can be seen from the fact that, from 1995 until the end of its government, there was not enough pressure to carry out the purchase of the jets ("invisible face of the power "). It should be noted that the DIRN already existed in that period, as noted in Dagnino (2010). The DIRN would have acted as a pressure group, which promoted cooperation with the FHC government in order not to generate conflicts with this government, since it can be assumed that both political forces were on the same ideological side (conservative right).

In the view of Bachrach and Baratz ([1962]2011) the fact that a government does nothing about a problem is also a way of doing public policy. For Ham and Hill (1993) the absences of decision also need to be studied in the AP. Based on these assumptions, it is clear that the FHC government was characterized by a typically neoliberal policy of the Minimum State, including omission on the part of the Executive Branch in some fundamental areas such as health and education (Dias 2012). Therefore, the failure to make a decision regarding the abandonment of the FX Project by the FHC government is a political fact to be considered in the present study.

Conclusions

The arguments presented in this study reinforce the approach presented in Dagnino (2010) and show the relevance of this author to the PA of the IDB. With regard mainly to the political-ideological bias of the decision-making process of the PPs, which received support from the Defense Industry in the Lula Government. This same tendency overflows to the Dilma government regarding the purchase of the GRIPEN NG fighter jets, as well as the continued existence of the DIRN in the Lula and Dilma governments. The importance of the purchase process and TT of the GRIPEN NG fighters and its contribution to the National Defense is undeniable.

However, as a main result, this work brings to light another perspective on what were the real motivations that culminated in the execution of the purchase contract and TT of the GRIPEN NG fighters, which helps to enrich the debate. For hegemonic thinking, it was the most successful DM purchase in the history of Brazilian aeronautics, and for a counter-hegemonic thinking, one of the examples in which ideological aspects were predominant, to the

detriment of values linked to social and economic development.

Through this study, it is possible to perceive, according to Dye's (1992) view, that public policies tend to shape public opinion, being much more common the fact that public opinion contributes little in the construction of public policies. In this sense, the existence of a political game that is inherently little participatory, in a democratizing sense, is preponderant, and this was observed in the analysis of the performance of the media.

The process of purchasing of the Swedish fighter jets followed an internationalized conception of DM, even if these interests were not North American, as President Dilma tried to avoid, due to leaks disclosed by Eduard Snowden (Harding 2014). To a certain extent this shows a certain fragility of the unipolarity represented by the US.

Our dependence is closely linked to historical processes that were directly linked to international interests and to the rise of neoliberalism in the world (Ocampo and Flores 2016). It is a problem of chronic dependence, which cannot be overcome exclusively from a vision of neutrality and determinism of capitalist technoscience (S,T&I triumphalism). More than that, it is necessary for the State to be the great direct promoter of the economy, whether in the improvement of health infrastructure, transport, communication, etc., even in strong interventions to overcome poverty, illiteracy, social exclusion, and degradation of nature, themes that could even be considered more important in the current historical moment. This alone would justify the debate exposed in this article in the field of studies of the CTS.

In general, the position of the media, represented by the main newspapers such as Jornal Estadão, O Globo and Folha de São Paulo, played a political-ideological role, with the purpose of only drawing the reader's attention to possible corruption in the Lula and Dilma governments. In comparison, there was little technical analysis and virtually no deeper economic analysis with national interests in mind. On the other hand, the newspapers Defesanet, Revista Asas and Revista Aero magazine presented a more technical and bureaucratic vision, hiding a supposedly militaristic and neoliberal approach, which could easily go unnoticed by unobservant eyes of some readers. If the major newspapers with national circulation claim a certain non-existent neutrality, those with lesser circulation bring a certain appearance of "technical neutrality". This framework promotes the reproduction of a triumphalist vision of science and technology in the case of the purchase process and TT of the GRIPEN NG fighter jets, a vision that needs to be the object of greater discussions in academic research in order to guarantee greater strategic intelligence for the Armed Forces when it comes to the purchase of DM and the guarantee of national sovereignty.

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ABSTRACT

This article aims to present a descriptive investigation from a qualitative perspective through a bibliographical analysis to discuss the political process of purchase and Technology Transfer (TT) of GRIPEN NG fighters. The research is presented in the form of a Political Analysis (PA) of the political game involving the main actors linked to the Brazilian Defense Industry (BDI) during the governments of Fernando Henrique Cardoso (1995 - 2002), Luiz Inácio Lula da Silva (2003 – 2010) and Dilma Rousseff (2011 – 2016). We resorted to the study of the decision-making process involving interrelationships between the main actors, consensus, interests and values. The study made it possible to identify and analyze the main political actors, how did they act in the political game? For what motivations did they act? The process of purchase and Technology Transfer (TT) was discussed, its advantages and difficulties and how some of the means of communication proceeded, highlighting some characteristics of the international Defense Material (DM) trade that are relevant for a better understanding of the approach raised and some similarities and differences between the FHC, Lula and Dilma governments, given this type of public policy formed during their governments. This work raises another issue, little remembered behind the scenes of the purchase process and TT of the GRIPEN NG fighters, due to the partial view of the media, not pertaining to the economic interests of the US military-industrial complex and often hidden by interests and values of the political environment given the intrinsic characteristics of these actors. This is another aspect that justifies the need to plan and evaluate public policies for the acquisition and TT of DM, primarily aiming at the interests of defense, national sovereignty, and socio-economic development.

KEYWORDS

Purchase process; Technology transfer; Gripen NG; Policy.

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