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**BRAZIL, THE NON-PROLIFERATION
TREATY AND LATIN AMERICA AS A
NUCLEAR WEAPON-FREE ZONE**

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PAULO WROBEL

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Signature of the “Agreement Concerning Cooperation in the Field of the Peaceful Use of Nuclear Energy”, at Bonn, Germany, in 27 July 1975. Seated: Antônio Francisco Azeredo da Silveira (Ministry of External Relations of Brazil) and Hans Dietrich Genscher (Foreign Ministry of Germany). Standing to the left: Paulo Nogueira Batista (2°), Shigeaki Ueki and others. CPDOC/Arquivo Paulo Nogueira Batista.

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PRESENTATION

The decision taken by the Editorial Board of the Alexandre de Gusmão Foundation to publish Paulo Wrobel's 1991 Ph.D. thesis, *Brazil, the Non-Proliferation Treaty and Latin America as a Nuclear Weapon Free Zone* reflects both the quality of the academic research he submitted to the Department of War Studies of King's College in London and the fact that his work remains relevant almost thirty years after its approval. The book is part of the collection "Brazilian Foreign Policy" along with other seminal works edited by Funag, such as those by Gerson Moura, Maria Regina Soares de Lima and Andrew Hurrell.

By publishing this book, Funag makes another scholarly work available to a wider audience interested in the hurdles and challenges of international coexistence. The publication analyses the evolution of Brazil's policies towards the nuclear non-proliferation regime. It addresses both the negotiations of a nuclear non-proliferation treaty, completed with the NPT in 1968, and the process of conclusion only a year earlier of the Treaty of Tlatelolco that established a Nuclear Weapon-Free Zone in Latin America and the Caribbean, the first of its kind in a densely populated region.

The main argument developed by the author throughout his investigation is that Brazil's search for the development of nuclear technology did not result from an alleged nuclear arms race neither from a clear project to build an atomic weapon. Wrobel integrates

the military, political and economic dimensions that form the nuclear issue in a broader approach, and in his concluding remarks states that:

[...] developing nuclear technology to acquire nuclear weapons was not the main motivation behind Brazil's complex and unstable nuclear program. The main motivation behind Brazil's attempt to gain access to the complete nuclear fuel cycle was peaceful, despite the existence of a military dimension. [...] The attempt to master advanced technologies, a basic idea of Brazil's national security notion, was seen as a fundamental step for upward international mobility ("Conclusion", p. 320-321).

The study – that had only partially appeared in a few academic articles – is now published in full and prefaced by one of the most experienced Brazilian diplomats in the matter, Ambassador Sergio Duarte. Besides providing a meticulous and precise reading of Wrobel's thesis, Duarte presents a brief analysis of the evolution of multilateral negotiations on nuclear disarmament, non-proliferation, and on other weapons of mass destruction since 1991, when the thesis was defended.

The current importance of the topic can be attested by the decision of the General Assembly in 2016, in its Resolution 71/258, to convene an international conference to negotiate a legally binding instrument to prohibit nuclear weapons, leading towards their total elimination. The conference to be held in New York, from 27 to 31 March and from 15 June to 7 July, was meant to congregate representatives of Member States, international organizations and civil society in order to establish general prohibitions and obligations as well as a political commitment to achieve and maintain a nuclear-weapon-free world.

As the Brazilian Minister of Foreign Affairs, Aloysio Nunes Ferreira, recently said in an editorial article about this Conference:

“to Brazilian diplomacy, the defense of nuclear disarmament, more than a strategic option, constitutes a moral imperative and a constitutional obligation” (*Folha de S. Paulo*, 27/03/2017). Wrobel’s thesis addresses this dimension of principles and values of our foreign policy, as stressed by Minister Nunes Ferreira. The scholar explains the strong Brazilian opposition to the NPT during the first decades of its existence:

The right to conduct peaceful nuclear explosions became a question of principle to Brazil [...]. Acquiring the access to the complete nuclear fuel cycle and ‘keeping open the nuclear path’ were the main reasons for the policy of not joining the regime. Brazil did not want any constraint in its search for modern technology, and the right to conduct peaceful nuclear explosions became the perfect symbol of independence in the nuclear field (“Conclusion”, p. 325-326).

The thesis’ subject is of lasting interest to scholars, students and professionals of international relations. Its current relevance rests clearly confirmed by the recent publication of another work: *The Universal Obligation of Nuclear Disarmament* by Professor Antônio Augusto Cançado Trindade, International Court of Justice’s judge, based on his dissent vote on the case of the Marshall Islands against the nuclear powers.

Before closing, I wish to thank Professor Wrobel, for authorizing the publication of his thesis; Ambassador Sergio Duarte, for his invaluable support to the project; Eliane Miranda Paiva, for her editorial assistance; and Lorena Borges, for the careful proofreading of the manuscript. I should also express my appreciation to Luiz Antônio Gusmão and acknowledge his role in the original proposal to edit and publish this book.

Sérgio Eduardo Moreira Lima
President of the Alexandre de Gusmão Foundation



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PREFACE

Written in 1991 and submitted to the Department of War Studies of the King's College in London, Paulo Wrobel's well-documented Ph.D. thesis deals articulately with the history of the evolution of the Brazilian policy regarding the nuclear weapon non-proliferation regime up to that time. Having participated in the work of the former Eighteen-Nation Disarmament Committee (ENDC)¹ as a member of the Brazilian Delegation during the debates on the elaboration of a treaty aiming at curbing the proliferation of those weapons, I had the opportunity to witness the very active performance of Brazil in the search for recognition by the draft treaty then under discussion of its main concerns in the field of the utilization of nuclear energy. Even before the start of the work of the ENDC on the original text jointly proposed by the two co-chairs of the organ (the representatives of the United States and the Soviet Union) Brazil had suggested at the General Assembly of the United Nations the negotiation of a treaty to prohibit nuclear weapons in Latin America. The result of the activity of the ENDC between 1965 and 1967 was the remittance to the General Assembly, under the authority of the two co-

1 The creation of the ENDC resulted from an understanding within the United Nations that restructured the predecessor organ (TNDC – Ten Nation Disarmament Committee) composed of five members from NATO and five from the Warsaw Pact. To those eight countries were added (Burma, Brazil, Ethiopia, India, Mexico, Nigeria, Sweden and United Arab Republic) that did not belong to any of the two military alliances. Later, the ENDC was reorganized under the name of Conference on Disarmament and has today 65 full members and several observers..

-chairs, of a draft non-proliferation treaty that had not obtained the consensus of all members of the Committee. Meanwhile, the negotiation of the regional Latin-American instrument to prohibit nuclear weapons was concluded between 1966 and 1967. The treaty became known as Treaty of Tlatelolco, after the name of the seat of the Mexican State Secretariat for Foreign Affairs, where it was solemnly signed on February 14 1967. For its part, the draft Treaty on the Non-proliferation of Nuclear Weapons (NPT) was discussed at the 22nd Session of the General Assembly which finally endorsed and recommended it to the signature of States by means of Resolution 2373/XXII with 95 votes in favor, 4 against and 21 abstentions (including Brazil). It entered into force in 1970 upon the deposit of the 40th instrument of ratification.

Paulo Wrobel's dissertation traces minutely and with academic impartiality the evolution of the multilateral debate on those two important instruments and of the main elements of the position taken by Brazil and other Latin-American countries with regard to the NPT and the Treaty of Tlatelolco. It also describes the reasons why some semi-industrialized nations, including Brazil, were considered during several years as possible candidates to develop a military nuclear capability. Finally, it studies the bilateral relationship between Brazil and Argentina, especially in the nuclear field. The main argument developed by Wrobel in this final section is that the desire to master nuclear technology has complex motivations and in the case of Brazil must be understood in its historical context. The conclusion of the scholar is that the search for the acquisition of nuclear technology by Brazil had peaceful objectives and did not result from an alleged nuclear arms race with Argentina and neither from a clear project to develop atomic armament. The critical attitude of Brazil toward the NPT during the first few decades of the existence of this instrument can be explained as the product of a national security concept that

includes access to high-end technology as a matter of national survival and fundamental requirement for advancement in the international system.

Considerations of this kind were undoubtedly at the basis of the Brazilian decision not to sign the NPT and not to waive the requirements of paragraph 2 of Article 18 of the Treaty of Tlatelolco that were needed for the latter to enter into force for Brazil. The Brazilian government only came to reconsider those decisions a few years after the elaboration of the thesis and therefore the events after 1991 are obviously not analyzed in Wrobel's paper.² It is well known that in 1994 Brazil formally waived those requirements and became a party to the Latin American treaty, which entered into force for the whole region in 2002. In 1996 Brazil signed the Treaty on the Non-proliferation of Nuclear Weapons. Through Legislative Decree no. 65, of July 2 1998 the National Congress ratified the Brazilian accession to that instrument and clarified that "the adhesion of Brazil to this Treaty is linked to the understanding that, according to Article VI, effective measures aiming at the cessation, at an early date, of the nuclear arms race, with the complete elimination of all atomic weapons". This understanding has guided the action of Brazil in the several multilateral forums that deal with issues of disarmament, non-proliferation and nuclear security.

General aspects

Wrobel begins by analyzing the logic of a non-proliferation regime and discusses several sets of arguments that represent different approaches to the management of non-proliferation and the world order. He acknowledges previously that divergences of a theoretical and political nature have contributed to the

2 The final part of this presentation includes a summary of the multilateral evolution of the treatment of questions relating to nuclear non-proliferation and disarmament from 1991 to the present.

disagreement over the best way to manage a non-proliferation regime. Among the several partial proposals relating to disarmament and arms control, both within the scope of the United Nations and in other contexts, this chapter deals with the idea of zones free of nuclear weapons understood as instruments to increase national and regional security through the control of armaments, reducing tensions in a given region and at the same time as a contribution to global security by prohibiting the production and possession of the most destructive and destabilizing weapons.

The researcher considers the main premises of a non-proliferation regime and the criticism raised by many countries that its intrinsically discriminatory nature puts into question the utility of a nuclear weapon free zone. In this view, such a zone would be nothing but a device invented by the central countries to promote their own interests, increasing the complexity of the debate. The perceived injustice of a non-proliferation regime led to the argument of the “freezing of world power” represented by the establishment and defense of a system of world stability and order that gave certain privileges to a small group of militarily powerful nations that possessed a technology denied to the wide majority. The impossibility of separating completely the peaceful and military dimensions in the evolution of nuclear technology made highly difficult for several countries possessing relatively advanced nuclear programs to accept the idea of a non-proliferation regime. The notion of “responsible leadership” and of a certain hierarchy in the world order was supposed to qualify some countries as candidates to a place in the circle of the privileged ones and at the same time raised the question that nuclear weapons had a moderating effect in the behavior of the possessors, condemning the remainder to a perpetual situation of second-class powers.

The dissertation analyzes the arguments espoused by Kenneth Waltz and Joseph Nye Jr., respectively stemming from

a “neo-realist” vision in the case of the former scholar and from an “interdependent” one in the case of the latter. Nye considered that the unchecked expansion of nuclear technology represented a grave risk for the stability of the global order, while Waltz believed that besides the rulers of the nuclear countries other world leaders might learn to deal with the possession of nuclear weapons as a deterrent, as the five possessors recognized by the NPT had done. Wrobel concludes that Nye’s approach against horizontal proliferation and put more actively into practice by the Carter administration in the United States resulted in a polarization of positions in the international debate. The dissertation mentions the French and Indian examples of seeking and obtaining autonomously the mastery of nuclear explosive technology as an essential element to raise the international status and the prestige of both countries, as well as to reinforce their capacity to take sovereign decisions in the international context. Although France did not participate in the debates on the NPT at the ENDC it was included by the authors of the draft treaty in the category of “nuclear weapon State”, that is, those that had detonated an explosive device by the deadline of January 1 1968. India, an active participant in the work of the ENDC since the creation of this organ, only carried out one experimental detonation in 1974 with a “peaceful device”. As we will see below in the present comments, the idea of a differentiation between a nuclear “weapon” and a “peaceful device” was accepted in Tlatelolco but not in the NPT. The latter instrument does not contain a definition of a nuclear “weapon”.

Wrobel describes the genesis of the plans for the establishment of nuclear weapon free zones starting from a Soviet proposal in 1956 that contained the idea of prohibition of the emplacement of nuclear armament on a region to be defined in the two Germanys, although this suggestion was in fact considerably far from a

true zone of prohibition of such weapons. In the following year the Polish minister of Foreign Relations Adam Rapacki promoted the first plan to define geographically a zone of this kind. In 1961 the United Nations General Assembly adopted a resolution³ on the denuclearization of Africa as a result of the conduct of French tests in the Sahara desert. In September 1962 the Brazilian representative at the Assembly, Afonso Arinos de Melo Franco, suggested the expansion of the idea in order to include Latin America. This was the first time when the issue of the establishment of a zone free of nuclear weapons in the Latin American continent was brought to the international organization. Only in 1975, long after the conclusion of the Treaty of Tlatelolco, did the General Assembly adopt a comprehensive and coherent definition of what constitutes a zone free of nuclear weapons, based on a study carried out by a group of experts.

The dissertation points out the difficulties found at the United Nations to turn the theoretical acceptance of the idea of nuclear weapon free zones into specific recommendations for practical application in other regions of the world. It mentions the special circumstances that explain the success of the negotiation of the Treaty of Tlatelolco and the able conduct of the negotiations, which required important concessions on the part of some countries in the region. In Wrobel's view the main conditions existing in Latin America that made possible the star of the negotiation were: a) the region's legalist tradition that favored multilateral arrangements; b) the existence of a collective security pact with the United States (Treaty of Rio de Janeiro, 1947); and c) the relative absence of inter-regional tensions and frictions. In highlighting the resistance of several international actors to the extension of the Latin American example to other parts

3 Resolution 1652 (XVI). It is interesting to stress, as does Wrobel, that among the Latin-American countries only Brazil and Cuba voted for this resolution.

of the world, the author mentions the success of the Treaty of Rarotonga that established the South Pacific free zone in 1985. The other existing zones (Africa, Southwest Asia and Central Asia) that encompass 113 countries, the majority of which are in the Southern Hemisphere were the product of initiatives taken after the elaboration of the dissertation. In the next chapter the scholar analyzes thoroughly the Latin-American security context and the peculiarities of the continent. He also notes the importance of the eruption of the Cuban missile crisis that gave a decisive push to the negotiation already proposed within the United Nations.

Brazil, the NPT and the Treaty of Tlatelolco

The fourth chapter of the thesis is devoted to the examination of the Brazilian nuclear policy and its relationship with the positions adopted by Brazil during the debate of the Treaty on the Non-proliferation of Nuclear Weapons and the negotiation of the Treaty of Tlatelolco. In this part of his work Wrobel examines the path followed since the first Brazilian mention to a zone free of nuclear weapons in the 1962 Melo Franco speech and the resolution co-sponsored by Bolivia, Chile and Ecuador that proposed the establishment of a nuclear weapon free zone in Latin America, and shows with a wealth of detail the several stages of the process until the final text of the Treaty. After the Brazilian suggestion, the question was sent to the next Session of the General Assembly. Mexico associated itself to the initiative and the presidents of the five countries published in April 1963 a declaration that announced their decision to sign a multilateral treaty prohibiting nuclear weapons in the region.

Next the dissertation examines the reactions of Cuba and Argentina to the announcement of the Latin American presidents and also that of the Soviet bloc and the United States. The latter was particularly unenthusiastic. The use of the term

“denuclearization” in the declaration could have given the impression that the intention could be a complete rejection of nuclear technology. The scholar considers that the distinction between the peaceful and non-peaceful aspects of a nuclear weapon free zone in Latin America constituted the main concern from the Argentine point of view and became also important for Brazil after the establishment of the military government on March 31 1964. He mentions the rejection of the idea of a free zone by Havana, which previously had supported a Soviet proposal in the same direction, although of a global scope. The Cuban representative at the United Nations spelled out the conditions that would make it possible for his country to participate in the negotiations: withdrawal of the American forces from the base in Guantánamo and inclusion in the future zone of Puerto Rico and the Caribbean islands under American administration, as well as the Panama Canal. Under such conditions it was clear that the negotiation could not prosper. In solidarity with Cuba, all States of the Soviet bloc abstained from supporting at the time the establishment of the Latin-American zone. Wrobel points out that the United States saw in the Brazilian proposal a way to establish some kind of control over Cuba and prevent new deliveries of nuclear missiles and began stimulating the Brazilian representative to continue promoting his idea and to present it again at the next Session of the General Assembly, set to begin in September 1963.

Meanwhile, the Cuban missile crisis was resolved directly by Kennedy and Khrushchev, without “relevant” contributions from third parties⁴. Now supported by the United States and the Western bloc, the 18th Session of the General Assembly adopted

4 Wrobel does not mention the participation of the then secretary-general of the United Nations U Thant. According to an article by Gertrude Samuels in *The New York Times* (December 13 1964) U Thant’s mediation in the missile crisis led President Kennedy to remark: “The world owes a deep debt to U Thant”.

Resolution 1911 on November 29 1963 with 95 votes in favor, none against and 15 abstentions. Submitted by eleven Latin-American countries, that resolution recognized the danger of an increase in the number of States possessing nuclear weapons, mentioned the Declaration of the five presidents and expressed satisfaction for the initiative, together with the hope that the Latin-American States took the necessary steps to transform into reality the objectives of that Declaration. Wrobel comments the political-military impact of the introduction of Cold War rivalries and of questions linked to nuclear armament in a region up to then considered marginal in relation to the wider panorama of the East-West confrontation.

Mexico took the initiative to convene a preliminary meeting in its capital in November 1964 to launch the negotiating process. Wrobel describes the divergences between the Brazilian and the Mexican approaches during the elaboration of the text of the Treaty. The former aimed at preserving explicitly the right to the development and utilization of energy, including with regard to the sensitive question of nuclear explosions for peaceful purposes, while the latter advocated the prompt adoption of a wider prohibition that would not contemplate the possibility of development of the explosive technology. At the time it was believed that nuclear explosives could play an important role in large civilian engineering projects such as opening canals and even the conversion of shale into oil by means of underground detonations. For this reason, by the way, the authors of the draft of the NPT included in their proposal the possibility of providing explosive services to countries defined as “non-nuclear”, as contained in Article V of the instrument.

The dissertation examines in detail the Brazilian arguments in favor of the permission of explosions for peaceful purposes in the Treaty under negotiation, as well as the opposition of the

possessors of nuclear weapons to this possibility. Moscow, Washington and London condemned explicitly the inclusion of Article 18 of the Treaty of Tlatelolco where this permission is embodied. Article V contains the elements of differentiation between a nuclear weapon and an explosive device. Wrobel clarifies that the model for this distinction was a definition elaborated in 1954 aiming at preventing the Federal Republic of Germany from obtaining atomic armament. The scholar points out the Argentine support to the Brazilian position, which became a question of principle for both countries. A prohibition of peaceful nuclear explosions amounted, for Brazil and Argentina, to undue interference in their sovereign rights, since it would close their access to an important aspect of nuclear technology.

The mechanism of the entry into force of the Treaty of Tlatelolco also gave rise to heated debate. The question was finally resolved by means of an unprecedented formula in international arrangements, according to which the Treaty would be in force only when certain conditions were met; but signatories could waive those conditions. The instrument would then be in force for these States, but not for those that chose not to waive the conditions. Wrobel's dissertation was written before Brazil (who had signed the Tlatelolco Treaty in 1967) decided to waive those requirements in 1994 after similar action on the part of Argentina and Chile. The Treaty only became valid for all States in the region in 2002, when Cuba accompanied the rest of the Latin American States in waiving the above-mentioned conditions.

The question of guarantees to be given by the possessors of nuclear weapons that they would respect the free zone and would not use nuclear weapons against the countries in the region was resolved through a Protocol additional to the Treaty to be subscribed by those powers. Upon signing this Protocol the nuclear weapon countries made several reservations and interpretations

that established conditions for providing assurances of non-use of nuclear weapons against the States in the region. Some of those interpretations also deal with the permission to carry out nuclear detonations contained in Article 18. The members of Tlatelolco have sought, so far without success, to promote the revision of those reservations and interpretations and for this objective they seek support from the other existing nuclear weapon free zones. A second Protocol to the Treaty was signed by countries that administered territories located in the zone of application of the instrument.

Relationship between the Treaty of Tlatelolco and the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)

In the following pages the dissertation deals with the relationship between the Treaty of Tlatelolco and the Treaty on the Non-proliferation of Nuclear Weapons from the perspective of the successive Brazilian governments and analyzes the argument of stability and coherence of the positions of Brazil on nuclear external policy matters. Resolution 2028 (XX) of the 20th Session of the General Assembly (1965) had established five principles on which a future treaty on non-proliferation should be based, namely: a) the Treaty should not contain loopholes that could allow proliferation, directly or indirectly, by both nuclear and non-nuclear States; b) there should be an acceptable balance of rights and obligations between nuclear and non-nuclear States; c) the Treaty should be a step toward general and complete disarmament and particularly nuclear disarmament; d) it should contain provisions to ensure its effectiveness; and e) it should not adversely affect the conclusion of regional instruments for the total absence of nuclear weapons in such regions. The scholar argues that Washington and Moscow had promoted a draft treaty that did not take into account the interests and suggestions of third countries

and neither, in the opinion of the latter, the principles contained in that resolution, particularly the second one. He also shows that despite its strong rhetoric in favor of non-discriminatory measures only from 1967 onwards, during the government of general Costa e Silva, did Brazil demonstrate an effective commitment to develop a program of investment in nuclear technology. Suggestions of changes in the US-Soviet draft at the ENDC made by Brazil were not accepted by the two co-presidents, stimulating the Brazilian rejection of the NPT. The draft was seen as an instrument of perpetuation of the imbalances between developed and developing countries and of the hegemony of the big powers to the detriment of the medium and small States. The Brazilian effort to achieve consensus on its proposals in the negotiations on the Treaty of Tlatelolco represented, therefore, a successful attempt at countering the inconveniences and shortcomings perceived by Brazil in the NPT. Several pages of the thesis are devoted to the description and analysis of the different positions adopted by the five nuclear powers during the negotiations of Tlatelolco.

Brazilian and Latin-American nuclear policies

In the final chapter, the researcher examines in detail the relationship between Brazilian nuclear policy and the ways in which different Latin-American countries saw the question of the proliferation of nuclear weapons. It describes and analyzes initially the evolution of Brazilian nuclear policy in the domestic environment and stresses the decision to implement a program of production of energy from nuclear sources. Next, he enumerates the main features of the non-proliferation regime as perceived by its critics, including Brazil, and analyzes the regional view on the issue.

The dissertation goes on to describe the effort of the Brazilian Ministry of Foreign Affairs to fend off accusations of having proliferated intentions by insisting on the peaceful objectives of

its nuclear program and asserting that the country had as much right as any other to keep open its options in this field. It deals with the search for cooperation with countries like France and the Federal Republic of Germany. In 1975 Brazil signed with the latter an ambitious agreement to build eight nuclear plants for the production of electric power. At the same time, Brasilia was striving to acquire the mastery of the complete nuclear fuel cycle in order to ensure autonomy in the fuel supply of the future plants and to be able in the future to participate in the world market of fissile material for the production of electricity and other civilian purposes. Wrobel comments on the American opposition to the Brazilian cooperation with France and Germany, particularly in the period of President Jimmy Carter's administration in Washington.

The genesis of the program known as "autonomous", or "parallel", is ascribed to the arguments developed by a group of Brazilian Navy officers that the country needed to master the technology of uranium enrichment without the restrictions imposed by the trilateral regime of safeguards contained in the agreements with Germany. Not being a party of the NPT, Brazil was not under the obligation of celebrating bilateral safeguards agreements with the IAEA as mandated by Article III of that instrument. The dissertation gives a detailed description of the autonomous program, as its creators and promoters preferred to call it, as well as of the role of the Armed Forces in its development and eventual success. In spite of its many difficulties, mainly of a financial nature, Brazil announced in 1986 that it had succeeded in mastering the full nuclear fuel cycle and was able to enrich uranium for commercial purposes, thus avoiding external supply sources. Later, as is known, a nuclear fuel plant was inaugurated at Resende, in the state of Rio de Janeiro.

The dissertation argues that the main motivation of the agreement with Germany had not been to obtain fissile material for military purposes. For this, it goes on, a more carefully planned program would have been necessary, under a central authority and utilizing secret installations. Moreover, the German-Brazilian agreement was subject to strict safeguards. In those conditions, the suspicions about the true intentions of the Brazilian government were directed to the autonomous enrichment program. For the researcher, the investment of the Armed Forces in nuclear technology did not contemplate primarily the production of fissile material for military purposes. The explanation of the Brazilian attitude of rejection of the NPT lies, in his view, in nationalistic motivations to look for a technological base aiming at ensuring the economic and social development of the country.

Brazil-Argentina relationship in the nuclear field

The relationship between Brazil and Argentina in the field of nuclear technology is discussed in the final section of this chapter. The author begins by examining the argument, often raised by some commentators and the foreign press, that Brazilian domestic and external policy was a consequence of a competition between the two countries with a view to regional supremacy, which would explain an alleged “arms race” between them. In fact, he goes on, the approach brings up one single cause that would determine the political, economic and diplomatic decisions taken at the time, without situating them in the wider inter-American context of security and the changes in the global order. It represents, in his opinion, a simplistic view that considers all actions of each of the two countries through the angle of rivalry. Although acknowledging that there is a certain element of truth in the assertion that some decisions may be taken as having derived from a competition for regional supremacy, the author warns that it is

necessary to deepen the understanding of the action by both countries in the search for national and regional security and thereby reach more convincing explanations for the objectives of the respective nuclear programs.

Nuclear development in the two countries was stimulated by the American “Atoms for Peace” program through which Brazil and Argentina received equipment and training and felt encouraged to pursue an autonomous development of their capabilities. The stability and continuity of the nuclear policy of our Southern neighbor explain, for Wrobel, the initial success of its program, while in Brazil progress was slowed by frequent changes in the administrative structure and in the organization of the government agencies dealing with the matter, as well as by financial hardships. However, this should not be seen as a kind of “action-reaction” pattern of behavior; on the contrary, the Argentine example was considered as something to be emulated but to call it an “arms race” would be an overstatement. What in fact occurred, according to the researcher, was a gradual convergence of positions, with both countries seeking a similar objective, that is, the recognition and practical implementation of their right to develop and maintain a national nuclear program. Wrobel shows that although the Brazil-Germany agreement had been signed at a time of open divergence between Brazil and Argentina about the use of the water resources of the Plate basin it was not criticized in the Southern neighbor: even the Argentine Armed Forces took a position of support and defended the right of Brazil to conquer nuclear technology. It should be recalled that both countries had strong reservations to the Non-Proliferation Treaty, which they considered discriminatory and harmful to their interests. Although some sectors of opinion in Argentina has misgivings about the Brazilian economic expansion during the 1970’s, Buenos Aires understood that joint resistance against the pressure imposed

by the NPT regime was more important than stimulating those fears. During several years simplistic and biased comments from specialists mainly in the United States and Western Europe spread the idea that there existed a latent confrontation between Brazil and Argentina, like a historical fatality, a kind of carbon copy of other situations like the Cold War and the regional rivalries in the Middle East, Asia and Africa⁵.

Once the contentious episode about the rivers flowing from Brazil into Argentina was solved, the bilateral relationship entered into an extremely constructive phase that made possible the agreement to create the customs union on which MERCOSUL is based. Wrobel mentions the importance of the action by presidents José Sarney and Raúl Alfonsín and stresses the relevance of the measures aimed at preparing economic integration and particularly the initiatives taken by both countries to strengthen mutual confidence through visits and meetings of representatives of the agencies in charge of the respective nuclear programs and armed forces to discuss questions related to cooperation in the development of atomic industry and defense issues. In no other field, he stresses, cooperation was more deeply debated and attained a higher degree of progress than in the nuclear domain. With a difference of less than two years Argentina and Brazil reached the autonomous mastery of the fuel cycle and exchanged information at the highest level about these feats before they were publicly announced. Cooperation, rather than competition in the nuclear field became the means to circumvent the barriers imposed by the non-proliferation regime and was the most powerful symbol of the rejection of those obstacles.

5 For these commentators, an arms race between Brazil and Argentina would be the inevitable consequence of that situation. Still today these speculations sometimes resurface, fueled by the firm attitude taken by Brazil against new attempts at hardening the mechanisms of vigilance on the nuclear peaceful activities of countries that do not possess atomic armament, without sufficient counterparts on nuclear disarmament.

In the view of the researcher, an overall appraisal of the Brazil-Argentina nuclear relationship brings out the complexity of economic and political integration, the avowed objective of the process set off in the Southern Cone of South America. Despite such complexity, he concludes that the actions developed by the two countries in the nuclear field – which could have been a rich terrain for discord in a regional climate of competition – in fact contributed to the strengthening of friendship and collaboration between both of them. In this part of his dissertation the scholar identifies an “anti-NPT axis” in the diplomatic action of the two countries that reached its peak during the military regimes and particularly between 1970 and 1980.

Paulo Wrobel’s dissertation encompasses events up to 1991, when it was written. As is well known, Brazil and Argentina concluded in that year the pioneer agreement that resulted in the creation of the Argentine-Brazilian Agency for Accounting and Control of Nuclear Materials (ABACC) hailed as a model to be emulated by other regions. Both countries ended by acceding to the NPT without stopping their criticism of its negative aspects. Argentina and Brazil continue to carry out close bilateral cooperation and act in coordination in the multilateral organs of the United Nations system.

The current panorama

During the 26 years since the elaboration of Paulo Wrobel’s dissertation there were important developments in the multilateral treatment of the issues of nuclear disarmament and non-proliferation and other weapons of mass destruction. The paragraphs below are an attempt at summarizing these events, whose evolution led to the decision of the General Assembly to convene an international Conference in 2017 to negotiate a legally binding instrument to prohibit nuclear weapons in response to a

longstanding aspiration of the wide majority of the international community.

In 1996 the Convention to prohibit the manufacture, stockpiling, possession and use of chemical weapons and compelled their possessors to destroy their stocks under independent verification was successfully concluded. This measure ensured that two categories of weapons of mass destruction – chemical and bacteriological (biological) – are already banned by multilateral treaties of almost universal membership.⁶ It remains to prohibit the third and last category, nuclear weapons, the cruel and indiscriminate effects of which have been the subject of many recent studies.

In the final decade of last century the Democratic and Popular Republic of Korea (DPRK) withdrew from the NPT and started to implement a vigorous nuclear program that until now has produced enough explosive material for six or eight nuclear warheads. The country seems now intent on developing missiles of intercontinental reach able to carry atomic payloads. This situation changed considerably the balance of power in East Asia and generates concern in the defense and intelligence communities in the United States, South Korea and Japan.

India had already carried out a test with nuclear explosives in 1974 and started the development of a nuclear arsenal in 1998. In the same year Pakistan also acquired atomic armament. It is believe that much before, in the 1960's Israel had obtained Western assistance to develop explosive technology without having performed a test detonation. The current estimation is that this country possesses today between 100 and 150 atomic warheads. Israel authorities, however, do not deny nor confirm that officially.

6 Bacteriological (biological) weapons were prohibited by a treaty concluded in 1972.

None of the four countries mentioned in the preceding two paragraphs is a party to the NPT.

Also at the close of the 20th century the Islamic Republic of Iran, a party to the NPT and therefore barred from developing nuclear armament was accused of maintaining a clandestine program allegedly aiming at obtaining such weapons. After several years of negotiations a group of countries (France, Germany and the United Kingdom, plus China, Russia and the United States) succeeded in arriving at an agreement with Iran that restricted the production of highly enriched uranium and increased the frequency and scope of the inspections by the IAEA. The agreement has been criticized by the new American government but the other participants, particularly the three members of the European Union, stand by it. Syria and Libya were also suspected although their advancement in the nuclear field was still incipient.

In the 1960's South Africa started implementing a program that resulted in the production of six nuclear explosive devices for military purposes. There are strong indications that at a certain point the country cooperated with the Israel program. However, with the transition to the government elected by the African National Congress South Africa shut down its non-peaceful nuclear activities and dismantled the arsenal, adhering to the NPT in 1991.

A new treaty was concluded in 1996: the Comprehensive Test-ban Treaty (CTBT), signed by all five NPT nuclear-weapon powers and by a large majority of non-nuclear countries. This treaty prohibits nuclear explosive tests in all environments, complementing the 1963 Partial Test-ban Treaty that had banned tests in the atmosphere. However, the CTBT does not prohibit so-called "subcritical" test, that is, those that do not set off a chain reaction. Moreover, its entry into force is still pending from the

signature and/or ratification of eight remaining countries (among 44 nominally mentioned in the Treaty). These hold-outs are China, DPRK, Egypt, India, Iran, Israel, Pakistan and United States. Nevertheless, the CTBT created a strong taboo against such tests and some nuclear States have been observing declared unilateral moratoria. The DPRK is the only country that tested nuclear explosives after 1998.

In 2009, following a speech by President Barack Obama that declared the commitment of the United States to seek “the security of a world free of nuclear weapons” Washington and Moscow, which jointly possess 95% of all existing nuclear weapons, signed a bilateral agreement to reduce the respective nuclear arsenals. Although there is no independent verification, it is believed that the two countries are complying with the obligations under this pact and that by 2019 the number of weapons on both sides will reach the agreed limits. This did not prevent them however, from proceeding with their programs of “modernization” of nuclear arsenals and devoting efforts to the development of new technologies, such as cyber warfare, unmanned vehicles (drones) and robotics, all of which may soon change completely the methods of waging war. Tensions between Russia and NATO became more acute after 2010 and do not seem favorable to the negotiation of new reductions of nuclear arms.

The United States took the initiative to convene, starting in 2009, a cycle of four plurilateral conferences attended by approximately 50 countries especially invited with the objective of putting together measures to prevent or hamper the illicit traffic of sensitive materials that could be used by non-State actors for terrorist attacks. The result was compiled into unilateral commitments by some States to adopt domestic measures and to reduce or stop the production of highly enriched uranium.

In the multilateral field, the 1995 NPT Review and Extension Conference extended indefinitely the validity of the Treaty in exchange for an agreement on principles in the field of nuclear disarmament, a decision on the modalities of the review of the instrument and a resolution on the convening of a Conference to prohibit weapons of mass destruction in the Middle East. The 2000 NPT Review Conference established a set of “13 concrete steps” toward nuclear disarmament. The 2005 Review Conference ended without agreement on a final document, as had been the case in three prior opportunities. The 2010 Review achieved agreement on 26 recommendations relating to the three “pillars” of the NPT: disarmament, non-proliferation and peaceful uses of nuclear energy. The main new feature of this Conference was the recognition of the concern of States Party with the “catastrophic consequences” on any use of nuclear weapons.

Concern with the lack of concrete progress in nuclear disarmament after the indefinite extension of the NPT was responsible for the initiative to convene in 2013 and 2014 three international Conferences attended by governments, non-governmental entities and individual scientists and experts. The main conclusion was that the harmful effects of a nuclear detonation on populations and the environment would encompass a wide territorial area and the atmosphere. Besides, no country or group of countries would have enough resources to face the ensuing humanitarian emergency. At the 2015 NPT Review Conference, which like four previous others did not achieve consensus on a final document (to a large extent due to the absence of progress on the Middle East Conference mentioned above) 123 countries subscribed a “humanitarian pledge” proposed by Austria to “prohibit, stigmatize and eliminate” nuclear weapons.

At the same time, a large part of the international community was becoming increasingly impatient with the apparent lack of

willingness on the part of the nuclear armed countries and their allies to assume a leadership role in the multilateral efforts toward nuclear disarmament. The increase in the tensions between the two main powers and between regional rivals made more acute the risk of purposeful or accidental use of nuclear armament, including by non-State actors. This situation led many countries, with the support of civil society organizations, to look for new ways to revitalize the multilateral machinery and take forward negotiations for the total elimination of those weapons.

In 2015 Resolution 70/33 of the General Assembly established an open-ended working group charged with developing proposals to take forward multilateral nuclear disarmament negotiations for achieving and maintaining a world free of nuclear weapons. After several working sessions, this Group recommended, with the support of a wide majority of its members, the convening by the General Assembly, in 2017, of a Conference open to all States, with the participation and contribution of international organizations and representatives of civil society, to negotiate a legally binding instrument to prohibit nuclear weapons, leading to their complete elimination. Several nuclear weapon States and their allies did not agree with that recommendation arguing that any process to take forward multilateral nuclear disarmament negotiations should take into account national, international and collective security concerns, and advocating the continuity of the search for concrete steps in the shape of parallel and/or simultaneous compulsory and non-compulsory measures.

In December 2016, following a proposal initially presented by Austria, Brazil, Ireland, Mexico, Nigeria and South Africa, the General Assembly adopted Resolution 71/258 to convene the above-mentioned Conference. The result of the vote was 113 in favor, 35 against and 13 abstentions. The negotiations will be held in New York from March 27 to 31 and from June 15 to July 7. The

rules of procedure will be those of the General Assembly unless otherwise decided by the Conference. It is interesting to note that among the five countries recognized by the NPT as nuclear weapon States (China, France, Russia, United Kingdom and United States) China chose to abstain, while the other four voted against, as did Israel. India and Pakistan, also possessors of nuclear weapons, equally abstained. Finally, the Democratic Popular Republic of Korea (DPRK) did not participate in the vote at the Assembly despite having voted in favor of the same resolution at the phase of its discussion in the I Committee. The Netherlands, a member of NATO also abstained, as did countries like Belarus, Finland and Switzerland.

It is difficult to predict the result of this unprecedented Conference, to be presided over by Ambassador Elayne Whyte-Gómez, of Costa Rica. Many of the proponents of the prohibition of nuclear weapons stress the importance that the negotiations be conducted in a careful and non-aggressive or accusatory way in order not to alienate from the process the possessors of atomic armament. Others advocate a result that makes clear the latter's perceived lack of interest in arriving at workable nuclear disarmament arrangements and that stigmatizes atomic weapons as incompatible with the international norms that regulate the use or armament in conflict. For many, including civil society organizations active in the field of nuclear disarmament, a treaty prohibiting nuclear weapons, even if not subscribed by the current possessors, would strengthen global humanitarian norms and fill the gaps in the existing international legal regime, stimulating the adoption of effective disarmament measures. In any case, the mere holding of this Conference, the first one convened within the scope of the United Nations to negotiate a treaty banning nuclear weapons and leading to their elimination – 72 years after the start of the atomic age – represents by itself a positive and encouraging

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accomplishment that may produce concrete progress in the field of nuclear disarmament.

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INTRODUCTION

This study analyses the evolution of Brazil's policies towards the nuclear non-proliferation regime. Brasilia's posture in relation to the Non-Proliferation Treaty (NPT), completed in 1968, and the Treaty of Tlatelolco – which created a Nuclear Weapon-Free Zone (NWFZ) in Latin America and the Caribbean and was completed in 1967 – has to be understood as the product of a similar rationale. This rationale is presented as the right of a nation such as Brazil to pursue the domination of a complex and advanced technology. Civilian and military elites were equally attracted by the nuclear know-how, understood as essential for the nation's prosperity.

The NPT and the Treaty of Tlatelolco, part of what had been defined as a non-proliferation regime¹, were both the offspring of an international diplomacy for arms control implemented after the Cuban missile crisis of 1962. Nonetheless, each treaty had its own logic and peculiar negotiating process, objective and result.

1 I shall be using the term non-proliferation regime to describe the set of rules and regulations gradually created to manage a complex global issue. The NPT, the Treaty of Tlatelolco, the notion of NWFZ, the London supplier group and so on are part of a whole diplomatic, political and economic joint effort to control the dissemination of nuclear technology. Employing the term is not necessarily to accept the validity of the interdependent paradigm to explain the nuclear issue. For certain aspects of it, a sophisticated realist approach as well as the realist terminology are most helpful. Two of the main representatives of the interdependent and the realist paradigms will be analysed further on. On international regimes see Stephen Krasner (ed.) *International Regimes*, Ithaca, Cornell University Press, 1983. A helpful recent evaluation of the notion of regime to international relations theory is Stephen Haggard and Beth A. Simmons "Theories of International Regimes", *International Organization* v. 41, n. 3, Summer 1987, pp. 491-517.

Brazil is one of the few nations which did not sign the NPT. Despite intense diplomatic pressures since it was opened for signature in 1970, Brasilia had been able to resist, developing a reasonably coherent and nationally supported posture against signing the treaty². The discriminatory nature of the Non-Proliferation Treaty is the basic argument used to justify Brazil's resistance.

Brazil signed and ratified the Treaty of Tlatelolco in 1968, but did not waive some mandatory clauses to become a full member. In its article 28, the Treaty of Tlatelolco contains a mechanism for the treaty's entry into force which allows members that ratified the treaty to implement it only after certain conditions are fulfilled. Brasilia developed a set of arguments to explain and justify her posture for not being yet a full member of a novel experiment, that of Latin America as a nuclear weapon-free zone. At first view, Brazil's non-acceptance to implement fully the Treaty of Tlatelolco could appear a paradox, because she was the original proponent of Latin America as a NWFZ – following the United Nations resolution in favour of Africa as a NWFZ – in 1962. Among other arguments, it is not uncommon to hear ironic commentaries among Brazilian diplomats on the nature of the Tlatelolco Treaty. Because the diplomatic initiative for a NWFZ in Latin America has passed from Brazil to Mexico, it has been seen as an instrument of Mexican foreign policy, serving well Mexican interests, but not the interests of all South American republics.

Since the inception of a nuclear non-proliferation regime, symbolised by the NPT, Brazil and Argentina have been considered

2 A recent work which analysed the Brazilian posture towards the NPT was done by Maria Regina Soares de Lima: *The Political Economy of Brazilian Foreign Policy: Nuclear Energy, Trade and Itaipu*, unpublished PhD dissertation, Vanderbilt University, 1986. In the thesis the nuclear issue is analysed alongside other relevant issues for Brazilian foreign policy under the approach based on the notion of collective goods. In this approach, Brazil has acted as a 'free-rider' towards the NPT, receiving benefits without paying the costs of being a member of the treaty.

the two representatives of Latin America in a group of nations known as the ‘threshold nations’. Argentina neither signed the NPT nor ratified the Treaty of Tlatelolco. As middle-powers or semi-industrialised nations, these threshold nations apparently have been cultivating ambitions to master nuclear technology, and especially the complete nuclear fuel cycle, and so were pointed out as threats to the functioning of an evolving nuclear non-proliferation regime. As nations with reasonable industrial sophistication, they have been judged threats in terms of intentions as well as the capabilities to transform their intentions into deeds. Hence, the tightening of export controls of certain types of nuclear technology as well as delivery systems was sought as a deliberate policy to avoid this group of nations mastering up-to-date military technology³.

As non-members of the NPT, this group of nations, despite their different strategic importance, have been similarly treated as possible challengers to an established international order. Should they acquire, as was apparently intended, the ability to produce weapons of mass destruction, regional and global instability would follow. Underlying the reasoning was a concentration on capabilities, because intentions are too complex to be dealt with in such a general approach. As a consequence, any move to acquire technologies which could be also used with military purposes – known as ‘dual use’ technologies – was perceived with this worst case scenario in mind. Therefore it became a common view that the threshold nations were actually seeking to ‘go nuclear’.

It is one of the hypotheses of this work that although it is understandable to gather together nations which are disparate in terms of regional and global alliances, domestic political and economic systems, strategic environment, traditions and

3 A critical analysis of the evolving nuclear non-proliferation regime is by Roger K. Smith: “Explaining the Non-Proliferation Regime: Anomalies for Contemporary International Relations Theory”, *International Organization*, v. 41 n. 2 Spring 1987, pp. 253-82.

experiences in foreign and defence policies, as a single category of threshold nations, it hampers real understanding. Uniting, for example, Argentina and Brazil, India and Pakistan, Israel and her Arab neighbours, as cases of similar drives towards the proliferation of nuclear weapons has been the feature of an infinite number of studies in the burgeoning sub-field of nuclear non-proliferation.

Seeking to dominate the technology of arms of mass destruction could well explain something about the perennial problem of achieving the ultimate military technology or probably the wishes of a middle power to raise its status at both regional and global levels⁴. But it neglects particular strategic and political contexts and, at a high level of generalisation, it simplifies too much.

Latin America, for example, has its peculiar security environment. Therefore it is only through an historical and systematic analysis of a case study of a specific national and regional context that it is possible to understand the alleged drive towards proliferation of 'dual use' technologies and armaments of mass destruction⁵. This case study on Brazil must then be understood as a search for alternative explanations to the ambition to master nuclear know-how and technology. Analysing Brazil's posture towards the non-proliferation regime, the thesis argues that this reflects Brazil's search for national security. In this search, civilian and military aspects of the nuclear issue are combined. As a result, both aspects should be taken into consideration for

4 Nuclear proliferation can be analysed as a repetition, in the nuclear age, of the natural drive towards the dissemination of the ultimate military technology worldwide. For an analysis in these terms see Barry Buzan's *An Introduction to Strategic Studies*, London, Macmillan for the IISS, 1987 chapter 4 pp. 57-68. See also Hedley Bull "Rethinking Non-Proliferation" *International Affairs* v. 5 n. 2 April 1975; "Arms Control and World Order" *International Security* v. 1 n. 1 Summer 1976 and *Hedley Bull on Arms Control* selected and introduced by Robert O'Neill and David N. Schwartz, London, Macmillan for the IISS, 1987.

5 Besides nuclear weapons, also chemical and biological are considered as armaments of mass destruction. However, I will not deal with chemical and biological weapons. To my knowledge they have not been hitherto produced or imported in Latin America.

a proper understanding of Brazil's critical diplomacy towards the non-proliferation regime.

One of the concepts part of the regime is that of a Nuclear Weapon-Free Zone. The notion is presented as a useful means to enhance national, regional and global security⁶. Despite being proposed by outsiders and insiders alike as a possible means to control the spread of technology of mass destruction, all the proposals aimed to implement a NWFZ in politically unstable regions have hitherto failed. In problematic areas, even attempts to negotiate seriously on the establishment of less ambitious arms control measures have so far not materialized. In this context, Latin America's partially successful attempt in creating a NWFZ in an inhabited region through a multilateral negotiation process was striking. Apart from the Antarctic Treaty of 1959, and the treaties which designated the seabed and outer space as nuclear-free environments, the Treaty signed in the Tlatelolco region of Mexico City in February 1967 by the Latin American and Caribbean delegations was unique and became a model for other similar attempts. Since then the broader application of the notion worldwide has suffered many twists and turns. Following the establishment of the South Pacific as a NWFZ in 1983, through the Treaty of Rarotonga, the notion was once more considered as a useful and applicable concept in the arms control field. As a result an analysis of the evolution of the notion of NWFZ and its relationship with the non-proliferation regime must be undertaken.

Until the signature of the Treaty of Rarotonga, Latin America was the only implementation of a NWFZ. Despite being a partial achievement, because nations such as Argentina, Brazil, Chile and

6 The most complete analysis so far of the notion of Nuclear Weapon-Free Zone as an instrument in global arms control negotiations is by Graham G. M. Kennedy: *Nuclear Weapon-Free Zone as an Arms Control Measure*, unpublished PhD dissertation, Victoria University, Wellington, New Zealand, November 1983.

Cuba are not covered by the treaty, it reflected Latin America's uniqueness. Different from other areas where the notion of a NWFZ was proposed and failed, in Latin America the Cuban missile crisis of 1962 gave a sense of urgency to the movements in favour of arms control throughout the area.

Nevertheless, Brazil's attempt to develop a nuclear programme should be analysed not only as a military but also as a political and economic issue. Therefore this attempt should be understood under a broader notion of national security, encompassing a political, economic and military dimension.

The Nuclear Issue as a National Security Issue

A nation's external relations are always likely to be a complex intermix of domestic politics with external influences, stimuli and constraints. In order to explain the evolution of Brazil's policies towards a complex issue such as nuclear non-proliferation, it is necessary to understand, in historical terms, Brazil's search for national security. The development of motivations and aspirations to master nuclear technology is a complex combination of economic, political and military factors. In this process it is not always easy to distinguish causes from effects, active from reactive postures. As a result it is fundamental to consider the domestic, regional and global environments in explaining what appears to be a particular case of a universal drive.

The nations aspiring to conquer nuclear technology were usually grouped together as if they were motivated exactly by the same set of factors. Generally speaking it is correct to say that they have been motivated by national security concerns. Disregarding national peculiarities as well as particular regional circumstances could be useful as an analytical device. However, as a general approach towards such a fundamental issue, it contains a huge amount of ethnocentrism, so pervasive in the field of interna-

tional relations, particularly in studies over national and international security⁷.

The concept of national security has been one of the most difficult to apply in the field of international relations⁸. It can be used as a useful tool to understand the behaviour of nations or it can be used as a device to justify arbitrary actions⁹. A broader notion of national security, considering economic, political as well as military aspects is a very useful tool to understand the nuclear non-proliferation issue.

Since its appearance on the global political agenda, the nuclear issue can be seen to encompass a military, political and economic dimension. The concentration of the discipline of national security studies on its military aspect – specially on its consequences for stability and the ‘long peace’ brought about by nuclear weapons and deterrence – does not consider properly its economic and political dimensions. Therefore the broader notion of national security should be applied when dealing with an issue such as nuclear proliferation.

The international political agenda of the post-war years witnessed the appearance of new global issues such as economic development and the unequal distribution of resources and power. In the sub-discipline of national security studies, however, the nuclear issue tended to be considered separated from the issue of political economy, because it was perceived mainly as a politico-military matter for the superpowers to resolve. The piecemeal

7 See Ken Booth *Strategy and Ethnocentrism* London, Croom Helm, 1979.

8 See by Barry Buzan *Peoples, States and Fear: The National Security Problem in International Relations*, Brighton, Wheatsheaf, 1983; “People, Power and Security: Contending Concepts in the Study of International Relations”, *Journal of Peace Research* v. 21 n. 2, pp. 109-25 and “Is International Security Possible?” in Ken Booth (ed) *New Thinking about Strategy and International Security*, London, Harper Collins Academic, 1991, pp. 31-55.

9 A good example of the former is Michael Mandelbaum’s *The Fate of Nations. The Search for National Security in the Nineteenth and Twentieth Century* Cambridge, Cambridge University Press, 1988.

development of a nuclear strategy by civilians in the United States was ultimately responsible for the appearance of this sub-discipline in the field of international studies. Even if many of its principal contributors came from economics and the natural sciences, they were not particularly concerned with global economic, political and social problems¹⁰.

The decolonisation process and the appearance of new actors – states and non-states – in the international system introduced new issues into the global political and economic agenda. The thesis argues that non-proliferation of nuclear weapons must be understood not only as a security problem in the narrow sense of military security but as an example of these new global issues. Of course non-proliferation has a fundamental military aspect. Nonetheless, economic and political aspects must be taken into consideration. Non-proliferation must be understood as an issue of national and international security under this broader approach¹¹.

The drive to master nuclear technology by new nations or by older nations without tradition in global affairs should not be considered only as a military issue. Nuclear technology attracted the attention not only for its capacity to produce weapons of mass destruction, but also for its economic, political and technological aspects. The development of a nuclear military strategy, which in a great extent praised nuclear weapons as the basic factor behind

10 See Lawrence Freedman "The First Two Generations of Nuclear Strategists" in Peter Paret (ed), *Makers of Modern Strategy* Oxford, Clarendon Press, 1986, pp. 735-78 and "Whither Nuclear Strategy?" in Ken Booth (ed), op. cit., pp. 75-89.

11 A study which attempts to understand nuclear proliferation in the Third World with a more complex national security notion is by Caroline Thomas *In Search of Security. The Third World in International Relations* Brighton, Wheatsheaf, 1987, especially pp. 121-45. See also Caroline Thomas "New Directions in Thinking about Security in the Third World" in Ken Booth, op. cit., pp. 267-290; Edward E. Azar and Chung-In Moon (ed) *National Security in the Third World. The Management of Internal and External Threats* Aldershot, Edward Elgar, 1988 and a very interesting critical account of the recent literature on Third World security problems by Mohammed Ayoob "The Security Problematic of the Third World" *World Politics* v. 43 n. 2 January 1991, pp. 257-83.

the 'long peace', contributed to the mystique associated with nuclear technology. As an advanced source for energy supply and technological, scientific and economic prosperity, it attracted the attention of those nations which were struggling to achieve economic, social and political modernisation.

Furthermore, this attraction should not be separated from the attraction exerted by the most prosperous nation in the immediate post-war, the United States. Prosperity and modernisation became a global issue after the war because successful American economic management was perceived as a model to be emulated by those aspiring to better living conditions. Therefore, the search for economic, social and political modernisation must be understood as a drive towards greater national security. The successful American economic model and its global supremacy set the standard which others aspired. In this process, nuclear issues occupied a unique place. In the nuclear field, military might, economic prosperity and political prestige were combined.

Nations both at the centre as well as at the periphery of the international system were equally impressed by what appeared to be a unique combination. Moreover, the secretiveness with which nuclear issues were treated by both superpowers also contributed to the development of this mystique. The Soviet announcement of her own nuclear arsenal, and the subsequent employment of the technology to produce energy in the Soviet Union, followed later by the United Kingdom, were other factors which conspired to increase the number of nations aspiring to dominate nuclear technology.

Therefore when the non-proliferation of nuclear weapons came to the fore of the global agenda, it was not surprising that many nations had already begun developing autonomous nuclear programmes. Many felt it their obligation as part of their search

for greater national security. A technology which was praised as being the result of one of the great scientific achievements of mankind began to be unveiled by the Eisenhower administration in 1953. Perceived as being a great source of prosperity, it fascinated civilian and military elites worldwide.

The concern on the non-proliferation of nuclear weapons as a global political issue was a result of this drive. It was mainly developed by those nations which already possessed the technology. The fear that its dissemination would bring not only prosperity but also consequences for global stability made it an urgent issue in the international political agenda.

Nevertheless, it is here that the issue turned out to be terribly complex. As an international security issue, the proliferation of nuclear weapons has a narrow military dimension. Those nations which were concerned about the management of an anarchical international order were understandably worried about the increasing number of nations possessing nuclear weapons. As an ultimate military technology, its possession may function as a military leveller. Therefore, non-proliferation of nuclear weapons was a legitimate issue concerning the shape of the global order. In this order, divided between status quo and revisionist nations, nuclear weapons in the hands of the former was praised as a means for political stability, but in the hands of the latter was considered as being a source of instability.

However, the international security issue includes more than the quest for order and stability. It includes also the issue of international justice that is the unequal global distribution of resources and power. Under the latter, the nations which were aspiring to gain nuclear technology for political, economic *and* military reasons did not recognise the non-proliferation issue as being legitimate. They recognised that increasing the number of

states with nuclear weapons would bring more instability and raise the propensity for war, but who should control the spread? Those who already possessed nuclear weapons and had been increasingly investing in more sophisticated arsenals? And what about the positive deterrence role played by nuclear weapons?

Hence they considered the non-proliferation issue as the product of an unjust world order. The control only of horizontal proliferation left aside the issue on vertical proliferation. In considering nuclear non-proliferation as part of the political economy issue, as a clash between the haves and the have-nots, placed it under the search for greater national security. It was perceived as an attempt to control not only the proliferation of nuclear weapons – which to a certain extent was a legitimate concern – but also the spreading of nuclear technology for peaceful purposes.

Geographical proximity and American political supremacy deepened United States influence in Latin American affairs during the period of her uncontested global supremacy. An inter-American security system, based on collective defence, resulted from the defence pact made during the Second World War. Nonetheless, more autonomy was gradually sought by the Latin American nations, which began to recognise that their national security did not coincide with the project for regional security created and implemented by Washington.

This search for more autonomy has been a gradual process, which depended on the evolution of economic, social and political modernisation of the Latin American nations. Particularly in Argentina and Brazil, which possessed greater resources and broader global ambitions. The development of national nuclear programmes in these countries since the mid-1950s was part of a model of development and modernisation which occurred during

this decade. They aspired to industrial development and less dependency on imports. In this process, nuclear technology was devised as the ultimate modern technology to be aspired.

Nevertheless, the underdeveloped area of national security studies in Latin America did not evolve to a broadly based approach to national security issues. Dominated for so long by the military, with a traditionally narrow view of national security, it is only recently that a broader dimension of national security penetrated the international studies field in Latin America.

International Studies in Latin America

A study which intends to deal with issues such as national and regional security, defence policy, levels of defence spending, armament production and the political conditions for arms control in Latin America, faces many difficulties. To start with, the researcher cannot count on a well-developed field of study developed by researchers in the area. For a combination of intellectual and institutional reasons, the study of international relations in Latin America, especially the sub-field concerning security affairs, suffers from a lack of a reasonable number of empirical and systematic studies. Probably related to the relatively low priority of war and peace issues in the area, otherwise given to studies on more pressing topics such as economic development, social inequality or political instability, it has taken a long time to establish a modern discipline of international relations and foreign policy-making in the area¹².

Thus many difficulties arise in developing a consistent dialogue within a well-developed and accepted paradigm. The sub-field of

12 For general remarks on these difficulties see Mark S.C. Simpson and Paulo Wrobel "The Study of International Relations in Hispanic America" and Gelson Fonseca, Jr "Studies on International Relations in Brazil: Recent Times", both in Hugh C. Dyer and Leon Mangasarian (eds) *The Study of International Relations, The State of the Art* London, Macmillan in association with Millennium, 1989, pp. 275-80 and 189-200 respectively. See also Francisco Orrego Vicuna (ed) *Los Estudios Internacionales en América Latina, Realizaciones y Desafíos* Santiago de Chile, Editorial Universitaria, 1980.

studies dealing with issues broadly defined as national and regional security is unfortunately not very consistent in Latin America. Lacking access to documentation and an open public debate, one is often faced with generalisations and unproven statements. The level of defence spending, the implementation of defence policies, the military-industrial complex, national security doctrines and so on, are among the themes waiting for more systematic and empirical research. Therefore, statements which should be considered at best as hypotheses have been affirmed and re-affirmed as truth¹³.

Affirmations without solid evidence for political propaganda, an anti-militarist tradition in large sectors of the society, a lack of civilian involvement with defence issues have been, *inter alia*, reasons for the acceptance of mere hypotheses as definitive assumptions about these crucial topics. Moreover, on much of the literature produced in English about Latin American security issues, which constitutes much of the material utilised in this thesis, few possess capacities as both specialists on security issues and on the region.

The relationship between the nature of domestic regimes (civilian or military) and the level of defence spending, the actual existence of an arms race at certain specific historical periods, are only a few examples of topics waiting for more systematic research. Unfortunately, such themes have been only touched upon rather than dealt with in detail, in an empirical and systematic way.

This study aims to single out one relevant topic within the sub-field of security studies, namely the answer of one major

13 It would be unjust not to recognise that the field improved very rapidly recently. Some studies were conducted at, for instance, the Faculdade Latinoamericana de Ciencias Sociales (FLACSO) in Santiago de Chile by among others Augusto Varas, Carlos Portales and Felipe Argueros; at the Universidad de Lima by José Encinas del Pando; at the Mexican based Centro Latinoamericano de Estudios Estratégicos and in Brazil by Clovis Brigagão and Renato P. Dagnino. Nowadays almost every Latin American nation has its centre of strategic studies. Nonetheless, unfortunately they are still too few for the extension of the themes waiting to be better researched.

regional actor – Brazil – to the nuclear proliferation problem in Latin America. It seeks to treat the theme in a historical and systematic way, focusing on the evolution of the Brazilian domestic and external policies.

The topic chosen is complex. The lack of a tradition of public discussion as well as empirical investigation on security issues can be explained by the very nature of the topic. Considered as a highly specialised theme and far away from more prominent political problems it did not generate sufficient evidence as well as interpretations which one could test. National security issues had, so far, been treated as secret and a matter for the specialists in violence. Moreover, foreign affairs in general have traditionally been an area preserved for diplomats or specialists in international law. The gradual emergence of an academic community specialised on international relations will certainly offer more complex and systematic answers. However, another profession has had traditionally a vested interest in this field of enquiry, namely the military. In the Brazilian case, however, a lack of communication with civilians interested on the topic did not help in building up an effective dialogue between civilian experts and military officers¹⁴.

Nevertheless, it was not for a lack of intellectual capacity that the armed forces were not engaged in more systematic research and in an open dialogue with society at large. At least in Brazil, a tradition of intellectual as well as political engagement of the armed forces in social and political issues has been historically prominent. But it did not preclude the secrecy of the matter.

14 The Centro de Estudos Estratégicos in São Paulo is seeking since 1979 to congregate civilians and military interested in discussing security issues. It publishes since 1983 the journal *Política e Estratégia*. A Núcleo de Estudos Estratégicos was also created at the Universidade de Campinas. On the role of the military in the intellectual production in the field of international studies in Brazil see Maria Regina Soares de Lima e Zairo Borges Cheibub *Relações Internacionais e Política Externa Brasileira: Debate Intelectual e Produção Acadêmica* Rio de Janeiro, MRE/luperj, mimeo. 1983.

Through Brazilian twentieth century history a field of studies where the military had been particularly prominent was that described by the label of geopolitics¹⁵. This tradition has been a strong field of enquiry not only in Brazil, but also in Argentina, Chile and Uruguay. Despite being considered recently as an instrument for authoritarian and expansionist militarily-led regimes, this tradition has actually been a theory of international relations in the Southern Cone of the Western Hemisphere. Although an outdated theory, an offspring of the dominance of geographic studies before the consolidation of a modern social science approach, the absorption of European geopolitics in the South American context was employed as a theory of state and nation formation. Preoccupied with the consolidation of borders and the rational occupation of the national territory, this geopolitical thought inevitably utilised the language of power and was fascinated by physical resources and national integration¹⁶.

Brazil, which had the most sophisticated geopolitical tradition in the region, a production which dated mostly from the 1940s and 1950s, is the best example. In a nation with a continental dimension, ten neighbours and serious problems of national integration, there was logic in concentrating in defending national borders and natural resources. Building up an approach to national security relevant to Brazilian conditions required developing a specific body of knowledge. Therefore, defending inhospitable frontiers and consolidating the authority of the state became a major topic of study in Brazilian geopolitics. The nation's foreign relations were mainly defined in terms of securing large

15 Amongst the most useful studies are those by Shigenoli Myamoto: *O Pensamento Geopolítico Brasileiro (1920-1980)*, unpublished master's dissertation, University of São Paulo, 1981 and "Geopolítica e Política Externa" *Ciências Sociais Hoje* São Paulo, ANPOCS/Cortez Editora, 1984, pp. 143-61.

16 See the interesting article of Ladis Kristof "The Origins and Evolution of Geo-Politics" *Journal of Conflict Resolution* v. 4 n. 1 March 1960, pp. 15-51.

and unprotected borders and developing means of communication and transport.

However, a major intellectual challenge to the established military bias on foreign affairs was based on the need to modernise an outdated geopolitical approach in the light of contemporary conditions. Technological transformations at national and international level brought out new political and economic challenges. Brazil and her neighbours in the Southern Cone seemed to be still obsessed with issues such as territory and national integration. Nonetheless the challenges of modern science and technology are forging a conception of international relations, and national, regional and global security focusing on more prominent issues than the consolidation of national territory.

Henceforth, an exaggerated emphasis on geography and an obsession with Brazil's physical conditions have contributed to the precarious state of studies utilising a modern social science approach. As professionals of national defence, the armed forces appeared to be missing a more constant dialogue with an academic community which could help in supplying a more updated approach. As a civilian community specialized on foreign and defence affairs is still being formed, thus a vicious circle was formed. To sum up, much of the studies and the approach produced by the armed forces to deal with problems of national and regional security in Brazil, including nuclear issues in their domestic and external aspects, has an old-fashioned and simplistic reasoning, influenced by a geopolitical thought still dominating the armed forces thinking on foreign and defence affairs¹⁷.

Nevertheless, as bleak as this picture might appear, Brazil has not lacked a genuine interest in more broad international

17 As a good example of this simplistic reasoning among the Brazilian armed forces see Marco Antonio Felício da Silva "Necessidade de Nuclearização das Forças Armadas Brasileiras" *A Defesa Nacional* n. 712 March/April 1984, pp. 109-29.

issues. The other main actor in foreign affairs within the Brazilian government, the foreign service known as Itamaraty, has been consistently, even if sometimes it appears to be less outspoken than the armed forces, seeking to raise the Brazilian global profile. As a reasonably competent diplomatic corps, Itamaraty has been seeking to establish a particular Brazilian tradition in world affairs. Despite varying in degree and depending on the issue, Itamaraty has been able to conduct, or at least to influence the conduction of Brazil's foreign policy. It was the first Brazilian service to be organised as a meritocratic bureaucracy, and therefore was able to develop a remarkable expertise and reasonable independence to conduct and implement Brazil's foreign policy. As a consequence Itamaraty cultivated a relative independence from the administration of the day¹⁸.

Itamaraty has been able to develop a consistent posture in relation to regional and global disarmament¹⁹. Despite the issue of disarmament being relatively low in Brazil's priorities in foreign affairs, a tradition is discernable. Moreover, Brazil has historically maintained a very low level of defence spending, unable to produce domestically the arms needed for its defence. For a nation until recently systematically demanding more armaments of different levels of sophistication from abroad, arms control and disarmament

18 Perhaps it is fairer to say that the independence of Itamaraty in the formulation of Brazil's foreign policy varied according to the issue involved. Undoubtedly the organization of the foreign service in meritocratic basis after the Second World War contributed to the prestige and alleged professionalism of Brazil's diplomacy. For a study of this process see Zairo Borges Cheibub *Diplomacia, Diplomatas e Política Externa: Aspectos da Institucionalização do Itamaraty*, unpublished Master's dissertation, Rio de Janeiro, IUPERJ, 1984.

19 It is an argument repeated by every diplomat whom I interviewed that Itamaraty has a coherent approach towards arms control and disarmament issues. They perceived continuity since the beginning of the Brazilian participation in disarmament negotiations at a multilateral level. For a good summary of the Brazilian position and a defence of its posture towards the non-proliferation regime see Marcos Castrioto de Azambuja "Desarmamento - Posições Brasileiras" in Gelson Fonseca Júnior and Valdemar Carneiro Leão (eds.) *Temas de Política Externa Brasileira* Brasília, Fundação Alexandre de Gusmão/Editora Ática, 1989, pp. 177-94.

would not be on the top of her political agenda. On the contrary, the constant pressure from the armed forces was to help influence the development of an indigenous arms industry²⁰. Nonetheless, the posture developed by Itamaraty was sceptical towards the great powers' schemes for general disarmament, which dated from the Brazilian participation at the League of Nations. It evolved – after the nuclear issue became prominent – towards a policy of seeking influence at the multilateral negotiations leading towards measures of nuclear arms control and disarmament. It was a policy which stresses the limited role played by a disarmed nation in a world of great and superpowers.

Therefore, it is possible to discern in the reasoning behind her foreign nuclear policy the tradition initiated at the time of the League of Nations. It was a reasoning of mistrusting multilateral disarmament diplomacy²¹. As a nation eager to industrialise and gain access to modern technology, Brazil intended to enter the nuclear age not only as a passive spectator, as it felt itself to be up to this moment, but with the aim to raise its influence in world affairs and to protect her interests.

20 See the discussions between Stanley Hilton and Frank D. McCann in Stanley Hilton: "Military Influence on Brazilian Economic Policy, 1930-1945: A Different View" *Hispanic American Historical Review* v. 53 n. 1 February 1973, pp. 71-94; "The Armed Forces as Industrialists in Modern Brazil: The Drive for Military Autonomy (1889-1954)" *Hispanic American Historical Review* v. 62 n. 4 November 1984, pp. 629-73. Frank D. McCann: "The Formative Period of Twentieth Century Brazilian Army Thought, 1900-1922" *Hispanic American Historical Review* v. 62 n. 4 November 1984, pp. 737-65; "The Brazilian Army and the Pursuit of Arms Independence, 1889-1979" in Benjamin Franklin Cooling (ed.) *War, Business and World Military - Industrial Complexes* New York, Port Washington 1981, pp. 171-93.

21 See Stanley Hilton "Brazil and the Post-Versailles World: Elite Images and Foreign Policy Strategy, 1919-1929" *Journal of Latin American Studies* v. 12 November 1980, pp. 341-364.

The Brazilian Nuclear Tradition

In this major issue of the post-1945 era – the control and the spread of nuclear technology – Brazil was one of the few nations to be represented at the international level since the early days. As an exporter to the United States since 1941 of radioactive materials, she was an original member of the first international meeting held to discuss international control of this recent scientific discovery²². As an exporter of radioactive minerals, and as a result of her large territory and friendly relations, Brazil was cultivated by Washington as a promising partner. As a consequence of her early participation in international debates on the nuclear issue, an ambition to master modern science and technology became paramount among part of the Brazilian elite. The symbol of modern science and updated technology was by then nuclear technology.

Even with a recently founded system of higher education in the natural sciences, dating from the 1930s, a first national agency to foster the development of science and technology – the Conselho Nacional de Pesquisas (CNP) – was founded in 1951²³. The foundation of such an agency was demanded since the 1930s. One of its founders and first President was the same representative at the United Nations Atomic Energy Commission in New York, Admiral Alvaro Alberto da Mota e Silva. To sense the relevance of nuclear issues among the pioneers of Brazilian organised science, it is sufficient to point out that the CNP was divided into two main divisions, one for nuclear issues and the other for every other branch of modern science.

22 See Paulo S. Wrobel *A Questão Nuclear nas Relações Brasil-Estados Unidos*, unpublished master dissertation, Rio de Janeiro, IUPERJ, 1986 and Gerson Moura *Brazilian Foreign Relations, 1939-1950* unpublished PhD dissertation, London, University of London, 1982.

23 A recent study is Maria Cecília Spina Forjaz “Cientistas e Militares no Desenvolvimento do CNPq (1950-1985)” *BIB - Boletim Informativo e Bibliográfico em Ciências Sociais* n. 28 1989, pp. 71-99.

This early obsession with nuclear technology is important in the description and analysis of Brazil's domestic and foreign nuclear policies. The association of nuclear technology with scientific and technical progress as a whole became even more acute with President Eisenhower's 'Atoms for Peace' programme announced in 1953²⁴. The programme helped definitively to create a nuclear nationalism in Latin America, especially in Argentina and Brazil. Mastering nuclear technology became the dream of those who understood it as a way of fighting against poverty and underdevelopment.

Energy production in Brazil has traditionally galvanised strong nationalist sentiments, as in the campaign for the creation of a national oil company in the early fifties²⁵. With the announcement of an era of a nuclear bonanza by Eisenhower, the imagination of the 'nuclear nationalists' was stimulated. Nevertheless, a coherent and long-term domestic and foreign nuclear policy was much more difficult to achieve²⁶. In a nation which cultivated through its twentieth century history good relations with the Western world, and a particularly close partnership with the United States which dated from the beginning of the century, a reluctance to join a nuclear non-proliferation regime could appear a surprise. Brazil has constantly sought to emphasise the pacific nature of both her foreign policy and nuclear programme. Nevertheless, despite the intense pressures exerted by the industrialised nations led by Washington, Brazil has been able to successfully resist and develop an argument for not being a member of the NPT. In the nuclear nationalism, as

24 The text of Eisenhower's speech announcing the 'Atoms for Progress' is included in Henry S. Commager (ed) *Documents of American History* Englewood Cliffs, Prentice-Hall, 1973.

25 See Gabriel Cohn *Petróleo e Nacionalismo* São Paulo, Editora Difel, 1968.

26 See Maria Cristina Leal *Caminhos e Descaminhos do Brasil Nuclear: 1945-1958*, unpublished master's dissertation, Rio de Janeiro, IUUPERJ, 1982.

part of a policy to gain access to modern science and technology, lay the main element of explanation.

Explanations made by foreign observers, however, were based on possible hidden intentions to master nuclear technology for military purposes, as a result of regional aspirations or competition with Argentina²⁷. Although it is impossible to discharge entirely the relevance of the military explanation for certain aspects of Brasilia's domestic and foreign nuclear policies, the hypothesis of this study is different. It is that the main motivation behind the Brazilian domestic and foreign nuclear policies has been to master a modern technology which was perceived as being a symbol for prosperity. An unstable domestic nuclear policy with twists and turns, and some decisions made by a military government led, however, to a different perception.

Mastering nuclear technology, despite an inevitable military dimension, has scientific and technological dimensions considered by politicians, scientists, military officers and Itamaraty as an imperative for economic development. Even at the expense of reverting traditional alliance policies, as shown in the conflicts with Washington over nuclear proliferation issues, it was considered a price worth paying for national autonomy²⁸. Moreover, changing perceptions of the traditional role of the United States in the region, and the decline of the collective defence system acted to reinforce the attempts to master nuclear technology. In fact this move was initiated in the sixties, and reached a crucial stage

27 One of the most complete assessments of the prospects for nuclear weapons proliferation is annually made by Leonard S. Spector for the Carnegie Endowment for International Peace. In Latin America, Argentina and Brazil are the two countries which the progress in nuclear technology have been assessed since 1984. See by Leonard S. Spector: *Nuclear Proliferation Today* New York, Random House, 1984; *The New Nuclear Nations* Cambridge, Ballinger, 1985; *Going Nuclear* Cambridge, Ballinger, 1987; *The Undeclared Bomb* Cambridge, Ballinger, 1988.

28 On the main problems of the relationship between Brasilia and Washington caused by the nuclear non-proliferation issue see Robert Wesson, *The United States and Brazil, Limits of Influence*, New York, Praeger, 1981 and Paulo S. Wrobel, op. cit.

during President Ernesto Geisel administration (1974-1979), when reacting against Washington's interference in Brazil's domestic affairs, Brasilia severed the 1952's military accord between Brasilia and Washington. This event was part of a pragmatic foreign policy implemented during the military regime.

In the 1980's, the Falklands-Malvinas War brought security issues, including the nuclear issue, to the surface of the political agenda in the area with a new vigour²⁹. Three aspects were relevant to make nuclear issues central in discussions on security and defence in South America.

First, there was a general belief throughout Latin America that a moribund inter-American security system had finally reached its end³⁰. Washington's support for the UK during the war had convinced the elites in the area that the crisis of a collective defence system built on the eve of the cold war was in a state beyond repair³¹. In the Brazilian case, it led to a reassessment of her relationship with Buenos Aires and to deepen the search for greater independence and military preparedness.

A second lesson brought about by the South Atlantic War was the realisation by the military planners of how ill-prepared were the armed forces of both Argentina and Brazil for modern technological warfare. In effect, it helped to crystallize once more the traditional armed forces concern with investing in science and technology, and having access to modern defence technology for a credible defence posture.

29 See the special number of *Estudios Internacionales* n. 60, October-December 1982, entitled "América Latina después de las Malvinas" and Roberto Russel (ed.) *América Latina y la Guerra del Atlántico Sur. Experiencias y Desafíos* Buenos Aires, Editorial del Belgrano, 1984.

30 See Heraldo Munhoz "Las Causas del Auge y la Declinación del Sistema Interamericano de Seguridad: Una Perspectiva Latinoamericana" *Estudios Internacionales* n. 77, January-March 1987, pp. 102-13.

31 See David Lewis Feldman "The United States' Role in the Malvinas Crisis, 1982: Misguidance and Misperception in Argentina's Decision to go to War", and Alexander M. Haig, Jr., "Reply to David Lewis Feldman" *Journal of Interamerican Studies and World Affairs* v. 27 n. 2 Summer 1985, pp. 1-24.

The third aspect concerns the debate brought about by Britain's introduction of nuclear technology into the South Atlantic. As a signatory of the Tlatelolco Treaty which created the whole Latin America and the Caribbean a region free of nuclear weapons – indigenous produced or delivered by a nuclear power – the United Kingdom firmly denied that she had introduced nuclear weaponry into the area. However, she could not deny the employment of nuclear-powered submarines. Britain's highly effective nuclear-powered submarines, which left Argentina's navy standing in port, or sank the one which adventured, caused Argentina to denounce their use as a violation of the spirit, if not the letter of the treaty³².

It is true that there is nothing in the Treaty of Tlatelolco prohibiting the use of nuclear power as propulsion for ships. In fact the treaty has stimulated the use of nuclear power as an energy source. It also left at the discretion of each nation part of the treaty to allow the right of transit in its territorial waters and ports for ships loaded with nuclear weapons. Thus, there was nothing in the treaty violated by the UK during the war.

The Organismo para la Proscripción de Armas Nucleares en la América Latina (OPANAL), created to monitor the application of the Treaty of Tlatelolco and located at Mexico City, voiced only a vague support for the Buenos Aires position, in the name of continental solidarity, cooling down the episode of the nuclear-powered submarines.

Since then much material has been published on the idea of building up a security system in South America, or even in Latin

32 See Hector Gros Espiell "El Conflicto Bélico de 1982 en el Atlántico Sur y el Tratado de Tlatelolco", pp. 61-80; Jorge Morelli Pando "El Transporte de Armas Nucleares y las Naves Propulsadas por Energía Atómica", pp. 81-96; Klaus Tornudd "Problemas de Tránsito y Transporte en Zonas Libres de Armas Nucleares", pp. 97-104, all in the collective work edited by OPANAL *Vigésimo Aniversario del Tratado de Tlatelolco* Mexico City 1987.

America, independent from the United States³³. Reformulating old grievances against Washington's policy towards the area, this line of reasoning tried to combine the criticism of the inter-American priorities on security with a cooperative and anti-dependent tone. In this new Latin American security project, searching for independence from American military influence, some tried to give a more broad as well as a more effective role to OPANAL³⁴.

One idea proposed was to use the OPANAL machinery as a kind of agency for defence cooperation in the whole Latin America. Another proposal has been to make the Agency a coordination body for the development of nuclear technology in the region. Yet another proposal was to make the Agency monitor the development in conventional armaments' systems in the area. Nonetheless, such proposals do not have great chance of succeeding. Although understandable, the search for a more active role for OPANAL, which certainly has been seeking to play a more relevant political role in the nuclear development of the area, these proposals missed the point.

The point is that much of the low political relevance of OPANAL has to do with the ineffectiveness of multilateral institutions at regional level and the absence of two key members of the region from the treaty, namely Brazil and Argentina. With the company of Chile, Cuba and Guyana, the two South American neighbours and most advanced in nuclear technology in the area are not

33 For an attempt to develop a sub-regional security cooperation in South America with good relations but independent from Washington see Carlos Portales "South American Regional Security and the United States" in Augusto Varas (ed.) *Hemispheric Security and U.S. Policy in Latin America* Boulder and London, Westview Press, 1989, pp. 141-184. See also Augusto Varas "De la Competencia a la Cooperación Militar en America Latina" *Estudios Internacionales* n. 77, January-March 1987, pp. 3-18 and Luciano Tomassini "Hacia un Sistema Latinoamericano de Seguridad Regional" *Estudios Internacionales* n. 60, October-December 1982, pp. 533-41.

34 See Pilar Armanet "La Zona Desnuclearizada Latinoamericana en la Perspectiva de la Cooperación Regional" *Estudios Internacionales* n. 77 January-March 1987, pp. 19-38.

full members of the Treaty which bans nuclear weapons in Latin America and the Caribbean³⁵.

The Non-proliferation Treaty and the Treaty of Tlatelolco

Chile's principal reason for not being a full member of the Treaty is an answer to the Brazilian and Argentine position. Chile signed and ratified the treaty, but has the same policy as Brazil. She did not waive the conditions set in article 28, permitting the application of the treaty³⁶. Guyana is not a member due to her border problems with Venezuela. Caracas has an old-age claim on great part of Guyana's territory, since it was a British colony. No member could accede to the treaty while in a litigant position with another member³⁷.

Cuba is in a somehow different position. Indeed, Havana was the only nation in the Latin America and Caribbean area which has had nuclear weapons on its territory. Actually, it was the very existence of nuclear weapons on her territory in 1962 which triggered the whole process to build up a nuclear weapon-free zone in Latin America and the Caribbean. Havana's position has not changed since, despite the major transformations in global and inter-American relations since the height of the cold war. Since 1962, Cuba's policy has been to make the acceptance of a NWFZ in Latin America and the Caribbean conditional on certain political concessions made by Washington, but which have been unacceptable to successive American administrations since 1962³⁸.

Nevertheless, apart from the symbolic importance of Havana's rejection of the NWFZ idea and her constant criticism of the non-

35 See OPANAL *El Tratado de Tlatelolco (1967-1987)* Mexico City 1987.

36 See Armanet, op. cit.

37 This is regulated by article 25 of the treaty. See OPANAL *El Tratado de Tlatelolco (1967-1987)*, pp. 22-23.

38 See Armanet, op. cit.

-proliferation regime, it is Brazil and Argentina which really matter. As the two real economic and political powers of the South American area, they are the truly relevant actors as far as nuclear development is concerned³⁹. Both are in a position to give another dimension to the Treaty, and to OPANAL, whether and when they decide to join the treaty. As much more advanced countries in nuclear terms than Mexico – the third middle-power in Latin America – the two South American nations are the decisive players in any joint effort leading towards an effective ban on nuclear weapons in the area. The strengthening of the non-proliferation regime in Latin America and the Caribbean depends fundamentally on Buenos Aires and Brasilia⁴⁰.

With their combined natural and industrial resources, population and territory they have, as non-members of the regime, turned much of the territory of South America outside the effective application of a NWFZ. Besides, there is also a relevant question concerning the effectiveness of the notion of a NWFZ in Latin America itself. It is a relevant question to ask if the actual existence of a treaty banning nuclear weaponry in the region could be made responsible for the fact that no nation in the area has developed so far any nuclear military device. This is, however, a difficult question to give a straightforward answer. The role of a treaty as such, developed in a particular historical context has, as every treaty which crystallises a certain regional or global order, failed to capture the rapid dynamics of change in international relations.

39 For an overall picture see Margareth K. Luddeman "Nuclear Power in Latin America" *Journal of Interamerican Studies and World Affairs* v. 25 n. 3 August 1983, pp. 377-415 and John R. Redick "Nuclear Trends in Latin America" in *Governance in the Western Hemisphere* Aspen Institute for Humanistic Studies, New York 1982, pp. 213-65.

40 As an example of the non-proliferation literature over the role of Brasilia and Buenos Aires in Latin America, see Stephen M. Gorman "Security, Influence and Nuclear Weapons: The Case of Argentina and Brazil" *Parameters* v. 9 March 1979.

As will be discussed further on, the very notion of a NWFZ has been suffering from the twists and turns within the discussions on arms control and disarmament. Therefore it is not necessarily the existence of a treaty banning nuclear weapons that solely functions as a barrier against potential nuclear proliferation. Probably more effective than any multilateral treaty has been the joint efforts of the exporters of nuclear technology to control the diffusion of fundamental technological processes. The establishment of tight control and regulations on the export of sensitive technologies has evolved into a real non-proliferation regime, in the interests of the industrialised nations in the West as well as in the East⁴¹.

Equally, there were domestic reasons for the phasing out of the nuclear programmes. The economic crisis which Brazil and Argentina had been passing through since the late seventies has been the single most important reason for restraining the pursuit of nuclear technology, including the technology for small reactors for submarines, albeit the pressures triggered by the South Atlantic War.

Nonetheless, with its immense coast in the South Atlantic, Brazil has aggravated her sense of insecurity since the South Atlantic War. As it will be shown, it helped the hand of those in favour of pursuing the nuclear propulsion technology for submarines. Meanwhile the appeal that the NWFZ idea might have to fill her sense of vulnerability was endorsed by another Brazilian diplomatic initiative. Brasilia has been seeking a regional security initiative with some similarity to the idea of a NWFZ. After refusing a potential proposal to create a South Atlantic pact with Argentina and South Africa, backed by Washington, as an answer to the Soviet naval build up in Guinea-Bissau and Angola, Brazil introduced in

41 See Michael J. Brenner *Nuclear Power and Non-Proliferation. The Remaking of U.S. Policy* Cambridge, Cambridge University Press, 1981, pp. 1-13 and Bertrand Goldschmidt "A Historical Survey of Nonproliferation Policies" *International Security* v. 2 n. 1 Summer 1977, pp. 69-87.

the United Nations the idea of the South Atlantic as a Zone of Peace and Cooperation⁴². Similar to the Sri Lankan proposal of 1971 on the Indian Ocean, the idea of a zone of peace was presented by President José Sarney at the United Nations General Assembly as a demonstration of Brazil's traditional commitment to peaceful solutions, her acceptance of non-proliferation in South America and aiming to preserve the area free from super-power rivalry.

With Washington's solitary vote against, however, the notion of the South Atlantic as a Zone of Peace and Cooperation did not advance, despite a first meeting in Rio de Janeiro in July 1988. Nonetheless Itamaraty has been using the notion as a way to publicise Brasilia's commitment to nuclear non-proliferation in the South Atlantic area. As a result Brazil could resist with more solid arguments the constant pressures to sign the NPT. Proposing a zone of peace, as a non-member of the NPT and the Tlatelolco Treaty, she can yet sustain an overall position in favour of vertical and horizontal non-proliferation.

Insisting on her right to pursue nuclear technology for peaceful purposes – including until quite recently the defence of the technique of 'peaceful nuclear explosions' – Brasilia created solid foreign and defence policies. This position had been capable of resisting pressures for change by persuasion. Itamaraty had been able to present a constant and well-reasoned argument against those raised by the promoters of the NPT. Moreover, pledging to behave as a full member of the Tlatelolco Treaty, even if not waiving the conditions established by article 28 of the treaty, has been another argument utilised in her support.

Brasilia's posture in relation to the Treaty of Tlatelolco has to be understood as a by-product of her posture towards the heart

42 See Edmundo Fujita *The Prevention of Geographical Proliferation of Nuclear Weapons: Nuclear-Weapon-Free-Zones and Zones of Peace in the Southern Hemisphere* Geneva, UNIDIR, Research Paper n. 4, April 1989.

of the non-proliferation regime, namely the NPT⁴³. Responding to the pressures constantly made by the promoters of the non-proliferation regime, Itamaraty has made her position more solid domestically and more respected externally.

The core of the argument against signing the NPT has been that it is a discriminatory treaty⁴⁴. While accepting the arguments in favour of horizontal non-proliferation, Brasilia has stressed that the promoters of the regime had nothing to halt vertical proliferation of more complex, sophisticated and accurate weapons systems. Moreover, in praising the value of weapons of mass destruction as the best means to achieve a credible deterrence posture, the promoters of the regime had, so the argument goes, stimulated the non-nuclear armed states to also seek a credible deterrent. Therefore, to face a real or an imaginary enemy, a defence policy based on credible deterrence, must include, if possible, the most sophisticated weaponry available. The perennial problem of catching up with the most advanced military technology available could then lead to seek weapons of mass destruction and their delivery means.

The argument, based on the immobilism in controlling vertical proliferation, has undoubtedly been shaken by recent events. The efforts made by Washington and Moscow to achieve for the first time in the nuclear era an actual reduction in the numbers of certain classes of nuclear weapons weakened the reasoning. Nevertheless, the centre of the argument on the discriminatory nature of the NPT remains the inequality of rights and duties by two different classes of nations.

43 A good resume of Brazil's policy is made by Wolf Grabendorff "O Brasil e a Não-Proliferação Nuclear" *Política e Estratégia* v. 6 n. 2 April-June 1988, pp. 272-311.

44 For a general criticism of the NPT in this perspective see Ashok Kapur "Nuclear Energy, Nuclear Proliferation and National Security: Views from the South" in Robert Boardman and James Keeley (eds.) *Nuclear Exports and World Politics, Policy and Regime* New York, St. Martin Press, 1983.

One class – all nations which did not possess the knowledge to produce nuclear weapons by 1 January 1967 – has been expected to pledge not to achieve them by any means. Henceforth their planning for defence should not include nuclear weaponry, regarded as the ultimate in defence preparedness. The other class of nations – which did achieve nuclear weapons by 1 January 1967 – has a different set of obligations. They have, by article 5 of the NPT, promised to negotiate in good faith to achieve a gradual reduction in their commitments to rely on nuclear weapons. Nevertheless, with the appearance of more sophisticated weapons systems, the promises of negotiations in good faith has had, since 1968, an appalling record. Emphasising this record to the promoters of the non-proliferation regime, Itamaraty has been seeking to defend a posture based on a perception of the non-proliferation regime as being unjust and discriminatory.

The very fact of the existence of a joint initiative led by Washington and Moscow, two fierce adversaries, to build up a non-proliferation regime was used by Itamaraty to strengthen the argument. Simply put, the NPT, as in the words of the Brazilian diplomat Araújo Castro, was a means to ‘freezing the world power’⁴⁵. Two incompatible ideological, political as well as economic systems, had agreed to jointly manage such a vital issue for world peace and stability. The super-powers realised that building up a non-proliferation regime could well serve their interests while preserving international stability. Nevertheless, in joining forces to pressure

45 João Augusto de Araújo Castro was a Brazilian diplomat. He had been, amongst other posts, the Foreign Minister during a brief period before the military coup in 1964, Brazil's Representative at the United Nations and the Brazilian Ambassador to the United States. Araújo Castro was a prominent figure in Brazil's foreign affairs during the sixties until his sudden death in the mid-seventies. For a collection of his writings, including the criticism of the NPT as a “freezing of the world power” see *Araújo Castro* organization and notes by Rodrigo Amado, Brasília, Editora Universidade de Brasília, 1982.

their allies in the name of order and stability, they had created the bases of a regime which favoured them⁴⁶.

By maintaining the status quo, the superpowers could well adopt a pragmatic policy in their bilateral relations, surmounting profound ideological and political divides. In the context of the mid-sixties, when both superpowers were able to command the support of their allies, and due to the polarisation of the world order, Washington and Moscow were able to co-exist with their divergence in every other aspect. Moreover, their continuous research and production of new weapons systems and the raising of defence spending served to guarantee the maintenance of the gap between them and the rest. The impossibility of catching up was confirmed by the great amount of investment needed. Thus, the argument concludes, accepting Moscow and Washington pressures in the name of global stability and a better management of the international order is to accept the permanence of an unjust and discriminatory order. A revisionist nation could not agree with the superpower argument.

The Structure of the Thesis

In the first chapter I will discuss the notion of a nuclear non-proliferation regime and particularly that of a Nuclear Weapon-Free Zone. The non-proliferation regime is based on the idea that horizontal nuclear proliferation inevitably creates regional or global instability and so it establishes a set of rules and regulations to control the spread of the relevant know-how and technology. Nonetheless, the regime has been criticised as unjust and discriminatory. The chapter discusses the main argument developed by two relevant representatives of the international

46 A very good assessment of the non-proliferation regime as a unique successful achievement among political adversaries is Joseph S. Nye Jr's "Nuclear Learning and U.S.-Soviet Security Regimes" *International Organization* v. 41 n. 3 Summer 1987, pp. 371-402.

relations literature on non-proliferation, showing that there is no consensus on the best means to deal with the issue.

The chapter also examines the origins of the NWFZ notion as a measure for arms control. Originally sought as a means to deal with the specific strategic situation in Central Europe, it was devised as a Soviet-led policy to prevent German rearmament. Nevertheless, the NWFZ idea evolved to a concept of quasi-universal application. A comparative description of the attempts to apply the NWFZ concept on several different regional contexts, explaining why they failed, is made.

The limitations of the NWFZ concept, when applied to politically complex regions, are examined. NWFZ, it is argued, is a notion that should be understood within the gradual development of a machinery for arms control, seeking to enhance national, regional and global security. Isolating the notion from broader concepts on general and complete disarmament has, however, contributed to its a-political character, reducing its usefulness. Although the concept of NWFZ has had a resurgence recently, stimulated by the Treaty of Rarotonga, it remains a problematic means to deal with the prospect of nuclear weapons proliferation. Thus, to understand the notion correctly, one needs to frame it within regional contexts and the disputed nature of the non-proliferation regime. Isolating the NWFZ concept from its origins, that is the negotiations on general and complete disarmament, has distorted its real nature.

The second chapter concerns the pattern of armaments production in South America on the eve of the debates on measures for arms control and the appearance of the notion of Latin America as a NWFZ. First there is a description of the inter-American security environment. Based on the notion of sphere of influence, the role of the United States in forging a security agenda

for the whole Western hemisphere is analysed. Second there is a discussion on the notion of militarism and militarization in Latin America. During the 1960's, several Latin American nations, including Brazil, had passed through military coups. The chapter discusses some consequences of this fact to the arms control agenda in the area. Moreover, the climax of the inter-American security system during the sixties, witnessed the formulation of an anti-insurgency doctrine to counter the growth of left wing revolt. The inter-American system for defence and security assumed then a more active role. Since it was settled during the Second World War, the hemispheric security system had been more symbolic than effective. But besides the anti-insurgency doctrine and training, the military establishments in Latin America sought to modernise their antiquated military equipment. In searching at the world market for more sophisticated armaments than hitherto delivered by Washington, it generated a perception of an arms race.

Meanwhile, in Washington doubts had already appeared concerning the effects of her military aid, in terms of training and supply of armaments, to the implementation of an effective continental collective defence policy. Doubts were expressed over the role of military aid to politically relevant armed forces in Latin America. Initiated during President Eisenhower administration, this debate assumed a greater importance during President Kennedy's term, when the concerns on American support for authoritarian regimes became a greater political issue.

It is essential to understand the nature of Latin American defence spending and military preparedness in the sixties. It was the debate over an arms race in the region which gave public space to the appearance of the themes of arms control and disarmament in the region. In addition, the Cuban missile crisis introduced nuclear weapons within the inter-American diplomatic agenda,

paving the way for Brazil's proposal for a nuclear weapon-free zone in Latin America.

The third chapter begins the focus on the Brazilian case, with two principal lines of enquiry. The first is to explain the appearance of the NWFZ idea within her foreign policy priorities and the second to analyse the changing nature of her foreign policy priorities after the military coup of 1964. From 1961 to 1964, during the administrations of Jânio Quadros and João Goulart, Brazil experienced a shift in her traditionally cautious and pro-Western foreign policy. What became known as the 'independent foreign policy' was an attempt to change certain aspects of Brazil's foreign policy, creating a more active international role, less reactive to international events.

Under the formula of the 'three Ds' – disarmament, development and decolonisation – the foreign policy of the period 1961-1964 implemented several initiatives at multilateral level, such as the proposition made at the United Nations for a NWFZ in Latin America.

In this chapter there is also a discussion about the existence of a peculiar Brazilian national security notion. The building of a 'national security doctrine', as a result of the military involvement in policy-making after the military coup of 1964, was seen as fundamental to explain many features of Brazil's domestic and foreign policy during the period of military rule, including her posture towards the nuclear non-proliferation regime. The thesis argues that there existed a concept of national security which pre-dated the military regime. Moreover, despite the fact that the immediate foreign policy measures of the military government were aimed to join the Washington-led anti-Cuban coalition, it is argued that the lessons and the experiences of the period of the 'independent foreign policy' were not forgotten. They

could be traced in the arguments developed against a non-proliferation regime.

The fourth chapter explains the origins of a NWFZ in Latin America and describes the fundamental issues which occurred during its negotiation process under Mexican leadership. It also analyses the Brazilian change of policy towards the notion of Latin America as a NWFZ. From being the proponent of the idea, she became critical of some aspects of the Treaty of Tlatelolco. This change, however, only makes sense if understood in the context of her posture towards the nuclear non-proliferation regime as a whole.

Parallel to the Mexican negotiations over a NWFZ in Latin America, there were discussions in Geneva on the establishment of a non-proliferation treaty. Led by Washington and Moscow, the negotiations evolved towards an imposition of a joint American-Soviet draft. The Brazilian posture in Mexico needs to be understood together with the events in Geneva. The chapter argues that it became politically fundamental to Brasilia to harden her posture at Mexico City as compensation at a regional level for what she could not get in Geneva. The issue coming under the heading 'peaceful nuclear explosions' is explored, as representing the main drive behind Brazil's nuclear aspirations, that is technological autonomy. Finally it is explored the posture of the five nuclear powers towards the idea of Latin America as a NWFZ.

The fifth chapter studies the historical evolution of Brazil's nuclear programme from its inception in the 1950s. The aim is to discover a line of coherence in what appears to be an administratively unstable programme. Culminating in the changes which occurred during the administration of President Marshall Arthur da Costa e Silva in 1967, the unstable Brazilian nuclear policy finally entered the domestic political agenda as a policy-making priority. Therefore, the opposition posture at Geneva and Mexico City towards the nuclear regime did make sense, because

the nuclear issue began to occupy an important place within the drive towards industrialisation, under the motto 'security and development'.

The chapter continues to describe Brazil's nuclear programme and how it evolved since the Costa e Silva's decision. Two issues are addressed. The first is the 1975 Brazilian – Federal Republic of Germany nuclear deal. For the first time in deals of this nature, the accord included the export of the complete nuclear fuel cycle. As a result, it had a great impact on the evolving non-proliferation regime. The international repercussions of the deal, however, served to forge in Brazil a nationalist coalition against the non-proliferation regime and solidified a posture of intransigence against signing the Non-Proliferation Treaty. The second main issue addressed is the regional approach to explain nuclear weapons proliferation. Here, it is criticised the idea that the only way to explain the nuclear ambition of the threshold nations is to frame them under a competitive regional context. In the case of Argentina and Brazil, however, Buenos Aires reacted favourably to the Brazilian acquisition of a huge technological package from West Germany. Buenos Aires did not criticise Brasilia because it was also her policy to defend the development of nuclear technology as a sovereign decision. Eventually, Buenos Aires and Brasilia evolved gradually towards a novel diplomatic understanding, where nuclear collaboration occupied an important place. As a highly visible issue, it served to galvanise their joint opposition to the nuclear non-proliferation regime, making more solid an alternative axis of technological as well as diplomatic collaboration.

The conclusion summarises the findings of the work. Then, it describes the recent moves of Brazil's nuclear diplomacy, after the election of a new civilian administration in 1989. It also aims to speculate on the future prospects of her position towards the non-proliferation regime. My hypothesis is that it will be

easier for Brasilia, as well as for Buenos Aires, to join the Treaty of Tlatelolco than to join the NPT. As the search for technological autonomy continues to be a relevant political and economic issue, even in a context of financial crisis, the critical posture towards the Non-Proliferation Treaty is unlikely to be abandoned in the short-term by the two South American nations. Even though financial constraints will probably continue to inhibit the investment in nuclear technology, the critical posture in relation to the non-proliferation regime is likely to remain.



1. WORLD ORDER, NON-PROLIFERATION AND NUCLEAR WEAPON-FREE ZONES

This chapter will be concerned with two issues. The first is an analysis of the logic behind the idea of a non-proliferation regime. Two sets of argument will be discussed, representing different approaches for the managing of non-proliferation and the world order. Theoretical and political considerations have contributed to the disagreements about the best way to manage a non-proliferation regime.

The second issue is an analysis of the incremental construction of a new arms control concept – nuclear weapon-free zones – as an internationally recognised means to prevent the deployment or the possession and control of nuclear weapons by nations located within some particular regions.

Within the realm of arms control and disarmament negotiations, which started not long after the Second World War, many different ideas had been offered. The significant number of armed forces and weapons accumulated after a global conflict of such proportion was a prime cause for concern in the planning for a new and more peaceful world order. Moreover, a new kind of weapon, that of atomic weaponry, complicated even further the process of regulating armaments level⁴⁷.

47 The Charter of the United Nations, since its first draft, did not employ the expressions arms control or disarmament. It used the expression arms regulation. For a useful discussion see Evan Luard *A History of the United Nations* Vol.1 London, Macmillan, 1989, pp. 321-42.

However, from the mid-fifties onwards, when a retaliatory capability against the United States had been achieved by Moscow, the attempts to put a ceiling on the level of armaments production gained a new dimension. To achieve a stable and peaceful post-war order it would be necessary to accommodate sophisticated military forces. Indeed, negotiations on 'the regulation of arms', especially military nuclear technology, became the central focus of international diplomacy: an Atomic Energy Commission was the first international body created by the first General Assembly of the United Nations, in January 1946⁴⁸.

Of all the proposals for partial disarmament or arms control which were raised within or outside the United Nations disarmament machinery, this chapter will be mostly concerned with the idea of nuclear weapon-free zones. This notion combined two different types of partial disarmament proposals in one. On the one hand, a free-zone could be understood as a means of enhancing national and regional security through arms control, so easing tension in regions of strategic importance. On the other hand, by prohibiting the possession of the most destructive and destabilizing types of weapons it could contribute to global security. Hence the idea of a militarily nuclear-free region as a way of enhancing national, regional and global security. The problem was that not every nation initially considered the idea desirable, feasible or a proper means of supplying regional or global stability.

Moreover, the NWFZ concept is a political concept. It was first raised to deal with a specific situation. Europe was the

48 "It was this proposal which was taken up by the Assembly in that first resolution passed on 24 January 1946. It agreed, without even debating the question, to act on the great powers' recommendation, and to establish an Atomic Energy Commission which would submit proposals to the Security Council for ensuring that atomic energy was used for peaceful purposes only, and for eliminating atomic weapons and other weapons of mass destruction through a system of inspection which would prevent evasion." Luard, *op. cit.* p.323.

main theatre where the proposals for partial disarmament were first made. It was in the context of the negotiations on the new political and military status of Europe, and the accommodation needed for co-existence between NATO and the Warsaw Pact that a proposal for a NWFZ was first suggested for Central Europe. This proposal, initially raised by Moscow in March 1956, was intended to stimulate the nuclear powers, through a treaty or similar instrument of international law, to achieve a nuclear-free zone in Central Europe. This referred at first to the two German states. Respect for the status quo of Central Europe, i.e., the preservation of a divided Germany, free of certain types of weapons and foreign military bases, was the prime motive behind Moscow's proposal.

Before describing the genesis of a NWFZ as an arms control concept, it is necessary to discuss the main premises behind the non-proliferation idea. The criticism raised by many nations on the injustice of a non-proliferation regime and the usefulness of the notion of a NWFZ must be understood as a result of the concern over the global distribution of resources and power. This view of the NWFZ notion as a political device created by the superpowers for their own interests is part of the complexity surrounding the applicability of the notion.

1.1. Horizontal Nuclear Proliferation: More or Less Stability?

Besides the argument that the nuclear non-proliferation regime created two diverse types of nations, with different rights and obligations, there is another set of arguments questioning the reasoning behind a non-proliferation regime. They are based on criticising the notion that the horizontal spreading of nuclear weapons equates with raising international instability. The latter reasoning had been fiercely contested by a group of nations

aspiring to conquer nuclear technology, including France, China, some 'threshold nations' as India, as well as by some highly respected scholars⁴⁹.

The argument which equated horizontal proliferation with international instability became *the* argument in favour of horizontal control. Many defenders of the argument felt that more nuclear weapons in more hands would be highly unstable for the global order. This would justify a non-proliferation regime as a necessary means to achieve international stability. However, this view is not as palatable as it could appear, and it remains at the centre of a long and complex debate. Few observers contest the reasoning altogether. Most agree that the spread of nuclear weapons might have a major impact on the global order. The debate lies, however, on the nature of the impact.

The debate is too complex to be fully analysed here, but it is relevant to present certain aspects. Moreover, it helps to understand opposing views on concepts such as stability, justice and a world order. One view on world order, stability and justice, developed by a group of Southern nations, has been the condemnation of the non-proliferation regime under the argument of the 'freezing of world power'. These nations sought to dominate nuclear technology, and felt discriminated by a non-proliferation regime. Indeed, the existence of peaceful and non-peaceful aspects of nuclear technology has complicated enormously the acceptance by some nations of the South of a non-proliferation regime. They felt discriminated against in their willingness to gain access to advance technologies in the name of possible military ends.

49 The argument was firstly put forward by Pierre Galois, *The Balance of Terror: Strategy for the Nuclear Age* Boston, Houghton Mifflin, 1961. (original French edition 1960). As an example of its employment by a respected scholar see Kenneth Waltz, *The Spread of Nuclear Weapons. More May be Better* Adelphi Paper 171, London, IISS, 1981.

It has been impossible to separate completely a peaceful from a non-peaceful dimension in the evolution of nuclear technology. The civilian application of the atom was an off-spring of military research⁵⁰. Many industrial commodities had also been off-springs of military research, and modern investment in science and technology has been deeply connected with military research. The five nations which dominated the field of nuclear military technology by 1 January 1967 invested heavily on the complete nuclear fuel cycle. The peaceful application which followed was only made possible because the industrial installations and technical man-power was created for military purposes.

Take for instance one method of creating fissile material for an explosive, namely enrichment of uranium. The five nuclear armed nations achieved the costly technology for enriching uranium at around 95%. But the costly and extremely sophisticated installations where the uranium was enriched at 95% were also used to enrich uranium at 3% for use in commercial power reactors. When Washington launched the 'Atoms for Peace' programme, she was propagating the commercial application of a hitherto secret technology. Guaranteeing the supply of enriched uranium for the nations which were able to receive initially research reactors, and then commercial reactors, she was creating an overseas market. By supplying enriched uranium at 3%, at an artificial price for foreign costumers, Washington was making a commercial use of materials which were developed first for military purposes. Supporting the diffusion of her pressurized-water reactor (PWR) technology worldwide, subsidising their companies with investments made foremost for military reasons, Washington was, alongwith

50 For an assessment of the complex relations between the peaceful and the non-peaceful atom see Albert Wohlstetter and all *Swords from Plowshares. The Military Potential of Civilian Nuclear Energy* Chicago, University of Chicago Press, 1977. See also J.A. Camileri "The Myth of the Peaceful Atom" *Millennium* v. 6 Autumn 1977, pp. 111-25.

Moscow and London, creating a nuclear economy from a military technology⁵¹.

The example of the technology to enrich uranium illustrates that a technology which was described as possessing a peaceful and a non-peaceful dimension, depending on the goals of the user, is a dangerous technology. It needs machinery for control. But the introduction of market forces into the field was a consequence of its diffusion for peaceful use. Civilian as well as military uses of the technology could well be part of the same investment with industrial installations, formation of man-power and so on. A clear-cut separation between purely civilian goals and purely military goals became meaningless.

Nevertheless, part of the debate on horizontal proliferation derives from the premise that it is possible to distinguish between peaceful and non-peaceful purposes. In the complex arguments on the instability of a world full of nuclear armed nations, two issues seem to be at the centre of the debate. One cannot forget relevant issues such as the possession of nuclear weaponry by terrorist groups or the irresponsibility of spending precious resources on nuclear weapons of doubtful utility. But the core of the argument has centred on two issues.

First the issue of leadership responsibility and second the risks brought about by forcing change in the hierarchy of the world order. The argument on responsibility is based on the idea that to learn the proper deterrence use of nuclear weapons is a demanding and painstaking process. It requires a sophisticated and responsible leadership, as well as expertise to produce adequate policies. It depends on experience in world affairs and complex machinery for command, control and intelligence. Apparently, it does not require

51 See Edward Wigner *Nuclear Fuel and American Foreign Policy, Multilateralization for Uranium Enrichment* Boulder, Westview Press, 1977 and Joseph A. Yager and Eleanor B. Steimberger *Energy and U.S. Foreign Policy* Cambridge. Ballinger, 1974.

a democratic polity or an open dialogue with the public opinion, as the Soviet and Chinese examples demonstrated. Nonetheless it has been pointed out that even in a democratic society such as the United States, the command and control of the nuclear forces has been much more problematic than expected⁵².

To complete the picture, there is the crisis of civilian nuclear power. Mounting costs, safety and environment problems had been undermining the credibility of the 'cheap and safe' nuclear energy. The accidents of Three Mile Island and Chernobyl were the most publicised examples of failures which occurred in the safety standards of a complex and costly industry. In the United States, the nuclear industry began to lose commercial credibility in the mid-seventies, and the eighties witnessed the phasing out of the industry in several more nations⁵³.

The argument on leadership responsibility is based on a fear of political instability in a nation armed with nuclear weapons, where an irresponsible or an 'irrational' leadership can threaten to make use of the unusable. Depending on the nature of the threat, it could trigger conflicts which could escalate to the use of nuclear weapons. It is actually a most serious argument. Nonetheless an argument on leadership responsibility and the learning process of co-existence with weapons of awesome destructive power consists in proving a moderate effect that their possession brought out. For example, Mao Ze Dong's China could not be considered as an example in foreign policy moderation. But in fact the possession of a deterrence capacity based on nuclear weapons seems to have acted as a moderating factor in Beijing's foreign policy, despite

52 See Paul Bracken *The Command and Control of Nuclear Forces* New Haven, Yale University Press, 1983. For a strong argument in favour of a more democratic and accountable management of nuclear weapons see Robert Dahl *Controlling Nuclear Weapons, Democracy versus Guardianship* Syracuse, Syracuse University Press, 1985.

53 See Irvin C. Bupp and Jean-Claude Derian *The Failed Promise of Nuclear Power. The Story of Light Water*, New York, Basic Books, 1981.

the relentless rhetoric about the inevitability of a third world war⁵⁴. Therefore, a revolutionary nation has evolved to behave in a moderate way, despite being armed with nuclear weaponry.

A counter example appears to be Castro's plea to the Soviet leadership not to remove the missiles from Cuba after the resolution of the Cuban missile crisis. Apparently Castro wanted to keep the missiles in Cuba as a security against the American threat to invade the island. But that is yet a matter of continuous debate and there is no conclusive evidence⁵⁵. Therefore the main point relates to the moderating effect that the possession of sophisticated weapons of mass destruction could stimulate.

Under the cover of the argument on leadership responsibility and political stability, the critics of the non-proliferation regime have uncovered an argument in favour of the perpetuation of an unjust world order. One class of nations was condemned to a perpetual second class status because the fear of political instability brought about by irresponsible leadership. On the other hand, the other class of nations has been free to pursue freely their technological advance as well as any system of armaments imaginable by the virtue of a self-attributed responsibility.

The argument might be more plausible whether understood as a defence of the virtues of a democratic polity for a non-aggressive foreign policy. But as the historical examples of the Soviet Union and China have demonstrated, a normative analysis of the world order will not do. Even if the necessity of responsible decision-

54 See Jonathan D. Pollack "Chinese Attitudes Towards Nuclear Weapons, 1964-9", *China Quarterly* n. 50, 1972, pp. 244-71. A recent history of the Chinese building of a nuclear arsenal is John Wilson Lewis and Xue Litai *China Builds the Bomb* Stanford, University of Stanford Press, 1988.

55 The recent debate between American and Soviet scholars and officials, and the Cuban interpretation of the events, are leading towards a more balanced explanation of the most serious crisis of the cold war. For Castro's position see Bern Greiner "The Soviet View: An Interview with Sergo Mikoyan" and Raymond L. Garthoff, Barton J. Bernstein, Marc Trachtenberg and Thomas G. Paterson "Commentaries on 'An Interview with Sergo Mikoyan'" *Diplomatic History* v. 14 n. 2 Spring 1990, pp. 205-56 and Tad Szulc *Fidel, A Critical Portrait* London, Hutchinson, 1986, pp. 469-80.

-making and a democratic polity has been the best argument against an aggressive foreign policy, the debate has not been centred on the virtues of a democratic polity but on order, stability and justice. It has been deceptive to base the argument in favour of a stable world order on speculations about the possible behaviour of an unstable leadership. Thus it is too much reductionism to deal with complex historical facts and imponderable human behaviour by putting too much stress on leadership responsibility. If the two superpowers did learn to restrict themselves, and did learn how to use nuclear weapons as a credible deterrent, other nations could learn as well.

The second main argument has dealt with the risks for international order in a world with many nuclear powers⁵⁶. First the argument stresses the complexity of building up a credible deterrence based on nuclear weapons. A credible deterrence based on nuclear weaponry implies the existence of a credible second strike capability, which requires a sophisticated and complex management of command, control and intelligence. The probability of many nations acquiring that level of sophistication is low.

What they would probably possess would be crude versions of nuclear devices, a handful of plutonium or enriched uranium explosives⁵⁷. Without a second strike capability, as well as without sophisticated delivery means, they could become less, not more secure. They would be targets for nuclear weapons, without a proper defence. Thus the temptation to strike first in a crisis would be great.

This is a most serious criticism of the propensity for world instability brought about by horizontal proliferation of nuclear

56 This is the main problem dealt with by the literature since the early sixties, when the prospect of more nations entering the nuclear age was beginning to be an international issue. For an early article see Fred Ikle "Nth Countries and Disarmament", *Bulletin of the Atomic Scientists*, v. 16 n. 10 December 1960, pp. 391-94.

57 A recent study showing this being the case of Israel is Peter Pry *Israel's Nuclear Arsenal* Boulder, Westview Press, 1984.

weapons. The only reasonable answer to this argument is that a moderating effect could well work by pure self-interest. If the two superpowers managed to overcome the initial problems of learning how to co-exist in a nuclear world based on an overkill capability, less developed nuclear powers could learn to live with their scarcity. They are, by and large, experts in the art of living with scarcity.

The doubts raised by the arguments explored here should not be understood as a defence of horizontal proliferation. They have to be understood as a response to some aspects in which the argument in favour of a tight nuclear regime has been based. For example, there has been an extensive literature dealing with the relevance of nuclear weapons for decades of world stability. Its main rationale has been the idea that a bipolar order is intrinsically more stable than a multipolar order⁵⁸. Thus, the introduction of more nations with nuclear weapons could be understood as a contribution towards multipolarity, and hence towards greater global instability.

Surely, a world with more nations armed with nuclear weapons could become a more unstable world. However, as a matter of speculation, one can take the argument to its logical conclusion, that is that a world with every nation armed with some form of credible deterrence posture would be a perfectly stable order. So far, the only historical evidence available has been the stability of a nuclear bipolar world. Nonetheless the nature of the world order has been continuous change and adaptation. No one could have predicted the stability of a nuclear bipolar order, which was an evolving process.

Undoubtedly, under the diplomatic posture of the group of nations critical of the non-proliferation regime, ambitions for change had been prominent, and change not only in military capability but

58 See Kenneth N. Waltz *Theory of International Politics* Reading, Mass., Addison-Wesley, 1979.

also in the world distribution of wealth⁵⁹. Military power has been gradually losing its importance as a measure for world power. By and large a notion such as power has been gradually less associated with pure military capacity⁶⁰. Thus, in understanding their reasons for wanting to master nuclear technology, a combination of motivations should be combined. To change their international status and raise themselves in the hierarchy of nations is a complex, costly and difficult business. More resources of power are needed. By a combination of territorial size, population, natural resources and industrial capacity, skills, self-image as well as regional and global perceptions, this group of nations seeks to raise their profiles as responsible nations, and have more say on global issues. Some lack a major symbol of world status, which could be given by the possession of nuclear technology. In associating first class status with conquering nuclear technology, rightly or wrongly, they were making explicit what they seek, namely to be part of the selected group of influential and first class nations. This is the idea of the ultimate military technology as a great leveller of global power.

A good example of different assumptions on the role of nuclear weapons as a factor of stability or instability of the world order could be better understood in the different theoretical assumptions by two groups of American scholars who had been writing extensively on non-proliferation and world stability. Joseph Nye, Jr. and Kenneth Waltz could be considered as representatives of two different approaches towards international order, an interdependent approach in the former and a neo-realist approach in the latter. Besides the theoretical aspect, Nye has had an important experience as a policy-maker during the Carter years,

59 A good account is Stephen D. Krasner "Transforming International Regimes: What the Third World Wants and Why" *International Studies Quarterly* v. 25 March 1981, pp. 119-48.

60 See David Baldwin "Power Analysis and World Politics: New Trends versus Old Tendencies" *World Politics* v. 31 January 1979, pp. 161-94.

when he was under-secretary of State for Security Assistance, Science, and Technology. He became a key decision-maker for non-proliferation issues. Waltz produced the most known defence of horizontal proliferation among the neo-realist scholars.

In Nye's work on non-proliferation it is very clear the combination of a scholar and a policy-maker⁶¹. In his more famous piece on the issue, he sought to defend the record of Carter's non-proliferation policy, which attracted many enemies among allies and foes alike. As someone theoretically worried about management of the world order and the role of the hegemonic power, Nye represented the enlightened approach of the Carter administration. Non-proliferation was pointed out as a first priority by the Carter administration. Seeking to gain support for a joint management of the non-proliferation regime, in a truly interdependent manner, Carter's initial approach to the non-proliferation regime was a mixture of successes and failures.

The main objective of Nye's reasoning in the *Foreign Affairs* article was to defend the reform of the nuclear non-proliferation regime. Seeking to persuade the partners that a concerted initiative was the best way to deal with a complex international issue, the Carter administration understood the uncontrolled expansion of nuclear technology as a great risk to the global order. Initiatives such as an international conference on the nuclear fuel cycle – the INFCE – and the acceptance of fresh initiatives on vertical proliferation to give more credibility to tackle the horizontal proliferation problem were pursued. But under Nye's progressive proposals, there were implicit arguments similar to

61 See Joseph Nye, Jr.: "Non-Proliferation: A Long Term Strategy" *Foreign Affairs* v. 56 n. 3 April 1978, pp. 601-23; "Maintaining a Nonproliferation Regime" *International Organization* v. 35 Winter 1981, pp. 15-38; "NPT: The Logic of Inequality" *Foreign Policy* n. 59 Summer 1985, pp. 123-31. A very interesting recollection of his experience is found in "The Diplomacy of Nuclear Non-Proliferation" in Alan K. Henrikson (ed.) *Negotiating World Order: The Artisanry and Architecture of Global Diplomacy* Wilmington, Scholarly Resources Inc., 1986, pp. 79-94.

the arguments discussed above on leadership responsibility and on world instability caused by horizontal proliferation.

Henceforth, the problem with the argument of enlightened leadership to manage a successful regime is that in the end it worked with the usual combination of carrots and stick. When many nations did not agree with Carter's ambitions to tighten the regime, Washington had appealed to more traditional ways of exerting leadership⁶². The relationship with the Federal Republic of Germany and with Brazil, after their nuclear deal of 1975, are the best examples⁶³. Despite the soft language and an appeal for persuasion instead of coercion, the approach was based on the joint management led by an enlightened leadership, and it failed. In the end, in tightening the export of sensitive nuclear processes, and reverting to coercion, the episode illustrated the limits of enlightened leadership to deal with a complex combination of opposing interests⁶⁴.

On the opposite front from Nye's argument in favour of enlightened management was Waltz's self-help approach⁶⁵. Implicit in his approach was a criticism of the interdependent vision and the idea of management of the world order by an enlightened leadership. Defending the deterrence value of nuclear weaponry in conditions of international anarchy, Waltz accepted and defended an international order based on the dissemination of nuclear weapons, despite his defence of bipolarity. With more than five

62 See Frederick Williams & all "The Nuclear Non-Proliferation Act of 1978: Reactions from Germany, India and Japan" *International Security* v. 3 n. 2 Fall 1978 and Brenner, op. cit. pp. 172-212.

63 See Karl Kaiser "The Great Nuclear Debate: German-American Disagreements" *Foreign Policy* n. 30 Spring 1978, pp. 83-110 and Margareth K. Luddeman "Nuclear Technology from West Germany: A Case of Disharmony in US-Brazilian Relations" Occasional Paper n. 1, Latin American Program, Georgetown University, 1978.

64 See Michael Mandelbaum "A Nuclear Exporter Cartel" *Bulletin of the Atomic Scientists* v. 33 n. 1 January 1977, pp. 42-50.

65 Waltz (1981), op. cit.

nuclear armed powers, nothing would automatically lead towards more instability. He based his argument on the idea that any leadership could learn, as the five nuclear weapons states did learn, how to co-exist with nuclear weapons as a deterrence force. Then, nuclear weapons could act as a moderating factor for leadership responsibility in world affairs, restraining aggressive expansion and irresponsibility. Under Waltz's approach, stressing the moderating factor, lay his quasi-Hobbesian conception of the world order.

Waltz was not imputing the same moral and political virtues to any leadership per se. As someone who wrote extensively on the virtues of a democratic polity to a non-aggressive foreign policy, he was well aware of the relationship between non-democratic polities and aggressive foreign policy⁶⁶. Hence, what could function as a moderating factor is a Hobbesian factor, namely fear. Of course the prospect of a world order based on fear is not bright. But certainly it can be stable. And stability is the value under discussion.

Waltz added up another factor in defending horizontal proliferation, i.e. that more capability in the hands of Third World nations would, as a consequence, bring them more influence on world affairs⁶⁷. More influence could mean more interest on the preservation of the international order and orderly change. Hence, they would become more involved in the management of the regime, and more interested in its preservation.

The major lesson to be learned from the debate between the interdependent and the neo-realist approaches on non-proliferation is that there is no consensus at all, at a theoretical as well as at policy-making level on the consequences of nuclear

66 See Kenneth N. Waltz *Foreign Policy and Democratic Politics* Boston, Little Brown, 1967.

67 A similar argument is developed in John J. Weltman "Nuclear Devolution and World Order" *World Politics* n. 2 January 1980, pp. 169-193.

proliferation on world stability. Both arguments described have raised some relevant points.

The main point is that both concentrated on stability and orderly change as main values. But as far as non-proliferation became a central issue on the international agenda – which undoubtedly the Carter administration had much to do with – it inevitably became embroiled in arguments along a rich-poor, North-South divide. Disagreements on perceptions as well as on the best policies to manage orderly and incremental changes became prominent. Due to the complexity of the issue, and to a certain inability to tackle it, Nye's approach, and Carter's policies, ended up in polarising the positions⁶⁸. In an issue combining civilian and military aspects, national pride and a set of complex national motivations, the attempt to co-ordinate every single aspect by enlightened leadership backfired. In tightening export controls of nuclear equipment, with the agreement of the developed world, Carter's policy ended by deepening the suspicions of that group of nations seeking to acquire nuclear technology that Carter's policies were perpetuating a rich versus poor game.

In contrast with American attempt at enlightened leadership, the French example of self-help is striking. France had been the best example in the sixties of maintaining an alliance with Washington, and at the same time investing in an autonomous nuclear technology for peaceful and non-peaceful purposes. The French success in mastering nuclear technology has had a very strong impact on the group of nations critical to the non-proliferation regime. As a non-member as well as a severe critic of the NPT, France has not been ostracised internationally, and her autonomous technological achievements and her *force-de-frappe*

68 See Bertrand Goldschmidt and Myron Kratzer "Peaceful Nuclear Relations: A Study of the Creation and the Erosion of Confidence" in Ian Smart (ed.) *World Nuclear Energy* Baltimore, Johns Hopkins University Press, 1982.

contributed enormously for her prestige among nations with similar motivations to master updated technology. Moreover, the building of a sophisticated arms industry and an indiscriminate export policy also contributed to France's prestige and influence abroad⁶⁹.

Subsequently, the Indian explosion of a 'peaceful nuclear device' in 1974, contributed as well to the emphasis on autonomous nuclear and technological development as a source for raising international status and national prestige. Even if New Delhi has refused to openly acknowledge that it has become a 'nuclear power', and stresses the peaceful nature of its programme, it has contributed to both, to the prestige and self-esteem of the Indian nation. It was a scientific achievement made with indigenous expertise against external attempts to inhibit New Delhi's autonomous drive.

1.2. The Genesis of the Concept of a NWFZ

The idea of banning certain types of weapon from a specific region as well as establishing limits on their production or deployment was not original. The notion of a free zone in the Central European context was the product of an international order which was increasingly bipolar. It meant that every single discussion on armaments became entangled within the security sphere of the two main powers⁷⁰. The Soviet proposal was motivated by a fear of a military encirclement and a 'revanchist' Germany, possibly armed with nuclear weapons, but it could also be understood as an attempt to impoverish Western defence⁷¹.

69 See Edward A. Kolodziej, *Making and Marketing Arms, The French Experience and its Implications for the International System* Princeton, Princeton University Press, 1987.

70 On the international political implications of bipolarity, see Waltz (1979).

71 This last view was the main argument of P. H. Vigor in *The Soviet View of Disarmament* London, Macmillan, 1986.

The proposal of March 1956, that the two German states should be made free of nuclear weapons, was presented by Moscow as a first step towards a denuclearized and fully disarmed Central Europe. The immediate Washington perception was that this reflected the Soviet fear of NATO's military strength. As a result, it was judged to reflect the Soviet's goal to achieve a neutral Germany rather than a serious interest in negotiation. Moreover, the plan did not contain detailed provisions for the implementation, control of nuclear weapons or even the role of the nations involved. The main element of contention between Washington and Moscow since 1946 on armaments negotiation – that of the priority given to implementation versus the necessity to establish accepted mechanism of control – was not resolved in the proposal. The proposal was thus seen by the Western powers as another example of the Soviet obsession with its own national security. At least both sides agreed on a single fact, namely that the political and military status of the German nation was indeed the main political problem in Europe.

In spite of Western opposition, the Soviet idea of a NWFZ in Central Europe gained a dimension far exceeding the original intent. It was gradually transformed into a popular proposal towards partial disarmament⁷². It evolved towards an idea of quasi-universal application, proposed and debated in relation to several different regions. Nevertheless, the NWFZ idea still needs to be understood in its original sense: as a product of the relationship between Washington and Moscow dealing with regard to the specific context of Central Europe.

At the end of the Second World War, when the struggle to fill the power vacuum in Europe became the dominant issue, the

72 See Hector Gros Espiell, "Desarme Nuclear, Perspectivas Regionales" *Revista de Estudios Internacionales* v. 2 n. 4 October-December 1981, pp. 927-49.

two new superpowers despite being allies could not agree on the shape of the new order. A conflict over ideology, as well as interests, developed in an overreaching international dispute, from which all other East-West confrontations derived. Amongst the major issues of the fifties were questions such as general or partial disarmament, foreign military bases, the deployment of new missile systems, the size of the defence budget and technological gaps. They were all conditioned by the evolution of the political and military relations between the two competing blocs. Indeed, the cold war gave prominence to decisions on defence, reinforced by the rapid sophistication and increase in destructive power of the recently introduced nuclear weapons.

One consequence of the slow learning process on the political and strategic meaning of nuclear weapons was the emergence of the vague and rather utopian notion of 'general and complete disarmament'⁷³. Instead of conducting piecemeal negotiations leading towards a more stable distribution of manpower and equipment, an emotional appeal to get rid once and for all of weapons, conventional as well as nuclear, became the major goal, at least rhetorically, of the United Nations disarmament machinery.

From 1959 onwards, general disarmament was presented by Moscow, Washington, London and Paris as a serious foreign policy goal, as well as a promise to the world community at large of a stable and peaceful future⁷⁴. Nevertheless, the failure of the League of

73 In fact the notion of general and complete disarmament was never fully and clearly defined. The UN Charter explicitly did not mention it as a desirable goal for international security. All the discussions about the theme mentioned the necessity to maintain a minimum level of armaments. For a criticism of the disarmament notion as a means for international security see Buzan (1987), Chapter 5.

74 A critical view of the role played by disarmament and arms control proposals as a way to administer the arms race in the benefit of the superpowers is Alva Myrdal *The Game of Disarmament, How the United States & Russia Run The Arms Race* Pantheon Books, revised and updated edition New York 1982. A very critical view of the role of the United Nations disarmament machinery is Avi Becker, *Disarmament Without Order: The Politics of Disarmament at the United Nations* Westport, Greenwood, 1985.

Nations in dealing with security issues and restrictions on the level of armaments, as well as its failed appeal for general disarmament, were not forgotten. Grand schemes for general disarmament had to be complemented with less encompassing but more attainable partial measures⁷⁵.

There was still a vivid memory in the United Nations of the failure of the American attempt to negotiate with the Soviet Union on the international control of nuclear technology, through the Baruch Plan⁷⁶. This failure eventually led to the Soviet withdrawal from the UN Atomic Energy Commission in 1950, and the closure of the Commission altogether in 1952.

The ill-equipped security machinery of the United Nations had already begun to be used as a forum to advance disarmament proposals. But without a common language, not to mention common objectives, the scale of the learning process was considerable. Hence the appeal of such a broad and ill-defined notion as 'general and complete disarmament'. Even as a simple instrument of propaganda, as rhetoric to conceal a huge investment in new armaments systems, the notion still had a utopian appeal which ignored the historical evidence on war and politics. Nonetheless, perhaps as a result of wishful thinking or by the hope brought out by the end of the war, the notion became widespread, and was cultivated within the international disarmament machinery. Therefore, attempts to achieve partial disarmament were made in the name of, or as confidence-building measures leading towards the final goal of 'general and complete disarmament'.

75 An interesting resume of the attempts for disarmament before 1945 is found in Jean Klein *L'entreprise du Desarmement, 1945-1964* Paris, Editions Cujas, 1964, pp. 2-29.

76 For an interesting insider view on the failure of the Baruch Plan, see Dean Acheson, *Present at the Creation: My Years at the State Department* London, Hamish Hamilton 1970 pp. 149-56; useful analysis are Larry G. Gerber "The Baruch Plan and the Origins of the Cold War" *Diplomatic History* v. 6 n. 1 Winter 1982, pp. 69-96 and McGeorge Bundy *Danger and Survive: Choices about the Bomb in the first Fifty Years* New York, Random House, 1988.

In fact, as Hedley Bull emphasized, disarmament proposals only make sense if properly understood as subordinate to tangible foreign policy goals⁷⁷. This remark helps to explain why so many proposals for partial, as well as general, disarmament initiated by one of the superpowers could not be accepted by the other. Examples abound where a particular proposal to achieve general disarmament – made by the United States, the Soviet Union, or even Britain or France – could not make progress because it clearly favoured one side only. There was no basis for any serious bargaining process.

A clear link existed between the many proposals for regional disarmament measures and the rhetoric on ‘general and complete disarmament’. As the latter was constantly repeated as a final and obtainable goal, the former were presented by the superpowers as a step in an evolving process. Thus, curbing the proliferation of certain kinds of weapons, including to certain regions, was presented as a reasonable means of enhancing both regional and global security. If, as a result, more confidence would be built up, then the superpowers could begin to discuss ways as well as levels of disarmament. It is very important to understand this link because it provided the initial rationale for the presentation of successive ideas on regional disarmament.

1.3. The Rapacki Plan

The notion that particular areas of the world should be made free of certain types of weapons in order to enhance national, regional or global security, as well as build up confidence among the superpowers was first raised by Moscow. In the beginning there was not a clear-cut plan to create NWFZ as a concept applicable

77 The pioneering and yet highly useful work of Hedley Bull, *The Control of the Arms Race* London, Weidenfeld & Nicolson for the Institute for Strategic Studies, 1961, is a source of a balanced view on the history of arms control negotiations. His exact wording is: “A nation’s disarmament policy is, however, a subordinate part of its foreign policy, and expresses the general character of that policy.” p.66.

world-wide. What appeared as a response to special circumstances eventually evolved into a quite elaborate, though polemical, notion of free zones with quasi-universal application. However, its acceptance by other nations besides the Soviet bloc was a rather long process. This process needs to be understood in the context of an issue that was developing coincidentally: the fear of the proliferation of nuclear weapons towards less developed and 'responsible' nations. The nuclear proliferation issue, initially known as 'the *Nth* nation problem' became a driving force behind a more extensive acceptance of the notion of NWFZ. Henceforth, when the fear of losing control of nuclear technology became widespread and penetrated the minds of both civilian and military leaders in the superpowers, it stimulated the acceptance of NWFZ as a more palatable idea to the United States and the Western bloc⁷⁸.

The first concrete plan to establish a region as militarily nuclear-free was a product of Central Europe's circumstances. In 27 March 1956, Moscow initiated at the United Nations a 'Soviet Proposal in the Disarmament Subcommittee: Draft Agreement on the Reduction of Conventional Armaments and Armed Forces'⁷⁹. As the title of the proposal indicates, the main objective of the Draft was to reduce the level of armaments and armed forces stationed in Germany. But in its second proposition, there was an explicit mention of nuclear weapons⁸⁰: "...the agreement shall provide that the stationing of atomic military formations and the location

78 The literature on nuclear non-proliferation is immense. Two broad but useful views on the link between horizontal non-proliferation and nuclear weapon-free zones are: Georges Fischer *The Non-Proliferation of Nuclear Weapons* London, Europa Publications, 1971 and William Epstein *The Last Chance, Nuclear Proliferation and Arms Control* New York, The Free Press, 1976; A refined view is Buzan (1987) op. cit. chapter 4.

79 The title of this proposal as well as the subsequent titles were drawn from the series *Documents on Disarmament* Washington, D.C., United States Arms Control and Disarmament Agency. I prefer to maintain the titles given by the Agency to give uniformity to the proposals.

80 *Documents on Disarmament* p. 607.

of atomic and hydrogen weapons of any kind in the zone shall be prohibited”.

The Draft is the first where a prohibition to deploy nuclear weapons was explicitly mentioned. Nevertheless, it was far from being an organized set of ideas for a free-zone in Central Europe. The prohibition of nuclear weapons was an element within a plan to neutralize Germany. It was raised as a solution to what the Soviets then perceived as the most dangerous development in Europe, namely the rearmament of the Federal Republic of Germany and her integration into the NATO structure. The fear that the new military capability of the Federal Republic of Germany could contain nuclear weapons gave impetus to the proposal to neutralize the two Germanies and to create a zone prohibiting the introduction of nuclear weapons by the superpowers⁸¹.

The idea evolved to include Poland and Czechoslovakia, and became openly discussed from 1957 onwards under the name of the Polish Foreign Minister who refined the plan and made it more concrete, Adam Rapacki. Therefore, the Rapacki Plan was the first coherent proposal, in political as well as military terms, to address the question of how to create a geographically well-defined region free of nuclear weaponry.

The initiative of the Polish Foreign Minister was well conceived. Speaking in the name of one of the nations of Central Europe which had also legitimate interests in German rearmament, Rapacki intended to answer the American criticisms that the Soviet Plan of 1956 was an imposition from a foreign power on the wishes of Central Europeans nations. Thereafter it was judged that any

81 A useful analysis of the major issues surrounding the West Germany possession of nuclear weapons is by Catherine M. Kelleher *Germany and the Politics of Nuclear Weapons* New York, Columbia University Press, 1975.

genuine plan to establish regional disarmament required that it be raised by a member of the region concerned⁸².

The Rapacki Plan made its first appearance on October 2, 1957, when the Polish Minister delivered an 'Address to the General Assembly', stressing the dangers of German rearmament. The address also contained proposals opposing West Germany's entry into NATO and its reunification, and tackling the problem of the Polish-German border. In this address the Minister mentioned nuclear weapons as a problem of serious concern for all the Central European nations. In Rapacki's words:

*...the government of the People's Republic of Poland declares that if the two German states consent to enforce the prohibition of the production and stockpiling of nuclear weapons in their respective territories, the People's Republic of Poland is prepared simultaneously to institute the same prohibition in its territory*⁸³.

A further development came on February 14, 1958, when a 'Note and Memorandum from the Polish Foreign Minister (Rapacki) to the American Ambassador (Bean)' was delivered in Warsaw⁸⁴. It consisted of a much more elaborate version of the proposal made at the United Nations in October. The previous proposal had just mentioned concrete steps towards a treaty, but now they were deepened with reference to security guarantees from the superpowers, supervision of the retirement of forces and effective control as well as an international convention to discuss and implement the accord. It argued that this plan would reduce the overall military forces in the region and contribute to world peace.

82 This became a necessary but by no means a sufficient condition to a successful negotiation, as will be explored later on.

83 *Documents on Disarmament* 1957, pp. 889-92.

84 *Documents on Disarmament* 1958, pp. 944-48.

In its answer, the American government utilised a set of arguments which became her standard position towards any proposal leading towards regional disarmament in Europe or elsewhere which included nuclear weapons. It argued that NATO was a defensive structure which needed nuclear weapons to face the Soviet superiority in conventional weapons. The Americans answer also defended German reunification, stating that the Polish proposal: "...would perpetuate the basic cause of tension in Europe by accepting the continuation of the division of Germany"⁸⁵.

The next step came in November 4, 1958, in 'News Conference Remarks by the Polish Foreign Minister (Rapacki) Regarding an Atom-Free Zone in Central Europe'⁸⁶. Rapacki once more defended his Plan, aiming to improve it to meet Western demands. In response to the American criticism of the previous proposal, he faced the issue of Soviet supremacy in conventional armaments. He envisaged a Plan in two phases, where:

...the implementation of the second stage would be preceded by talks on the appropriate reduction of conventional forces. Such a reduction would be effected simultaneously with the complete denuclearization of the zone. Again it would be accompanied by the introduction of appropriate control measures⁸⁷.

Connecting the nuclear with the conventional aspects of disarmament, Rapacki wanted to surmount Western opposition and generate international support. He tried to present it as an ambitious but feasible plan.

However, sympathetic support from these sectors of the international community still fascinated by grand schemes of

85 In 'Note from the American Ambassador (Bean) to the Acting Polish Foreign Minister (Winiewicz), May 3, 1958' *Documents on Disarmament* 1958, pp. 1023-25.

86 *Documents on Disarmament* 1958, pp. 1217-19.

87 *Op.cit.* p.1218.

disarmament was not sufficient to make his Plan palatable to the Western bloc, which then mistrusted any diplomatic initiative from the Eastern bloc. The only achievement, in terms of the building up of plans for partial disarmament measures, was that the Rapacki Plan for the denuclearisation of Central Europe became widely known. Even though it lacked immediate application, the idea of regional military denuclearisation came to be recognised as a measure of partial disarmament. Similar ideas began to proliferate worldwide.

On September 27, 1960, in an 'Address by the Polish Representative (Gomulka) to the General Assembly', the Polish Prime Minister presented once again a Polish Plan for a free-zone in Central Europe⁸⁸. This time, he pointed to the international recognition and support for the NWFZ idea, offering the Rapacki Plan as an example of a regional arrangement for security which could be emulated world-wide. He defended similar proposals in the Balkans, supporting a Romanian proposal, in the Far East through a Chinese proposal, and in Africa with a proposal suggested by Ghana. In the speech, he also made a plea for a detente between the superpowers and suggested that the NWFZ idea could increase experience in partial disarmament. As before, the main opposition continued to be from the United States, strongly supported by the Western powers, especially the Federal Republic of Germany.

On March 28, 1962, in the 'Polish Memorandum Submitted to the Committee of the Whole of the Eighteen Nation Disarmament Committee: Rapacki Plan for Denuclearization and Limited Armaments in Europe'⁸⁹, the Polish delegation introduced once more the theme of NWFZ into the United Nations, following a

88 *Documents on Disarmament* 1960, pp. 254-60.

89 *Documents on Disarmament* 1962, pp. 201-205.

Resolution in favour of Africa as a NWFZ passed in 1961⁹⁰. The African resolution was a direct product of the French use of the Sahara desert as a site for nuclear tests⁹¹. In his yet more extended Plan, Rapacki developed his previous ideas, with a new two-phased proposal. In the first phase, he suggested a freezing of nuclear weapons and rockets and the prohibition of the establishment of new foreign military bases in the area. In the second phase, the Plan sought the elimination of nuclear weapons and the reduction of armed forces and conventional armaments. The aim of this extended version was to make the proposal even more palatable to the United States and the Western bloc.

Nonetheless, the Western powers were still not convinced of the good intentions of the Plan in dealing with Soviet superiority in conventional forces. The American response was delivered in a 'Statement by the Department of State on the Rapacki Plan and other Partial Disarmament Proposals, April 3, 1962'⁹². Although Washington's reaction was explicitly against the new version of the

90 'General Assembly Resolution 1652 (XVI): Consideration of Africa as a Denuclearized Zone, November 24, 1961', *Documents on Disarmament* 1961, pp. 647-48. On the American reaction to the proposal of Africa as a NWFZ see 'Statement by the American Representative (Dean) to the First Committee of the General Assembly: Denuclearized Zone in Africa, November 9, 1961', *Documents on Disarmament* 1961, pp. 580-82. On the Soviet reaction see 'Statement by the Soviet Representative (Tsarapkin) on the First Committee of the General Assembly: Denuclearized Zone in Africa and Prohibition of the Use of Nuclear Weapons, November 8, 1961', *Documents on Disarmament* 1961, pp. 574-78. Rapacki wrote an article defending his new version of the Plan in Adam Rapacki "Nuclear-Free Zones" *International Affairs* v. 39 n. 1 January 1963, pp. 1-12. See also Betty Goetz Lall "On Disarmament Issues: The Polish Plan" *Bulletin of the Atomic Scientists* v. 20 n. 6 June 1964, pp. 41-43.

91 On the African failed attempt to establish a NWFZ see William Epstein, *A Nuclear-Weapon-Free Zone in Africa?* Occasional Paper n. 14, Muscatine, The Stanley Foundation, 1977.

92 The three main reasons raised to oppose the Rapacki and other plans of partial disarmament in Central Europe were: "1)...that the measures envisaged do not address themselves to the nuclear weapons located in the Soviet Union, the use of which against Western Europe has been repeatedly threatened by Soviet spokesmen. 2) that the plan would therefore result in a serious military imbalance. 3) that consequently, while creating an illusion of progress, it would in reality endanger the peace of the world rather than contribute to maintaining it." *Documents on Disarmament* 1962, pp. 277-78.

Rapacki Plan, it was in fact a repeated answer of its position towards the NWFZ idea⁹³.

The NWFZ notion was in the process of being transformed from a clear example of Soviet propaganda into an acceptable measure towards regional security. The proposal for a NWFZ in the African continent made in 1961, the Polish re-introduction of the Rapacki Plan in 1962, the Brazilian proposal for a Latin American NWFZ following the African example, as well as the other proposals to create NWFZs around the world are all examples of this transformation. An idea which was initially raised to defend the interests of a superpower became relatively well accepted by other nations not allied with the Soviets⁹⁴.

1.4. NWFZ as a Practical Notion

The proliferation of NWFZ initiatives from outside the Soviet bloc by nations of different political, geographic and economic levels of development, suggested that a loose alliance against any form of development of military nuclear technology was being formed. The idea of free-zones appealed as a means of enhancing regional security and protecting weak nations from an undesirable regional nuclear competition. Leaving aside the rhetoric in favour of world peace which any NWFZ proposal naturally brought out, the spread of these initiatives was understandable. In the environment of the cold war there was widespread suspicion of the superpowers intentions as well as of all-encompassing plans

93 An analysis of the reasons for the failure of the Rapacki Plan was made by James R. Ozinga *The Rapacki Plan. The 1957 Proposal to Denuclearize Central Europe, and an Analysis of its Rejection* Jefferson, McFarland & Company, 1989.

94 Proposals were made after 1959 for free-zones in the Baltic, Adriatic, Mediterranean, Scandinavia, The Far East and African areas. It was not a coincidence that several of these proposals were mentioned following a security pact signed between western powers and nations of these regions, the creation of American military bases or the announcement of the deployment of nuclear weapons on the soil of an American ally. For a detailed study of every proposal made and the causes for its failure, see Graham, op. cit.

for general disarmament. Partial disarmament or arms control, perceived as enhancing national, regional and global stability were well received.

Meanwhile, the politics of bipolarity also had its complexities. The strategy of the superpowers, which had led to the creation of alliances and security pacts, began to collide with the tentative formation of a third force in the international system, known as the non-aligned movement. This rather loose coalition of nations which struggled to remain outside the two main blocs, became the main advocate of the NWFZ idea⁹⁵. The notion that this was a legitimate way to fight for national and regional security in a highly polarized environment could be detected in the spread of suggestions for NWFZ, made not by the Soviet bloc, but by nations of different political persuasions⁹⁶. It was as if every corner of the world was waiting for an opportunity to build mechanisms against the deployment of nuclear weapons.

Although the fascination with nuclear technology per se, as a means towards peaceful development, did not lose its appeal, military nuclear technology became a clear target of the non-aligned movement. Any regional plan for the prohibition of the deployment of nuclear weapons, if presented as a step towards general disarmament, would be supported by a coalition of African, Asian and, on a lesser scale, Latin American nations. The fight in favour of decolonisation became the trigger for the formation of

95 Three useful studies on the 'neutral' participation in the UN Eighteen Nations Disarmament Committee (ENDC) are: Arthur S. Lall "The Nonaligned in Disarmament Negotiations" *Bulletin of the Atomic Scientists* v. 20 n. 5 May 1964, pp. 17-20 and *Negotiating Disarmament, The Eighteen Nation Disarmament Conference: The First Two Years, 1962-64* Ithaca, Cornell University, Centre for International Studies, Cornell Research Papers in International Studies n. 2, 1964. Lall was the Indian representative at the ENDC; Samir M. Ahmed "The Role of Neutrals in the Geneva Negotiations" *Disarmament and Arms Control* v. 1 n. 1 Summer 1963, pp. 20-32. It is also useful to consult Jack A. Homer "Nonalignment and a Test Ban Agreement: The Role of the Nonaligned Nations" *Journal of Conflict Resolution* v. 7 n. 3 1963, pp. 542-52.

96 Mexico, for instance, has declared herself unilaterally as a nuclear-free nation in 1962, followed by Sri Lanka in 1964. See Graham op.cit p. 65.

the coalition of the non-aligned. They could also unite, at least rhetorically, on a plea in favour of the banning of nuclear weapons.

Along with the formation of this loose coalition in favour of partial disarmament from outside the Soviet bloc, another coalition was being built. This was of the nuclear powers. Their alliance to control horizontal nuclear proliferation evolved to the defence of the idea in favour of regional military denuclearisation. The widespread dissemination of nuclear technology amongst other states changed its nature. Horizontal nuclear proliferation was initially restricted to the deployment of nuclear weapons by the superpowers in the territory of their allies. Later it began to include an increasing number of medium or well developed nations which were starting to contemplate, for different motives, the production of nuclear weapons as an acceptable instrument for national defence.

From the fifties, a rationale for investment in an autonomous nuclear weapons programme was developed by nations aspiring to world status. The most successful were developed by France and China. After the UK's entry into the 'Nuclear Club', the success of Paris and Beijing brought the number of Nuclear Powers to five by 1964. The French independent force de frappe, as well as the Chinese conflict with the USSR over the development of its own nuclear weaponry, demonstrated that with a certain level of industrial development, and the political will to engage in a well-conceived programme, a minimum deterrence capability could be built. As a consequence of the possible enlargement of the 'Nuclear Club', several proposals were made to control the spread of nuclear weapons⁹⁷.

97 See Mason Willrich *Non-Proliferation Treaty: Framework for Nuclear Arms Control* Charlottesville, The Michie Company, 1969. The most complete study of the origins of the Non-Proliferation Treaty is by Mohamed Shaker *The Nuclear Non-Proliferation Treaty: Origins and Implementation, 1959-1979* New York, Oceana Publications, 1980.

Through the United Nations, diplomats were trying to find ways of restraining production of nuclear weapons by other nations other than the three original possessors. From the Irish proposal of 1959, and the perception that neither France nor China would restrict themselves in developing a nuclear military capability, the efforts to create a mechanism of international control became more urgent.

Meanwhile, France and China were developing rather similar arguments to justify their right to pursue independent defense policies based on the use of nuclear weapons. The arguments were drawn from what was defined as the 'injustice of the international order'. As powers aspiring to more prestige and influence in world affairs, France and China began to ask questions such as: 1) why should a sovereign nation accept a prohibition on the production of a means of national defence available to other nations? 2) why should a technically sophisticated nation avoid the mastering of a technology which is so valued and praised as an achievement of mankind?

Thus, in affirming their readiness to enhance their international status, De Gaulle as well as Mao Ze Dong, refused to recognise the right of any international mechanism to control the spread of nuclear weapons. They marginalised themselves from the United Nations disarmament machinery. France never attended the ENDC, so this met through the period with only 17 nations. China, not even a member of the United Nations at the time, and pursuing a very secretive policy, was under no scrutiny at all from the international community. Under the argument of national grandeur or freedom of movement, the French achievement of 1960 as well as the Chinese achievement of 1964 increased the international awareness on the spread of nuclear military technology. Therefore, the absence of any real mechanism for controlling horizontal nuclear proliferation showed that the

moral crusade in the name of general and complete disarmament had to be substituted for a more sober and realistic mechanism for arms control.

At a time of mounting independent initiatives to acquire nuclear weapons, led by the French and Chinese, a coalition of interests in favour of stimulating control on the proliferation of nuclear weapons gradually became the dominant focus of the disarmament debate. But this coalition, led by Washington, Moscow and London, was attacked not only by France and China, but also by any nation with an ambition to master nuclear technology. By definition, these states could not easily be convinced to accept international supervision over domestic programmes of nuclear development, as an inevitable part of any process of international verification and control. The delicate problem of the relationship between horizontal nuclear proliferation, vertical nuclear proliferation, national sovereignty, and effective arms control mechanisms became the key in the formation of a working nuclear non-proliferation regime. The notion of NWFZ was then trapped within this complex set of negotiations.

The transition from a rather vague notion towards a more refined concept, led to the neglect of the complexities of NWFZ in terms of implementation, control and effective application. Although it eventually evolved towards a more feasible and well developed concept, NWFZ continued to face several difficulties. To begin with, even an accepted and consensual definition of the notion in juridical as well as political terms, was not easy to achieve. In fact, there still are disagreements among nations, as well as experts, on the exact meaning of the notion. The United Nations General Assembly, however, accepted a definition of NWFZ, proposed by Mexico in 1975, which follows:

A nuclear-weapon-free zone shall, as a general rule, be deemed to be any zone, recognized as such by the United Nations General Assembly, which any group of states, in the free exercise of their sovereignty, has established by virtue of a treaty or convention whereby:

(a) The statute of total absence of nuclear weapons to which the zone should be subjected, including the procedure for the delimitation of the zone is defined;

(b) An international system of verification and control is established to guarantee compliance with the obligations deriving from that statute⁹⁸.

The General Assembly agreement on a NWFZ concept was the result of a study elaborated by a group of experts, the first of its kind, which was completed in 1975. The “Comprehensive Study of the Question of Nuclear Weapon Free Zones in all its Aspects”, published in 1976, was sponsored by the United Nations Committee on Disarmament to draw up a synthesis on the achievements of the negotiations leading towards NWFZs, and to publish a set of recommendations to all its members⁹⁹. It was a very cautious study, clearly a product of experts representing different political persuasions as well as national interests. The study attempted to give a balanced view on the achievements thus far, as well as the difficulties with implementing the notion, and how these might be avoided. A retrospective assessment of the several proposals already designed to create NWFZs around the world was provided, concentrating on the Treaty of Tlatelolco. In 1982 an attempt to make a more up-to-date study, to serve as a new set of recommendations by the General Assembly was set-up. This failed to materialise, due to the lack of a minimum consensus on several

98 The text is from Shaker op. cit., p. 923.

99 See United Nations Committee on Disarmament: *Comprehensive Study of the Question of Nuclear Weapon-Free Zones in all its Aspects* New York, United Nations, 1976.

controversial aspects¹⁰⁰. Apparently, national interests ran above a realistic set of recommendations.

The difficulties faced by the committee of experts in 1975 which were aggravated by 1982, can be well understood. Reaching a common denominator in recommending the notion of NWFZ to the United Nations General Assembly as a universal idea was problematic. They were the subject to a high level of politicisation when debating a sensitive issue such as the nuclear issue. NWFZ is, by definition, a polemical idea. From being a rather concrete set of ideas to be applied in a specific context, it achieved recognition as an abstract concept towards enhancing national, regional and global security. Therefore, when any concrete proposal was laid on the table for serious negotiation, as in Central or Northern Europe, Africa, and so on, it turned out to be impossible to surpass many internal as well as external sources of resistance.

Arguments relating to national security became mingled with other political questions, such as, for example, the role of the Republic of South Africa in the African NWFZ, or the role of Israel in the Middle East case¹⁰¹. These examples indicated emphatically how complex it was to consider a proposal for a free-zone only as a technical matter, accepting that it must have a strong technical component. To convince many nations with different aspirations and national security visions to accept the argument that NWFZ is a sound way to enhance national, regional or global security is not simply a matter of argument. It is a question of political negotiation,

100 See Olga Sukovic, "The Concept of Nuclear-Weapon-Free Zones" in David Carlton and Carlo Schaerf (eds.) *Perspectives on the Arms Race* London, Macmillan 1989, pp. 267-85. As an example of vague rhetoric, the 1978 Final Document of the Tenth Special Session on Disarmament of the UN supported NWFZ as "...important disarmament measure...with the ultimate objective of achieving a world entirely free of nuclear weapons." Cited on p. 268.

101 On the African case and the difficulties with the Republic of South Africa see Trude Adeniran "Nuclear Proliferation in Black Africa: The Coming Crisis of Choice" *Third World Quarterly* v. 3 n. 4 October 1981, pp. 673-83.

which involves bargaining and conflicting interests. National and regional security could be perceived as being, in certain regional contexts, opposing. Summing up the main points, a rather critical article on the notion pointed out that:

Despite the number of treaties which seek to establish nuclear weapon-free zones, the whole idea is fraught with problems at both a legal and a political level. The distinction between peaceful and non-peaceful uses of nuclear material, the extent of state jurisdiction over the passage of nuclear armed ships through territorial waters, the compatibility of defence and security treaties (which are often underpruned by concepts of nuclear deterrence) with such zones, the opposability of NWFZ treaties to non-party states¹⁰².

In the United Nations study of the Committee of Experts, as well as in much of the specialised literature, the Latin American Treaty of Tlatelolco, has been presented as a paradigm of a successful negotiation. It was able to overcome many constraints in achieving the status of a treaty. As the only example of a NWFZ in an inhabited region, the treaty was praised for its well-constructed structure. Nonetheless, the success of the Treaty of Tlatelolco was due to very special circumstances. There was a skilful and complex diplomatic negotiation, with many important concessions from key nations of the area. The fact is that all other proposals to build a NWFZ, in almost every corner of the globe, failed. They did this even before initiating a serious diplomatic negotiation. With the single exception of the South Pacific Treaty of Rarotonga, concluded in 1985, no other region could manage to surpass the complexities involved¹⁰³.

102 The article is by David Freestone and Scott Davidson "Nuclear Weapon-Free Zones" in Istvan Pogany (ed.) *Nuclear Weapons and International Law* Aldershot, Avebury Press, 1987, p. 209. Some of the issues raised as critical to the applicability of the notion of NWFZ will be discussed in relation to the Latin American case.

103 A well balanced survey of the complexities attached to the Latin American Treaty can be found in Felix Calderon, "Nuclear-Weapon-Free Zone: The Latin American Experiment" in David Carlton and Carlos Schaefer (eds.) *The Arms Race in the 1980s* London, Macmillan, 1982.

To begin with, a successful negotiation could not be achieved in a zone of political or military tension. With two or more rivals engaged in any kind of political and/or military competition, the first prerequisite – confidence – was lacking. Building confidence and predictability with regard to the intentions of rivals is a tricky question. Introducing nuclear weapons as a means for national defence could be rationalised as the only way for national survival. There are, indeed, well known cases where national security is perceived as incompatible with a NWFZ as a means to enhance regional security.

The Israeli case is the most debated¹⁰⁴. As an example of a nation in a highly polarised regional context, Israel developed a defence posture committed to the survival of the nation at any cost. She had implemented a deliberate policy of ambiguity on the possession of nuclear weaponry¹⁰⁵. She is not a member of the Non-Proliferation Treaty, and has a well-known expertise in civilian nuclear technology¹⁰⁶. Israel built a defence policy where the vagueness over its real capability played a prominent role. Certainly, it brought insecurity to its foes. There is evidence showing that Israel does have a quite important nuclear capability, an uncertain amount of nuclear warheads which varies according to the source of information¹⁰⁷. By and large, speculations made by experts, as well as intelligence services, on the size, if any, of the Israeli nuclear

104 There is an enormous literature dealing with the Israeli case. The pioneer work is by Fuad Jabber *Israel and Nuclear Weapons, Present Options and Future Strategies* London, Chatto & Windus for the International Institute for Strategic Studies, 1971. The most recent is by Frank Barnaby *The Invisible Bomb, The Nuclear Arms Race in the Middle East* London, I. B. Tauris & Co., 1990; a useful summary is George H. Quester, "Nuclear Weapons and Israel", *The Middle East Journal* v. 37 n. 4 Autumn 1983, pp. 547-64.

105 See Yair Evron "Israel and the Atom: The Uses and Misuses of Ambiguity 1957-1967" *Orbis* v. 17 n. 4 Winter 1974, pp. 1326-43; A. Cohen and B. Frankel "Israel Nuclear Ambiguity" *Bulletin of the Atomic Scientists* v. 43 n. 2 March 1987, pp. 15-19.

106 See George Quester "Israel and the NPT" *Bulletin of the Atomic Scientists* v. 25 n. 6 June 1969, pp. 7-9.

107 The most complete study so far is Pry op. cit.

weaponry, serve the Israeli policy well. Speculation has been used by Israeli policy-makers as part of the policy of ambiguity, fiercely pursued by politicians and military officers alike. In any case, credible deterrence, based on sophisticated conventional weaponry, and maybe nuclear weaponry, targeted against such densely populated and resilient foes as the Arab states, was judged necessary for Israeli national security.

As a consequence, proposals made at the United Nations for a NWFZ in the Middle East have been nominally supported by Israel, but only if conducted through a regional conference¹⁰⁸. As the Arab states did not recognise the existence of Israel, they accused Jerusalem of seeking a regional conference essentially for regional legitimisation. This procedure resulted in a deadlock. Thus the Israeli example shows the problem of negotiating about free zones in a tense and conflictual regional environment. Perhaps the Israeli example, like the South African, is at the extreme. But they show that certain pre-conditions have to be met if a NWFZ could be taken seriously as a means to enhance national, regional and global security.

Besides the pre-condition of a politically homogeneous region in starting a negotiation leading towards a NWFZ, there are more sensitive issues, not definitively resolved even by the successful Latin American or South Pacific examples. They were the definition of a nuclear weapon and the question of peaceful nuclear explosions; transport, transit and deployment of nuclear weapons; geographical definition of the zone; mechanisms for verification and application of sanctions; and principally the issue of negative security assurances from the nuclear powers.

108 On the prospects for a Middle Eastern NWFZ see Paul F. Power "Preventing Nuclear Conflict in the Middle East: The Free-Zone Strategy" *The Middle East Journal* v. 37 n. 4 Autumn 1983 pp. 617-35; A complete analysis is done by Mahmaoud Karem *A Nuclear-Weapon-Free Zone in the Middle East, Problems and Prospects* Westport, Greenwood Press, 1988 and by Graham op. cit. pp. 153-64.

The so-called positive security guarantees and negative security guarantees have been one of the most sensitive issues, as the example of the negotiation towards the Latin American Treaty showed. Any nation which agrees to enter into a regional military denuclearisation negotiation has, by definition, accepted a status of inferiority in terms of defence capability. The capacity for a non-nuclear state to defend itself against a nuclear armed state is a complex issue, as the Americans learned in Vietnam, and the Soviets in Afghanistan, but yet it symbolises a hierarchy in global affairs. Hence the requirement that the nuclear powers should take an active part in any treaty or convention, by means of written negative security guarantees, that they will not use their nuclear weaponry against any nation which is a member of a free-zone.

At the 30th session of the United Nations General Assembly in 1975, when the experts study on NWFZ was considered, it set out the principal obligations by which the nuclear powers should respect the status of a NWFZ. They were:

- a) To respect in all its parts the statute of total absence of nuclear weapons defined in the treaty or convention which serves as the constitutive instrument of the zone;*
- b) To refrain from contributing in any way to the performance in the territories forming part of the zone of acts which involve a violation of the aforesaid treaty or convention;*
- c) To refrain from using or threatening to use nuclear weapons against the states included in the zone¹⁰⁹.*

Moreover, a defence policy based solely on conventional weaponry was not easily accepted by many military establishments. It is indeed recognition of an international status of military inferiority. In fact, it is not only a matter of prestige for the armed

109 See Shaker, op. cit., pp. 923-24.

forces, an argument which is extensively utilised as an explanation for nuclear military proliferation¹¹⁰. There exists also an underlying reasoning that nuclear weaponry should be pursued by any nation with aspiration to more influence in world politics, as showed by Paris and Beijing.

Thus, the issue of positive and negative security guarantees which should be given by the states possessing nuclear weapons to the non-nuclear states – given their principal support for a NWFZ proposal – became part of a complex relationship between nuclear and non-nuclear states. In the first place, a positive guarantee may be understood as conferring a subordinated relationship on the non-nuclear power by the nuclear state or states¹¹¹. In the case of a threat to use nuclear weapons, or attack by a nuclear weapon state, which may or may not use nuclear weapons, a non-nuclear state is dependent on decisions taken by other nuclear weapon states. To the same extent that Moscow, Washington and London developed their argument against giving unconditional assurances that nuclear weaponry will not be used, the states which pledged that they will not receive or produce nuclear weapons, have their reasons to ask for unconditional negative security guarantees.

In the second place, while accepting positive guarantees through a defence pact, the latter states have become dependent on an alliance or regional security pact for their defence. Because the dominant role played by a superpower within the pact – say the United States in NATO – essential to make credible the positive security guarantees, they are reducing their room for autonomous defence. Paris, for instance, could not accept this situation. This

110 A very useful examination and criticism of the argument of prestige as a driving force behind horizontal nuclear proliferation is Stephen M. Meyer, *The Dynamics of Nuclear Proliferation* Chicago, The University of Chicago Press, 1984.

111 On a case which expressed the dilemma of a nation unsatisfied with a security pact, see Jean Klein "France, NATO, and European Security" *International Security* v. 1 n. 3 Winter 1977, pp. 21-41.

being the case, it would inevitably bring out serious political as well as defence problems for the non-nuclear states, and strain their relationship with the superpowers. A nuclear weapon state will be, by definition, in a position of autonomy as far as defence decisions are concerned, therefore reinforcing and perpetuating their position of strength. As a consequence, any state with revisionist tendencies at regional or global level could not, by definition, accept an accord or treaty which could perpetuate its status as a nation less prepared to defend itself. Even if unwilling and incapable for changing the status quo by force, a state not satisfied with the status quo, regional and/or global, would naturally struggle to achieve more military capability.

Capability here is understood as a pre-condition for autonomy in defence, as well as a measure for more independence in foreign policy. Defining autonomy in foreign policy is of course not an easy matter. Small states, defined in terms of territory, population or natural resources, could be reasonably expected to perceive that their best interests would lie within a security bloc or pact led by a superpower, where they could trade-off defence autonomy for protection. Nevertheless, other states, with more resources and ambitions to aspire to greater international status, could not accept this quid pro quo. In Latin America, for example, Argentina and Brazil are examples of the latter group of states. As regional powers, with aspirations to greater global role, they have gradually been seeking a more autonomous defence policy.

Indeed, in Latin America, when the idea to denuclearise militarily the region was first proposed, it was presented as an attempt to gain greater independence from Washington, the leader of the hemispheric security system. The NWFZ idea was by then regarded as a symbol of autonomy of initiative, against the dominant regional power, which was fiercely opposed to the notion. However, when the Treaty began to be negotiated, it became clear

that it could not be achieved without Washington's support. Soon the problem of positive and negative security guarantees had to be seriously discussed, therefore involving the nuclear powers.

From the United Nations 1975's declaration on negative security guarantees Washington, London and Moscow gave unilateral pledges not to employ their nuclear arsenal against non-nuclear nations. Paris and Beijing, even if outside the disarmament and arms control mechanism of the UN, had already given unilateral support for the idea of negative security guarantees. In 1978, at the United Nations Special Session on Disarmament, unilateral negative security guarantees made by the five nuclear powers were codified in a formal declaration¹¹². Thereafter, the relation between the notion of NWFZ and the non-proliferation regime, in which the former became a means to enhance the latter, has been complicated by the issue of security guarantees.

It is interesting to compare the successful Latin American case of a NWFZ with an unsuccessful case which had some similarities, that of the Scandinavia. Possessing contiguous territories with one of the superpowers, Scandinavia could be an ideal region for a successful application of the notion. The Soviet attempt to build a NWFZ in Scandinavia, and the reception which the notion received in the region can help to explain the successful Latin American case.

1.5. The Scandinavian Case

The attempt to establish a NWFZ in Scandinavia is also important to illuminate the issues of positive and negative security guarantees given by the nuclear powers. Any attempt to establish an arms control system as a way of enhancing national or regional security cannot be separated from the actual conditions of superpower relations, and their own national security interests.

112 See Graham, *op. cit.*, pp. 279-324.

Scandinavia is a good example of this for three main reasons. First, though situated in Europe, Scandinavia could not be considered as a region of political or military tension as, for example, Central Europe. Following the resolution of Soviet-Finnish relations in 1955, through a Treaty of Friendship, Northern Europe could be considered as having found a *modus vivendi*, for a region so contiguous to the Soviet Union. Scandinavia qualifies as a relatively peaceful region, capable of building a free-zone. Secondly, its tradition of peaceful resolution of conflicts, political maturity, Swedish neutrality and the special status of Finland in relation to the Soviet Union were all good reasons to consider the region ripe for regional military denuclearisation. In addition, despite being industrialised and developed, the nations of the area had already publicly rejected independent nuclear arsenals. In the third place, due to its solid scholarly tradition in political as well as international relations studies, a substantial amount of sophisticated analysis on the advantages and drawbacks of a NWFZ is available¹¹³.

Nevertheless, though proposed and debated many times, a Scandinavian free-zone never advanced from the stage of mere speculation. One reason for this is that among the three major nations of the area – Sweden, Norway and Denmark – there was a major political divide: Sweden is a neutral nation, while Denmark and Norway are members of NATO. Iceland, though without armed forces, is also a member of NATO. Thus, from the first announcement on the feasibility of a NWFZ involving the whole of Scandinavia, the idea was received with mixed feelings and different levels of enthusiasm throughout the area. Apparently, the first mention of a NWFZ in Scandinavia was made by the Soviet Premier

113 One of the early analyses of the NWFZ idea, which still remains one of the best, was produced by a Scandinavian scholar. See Bertel Heulin, "Nuclear-free Zones, An Attempt to Place Suggested and Established Nuclear-free Zones within the Framework of International Politics" in *Cooperation and Conflict* vol.1 n. 1 1966, pp. 11-30.

Bulganin in January 1958, when Washington deployed plans for Thor and Jupiter missiles in Europe¹¹⁴.

Sweden is a curious example. Although a neutral nation, and perhaps because of its neutrality, Sweden has had a great preoccupation with its security and has invested heavily in building up an impressive defense capability¹¹⁵. In the early sixties, Sweden passed through an intense public debate on the incorporation of nuclear weaponry into her defence equipment. With a solid industrial base, sophisticated technology, manpower, and expertise on the production of advanced conventional weaponry, it would have been no problem at all for Stockholm to pursue nuclear weapons if the decision had been taken. However, it was decided not to. After this decision and with the Swedish diplomatic stance favouring disarmament – Sweden was one of the eight new members of the ENDC in 1962 – it appeared that she could be a leader in the process of regional military denuclearisation¹¹⁶. Meanwhile, the so-called Uden Plan – proposed as a response to a consultation made by the Secretary-General of the United Nations U-Thant – for a ‘nuclear-weapon-free club’ did not receive a warm

114 As Lindahl, in a detailed study of the history of the Scandinavian NWFZ, put it: “There is a consensus among Scandinavian analysts that the plan was first raised by Soviet Premier Bulganin in letters to his Norwegian and Danish colleagues in January 1958. Obviously the proposal constituted an off-spring of the ‘nuclear diplomacy’ the Soviet Union launched at the time with the double aim of preventing Germany and China from getting equipped with nuclear weapons. This diplomacy consisted of proposals for nuclear-free zones in Europe as well as the Far East, repeated with certain regularity at the end of the 1950s”. In Ingemar Lindahl, *The Soviet Union and the Nordic Nuclear-Weapons-Free Zone Proposal* MacMillan London 1988, p.47.

115 On Swedish neutrality see Harto HaKovirta, “The Soviet Union and the Varieties of Neutrality in Western Europe”, *World Politics* v. 35, n. 4 July 1983, pp. 563-85. On Swedish nuclear policy see George H. Quester “Sweden and the Nuclear Non-Proliferation Treaty” *Cooperation and Conflict* v. 5 n. 1 1970 pp. 52-64 and Mitchell Reiss *Without the Bomb: The Politics of Nuclear Proliferation* New York, Columbia University Press, 1988, pp. 37-77.

116 See “Sweden Agreeable to Atom-Free Zone”, *The New York Times*, 17 February 1962.

reception in Scandinavia, nor in the Soviet Union, and eventually did not lead to anything concrete¹¹⁷.

Since 1948-49, there have been attempts to establish a defence pact in Scandinavia. However, Stockholm opted for neutrality on the East-West conflict which meant developing an independent defence policy, without the support or military alliance with the Western nations. On the other hand, Norway and Denmark sought an alliance with, and support from, the Western powers. Thus, differences in perceptions on the best way to enhance national and regional security complicated the possibility of a unified defence policy to the area. Introducing a much more ambitious notion, such as NWFZ, would only have added another element of friction.

Indeed, the Norwegian and Danish positions have been to opt for a defence policy within NATO. Even though they managed to avoid hosting nuclear weapons on their territories, as members of NATO they declared that they retained the freedom to do so if necessary. With a perception about the Soviet threat, as well as a history of involvement during the Second World War different from that of Stockholm, Oslo and Copenhagen avoided banning nuclear weapons altogether as a matter of principle¹¹⁸. They sought to keep open the possibility of using, or having their territories as bases for, nuclear weapons.

117 U-Thant aims were to assess the reception of the United Nations disarmament proposals. Details on the Unden Plan may be found in "Sweden Agrees to Atom-Free Zones", *Swedish Press Summary* 19 February 1962. On the reception of the Unden Plan in Scandinavia see "Norway Rejects Unden Plan", *Swedish Press Summary*, 28 February 1962.

118 See Lindahl op. cit. and J.J. Holst, "The Challenge from Nuclear Weapons and Nuclear-Weapons-Free Zones" *Bulletin of Peace Proposals* v. 12 n. 3 1981, pp. 239-46. On a brief Soviet vision of the Soviet main worries on Scandinavia see Malcom Macintosh: "The Russian Attitude to Defence and Disarmament" *International Affairs* n. 3 1985, pp. 384-94. A more recent account is by George Maude, "Conflict and Cooperation: The Nordic Nuclear-Free Zone Today" *Cooperation and Conflict* v. 18 n. 4 1983, pp. 233-44. On the Soviet support for NWFZ see A. Samartsev: "Nuclear Free Zones are a Pressing Necessity" *International Affairs* (Moscow) n. 5 May 1964, pp. 35-39; M. Petrov, "Non-Nuclear Zones: A Pressing Demand" *International Affairs* (Moscow) n. 6 June 1967, pp. 12-16.

A rather different story is that of Finland. With an encompassing Treaty of Friendship and Non-Intervention concluded with the Soviet Union in 1948, which became fully implemented from 1955 – when Moscow returned a contested military base to Finland – she has declared her status as a nuclear-weapon free state. Since a Plan for a NWFZ was presented by president Kekkonen for the first time in May 1963, inspired by the UN Resolution on Latin America, it had been reaffirmed many times ever since. Thus, making a unilateral decision not to implement, or serve as a base for, nuclear weapons directed against the Soviet Union, Finland was ready to implement a regional free-zone as the best solution for its national security.

The conclusion one draws from the Scandinavian example is that to bridge the gap between political speculation and actual diplomatic negotiation in implementing a NWFZ, a region ought to have certain political, as well as military, pre-conditions. Scandinavia has not been perceived by Moscow as a particular acute security problem, yet the idea did not succeed. Differences over threat perceptions, combined with distinctive foreign policies as well as defence strategies, acted together to avoid a coincidence of interests among a relatively small number of states. As the superpower of the area the Soviet Union, despite her support for a free-zone, was simultaneously conducting bilateral negotiations with the Scandinavian nations. These nations therefore had other means available to obtain national and regional security. Therefore, even though Moscow and Helsinki have continued to offer the notion, at different times and in different forms, neither of the three major actors of the area has agreed to implement it. Besides, the unresolved demand to incorporate the Soviet Kola Peninsula – which is actually a Soviet tactical and strategic missile site – within

the geographical definition of a Scandinavian NWFZ, as sought by the Scandinavian nations, further complicated the issue¹¹⁹.

To start a regional multilateral negotiation leading towards a free-zone, an initial harmonization of common interests must be present. Similarities on foreign and defence policies, confidence on the mutual intentions of neighbours, coincidences on threat perception, a minimum agreement on the role of the regional superpower, as well as on the resources available to achieve a successful negotiation, appear to be necessary, although not sufficient, conditions. Despite the fact that some of the Scandinavian leaders were in the forefront of disarmament diplomacy world-wide, this was not sufficient. Thus, the causes of the failure to initiate negotiations on a NWFZ are likely to be found in the conflicting views on security amongst the relevant states.

To reach a point where NWFZ can be considered as the best, or at least, a useful means in enhancing national and regional security, something else needs to be added to the complex set of pre-conditions mentioned above¹²⁰. The notion of NWFZ has to be consensually approved by the members of the region, and endorsed by the superpower most concerned with the area, as a capable means to achieve what otherwise could be considered as incompatible, namely national and regional security.

Therefore the successful example of a NWFZ in Latin America required a special security environment. To be able to start a serious negotiation process leading towards a free-zone, a region

119 See Graham *op. cit.* pp. 108-25. More recently, the problems with Soviet nuclear submarines on territorial waters of Sweden and Norway added another element of strain to the implementation of a NWFZ. See Milton Leitenberg "The Stranded USSR Submarine in Sweden and the Question of a Nordic Nuclear-Free Zone" *Cooperation and Conflict* v. XVII n. 1, 1982, pp. 17-28.

120 As Lindahl put it: "The concept of a Nordic nuclear-weapon-free zone, as it has been commonly propagated over the years, offers no general solution to the dilemmas of Nordic security, but is instead running the risk of becoming part of the problem". Lindahl *op. cit.*, p. 13.

should possess certain particular conditions. In the circumstances of the early 1960's, when the idea of a NWFZ was defended by some Latin American nations as a useful instrument for national and regional security, the occurrence of the Cuban missile crisis triggered the negotiation process. But a correct understanding of the peculiarity of Latin America requires first an analysis of the inter-American security environment as well as a discussion of the main defence issues in the area when the idea of a free-zone was being introduced.

2. THE SECURITY ENVIRONMENT IN LATIN AMERICA: THE MEANING OF MILITARISM AND MILITARIZATION

This chapter intends to give a picture of the security environment in Latin America when arms control, disarmament and nuclear non-proliferation measures were proposed throughout the region. It consists firstly in a brief description of the formation of the security environment in Latin America since the Second World War. This security environment, however, must be understood in the context of inter-American relations. A relatively isolated region such as Latin America was involved since the end of the Second World War by a collective security project developed and led by Washington.

Second it attempts to discuss the notion of militarism and militarization, as they evolved to explain two simultaneous but different processes: a new cycle of military intervention in politics, and a concern over a moderate rise in defence spending throughout the area, especially in the major South American nations. From around 1965 onwards, nations such as Argentina, Brazil, Chile, Peru and Venezuela began to demand from the United States sophisticated aircraft to modernise their antiquated Air Forces. These demands, however, were accompanied by a fear of a process of militarization in the region. These concerns on militarization were presented in Latin America, and more so in the United States.

Arguments against an unnecessary 'arms race' were developed. Spending precious resources on sophisticated weaponry was criticised. The purchase of sophisticated aircraft was presented as an example of a 'militaristic' drive. In fact, these critics were concerned not only with the level of defence spending but also with domestic political issues.

My third aim is to show that, contrary to the fears exposed, the levels of defence spending in the major Latin American nations were low by any international standard. Therefore, it was a clear exaggeration to describe it in terms of an arms race. There existed, however, a genuine political fear regarding the strengthening political power of the military establishments. Nonetheless, it is the argument of this chapter that the modernisation of the military equipment, especially the air forces, had a military logic. The new supersonic jets were sought as substitute for antiquated subsonic jets. For domestic political reasons, however, their purchase led to an increasing concern with over-armed armed forces.

Studying the evolution of the pattern of arms acquisition by the Latin American nations since 1945 and comparing it with other underdeveloped regions, the distinct evolution of Latin America is striking. Nations such as Argentina and Brazil had become, by the early sixties, proportionally much less armed than other nations of a comparative similar international ranking. Meanwhile, nations such as those in the Middle East or China had passed through a greater increase in defence spending. An inter-American collective defence system, based on the subordination of defence policies to a comprehensive hemispheric security policy developed by Washington, kept the Latin American armed forces poorly armed. By the mid-sixties, their forces had not improved at the same level of other regions, where an extensive arms transfer process was occurring, because Latin America was perceived by Washington's policy-makers as a less dangerous area.

As one participant in the so-called 'arms race' of the mid and late sixties, the Brazilian military government was facing a political and strategic dilemma. It intended simultaneously to modernise the nation economically and to modernise its armed forces by demanding sophisticated armaments from Washington. Washington's policy, however, of keeping sophisticated armaments outside Latin America helped to change the Brazilian previous posture towards regional arms control measures as well as to attempt of the building of a sophisticated arms industry. As part of a multilateral diplomatic effort to prohibit nuclear weapons in Latin America, Brazil had to make political and military options. Accepting nuclear non-proliferation measures, as in the nuclear weapon-free zone notion, while lacking a sophisticated conventional capability and with a precarious defence industry, was perceived then as an admission of weakness. Moreover, as the access to updated technology assumed an essential role in this modernising process, she aimed to keep open this access at wherever political cost. Nuclear technology for civilian use was by then considered as the most relevant updated technology.

Analysing the levels of defence spending and the options open to strengthen national and regional security requires henceforth a proper understanding of the security environment where these decisions take place.

2.1. The Inter-American Security Environment

In 1939, with the mounting tension in Europe, prior to the outbreak of the Second World War, the United States took the initiative to implement a collective security system in the Western Hemisphere¹²¹. Based on the enormous inequality of economic,

121 A good description of the development of the inter-American security environment during and after the war is John Child *Unequal Alliance: The Inter-American Military System, 1938-1978* Boulder, Colorado, Westview Press, 1982. A good synthesis is John Child: "The Inter-American Military System:

political and military resources between the United States and the twenty or so other republics of the hemisphere, it is obvious that a workable collective security system could only be led and implemented by Washington. Indeed, Washington's worries about the hemisphere as a source of territorial conquest from European colonial powers has been made explicit even since the enunciation of the Monroe Doctrine in 1823. This unilateral vision of the particular nature of the Western Hemisphere, to be preserved from European colonialism, has since puzzled historians and interpreters of American domestic as well as foreign policy¹²².

Even so the United States proceeded to expand its global interests, searching for markets and commercial opportunities abroad, despite the US's self-image based on the uniqueness of her historical experience¹²³. The polemic over the true motivations for American economic and political expansion cannot be dealt with here. It is worth remarking, however, that Latin America and the Pacific Basin were the areas considered as priorities in the search for new markets. But in no other area than Latin America, Washington had geographical and political conditions to challenge the preponderance of the United Kingdom, by then the leader

Historical Development, Current Status, and Implications for U.S. Policy" in Tom J. Farer (ed.) *The Future of the Inter-American System* New York, Praeger, 1975, chapter 10. The classical account from the official American point of view is Stepson Conn and Byron Fairchild *The Framework of Hemisphere Defense* Office of the Chief of Military History, Department of the Army, Washington D.C., 1960.

122 See Jerald A. Combs *American Diplomatic History, Two Centuries of Changing Interpretations* Berkeley and Los Angeles, University of California Press, 1983. An interpretation of the Monroe Doctrine based on domestic politics is Ernest May: *The Making of the Monroe Doctrine* Cambridge, Harvard University Press, 1975. An exchange followed the publication of the book: Harry Ammon, "The Monroe Doctrine: Domestic Politics or National Decision?" *Diplomatic History*, v. 5 n. 1 Winter 1981, pp. 53-70, and May's response in the same number.

123 See Walter LaFeber, *The New Empire, An Interpretation of American Expansion 1860-1898* Ithaca, Cornell University Press, 1963 and the extensive discussion in Combs, op. cit.

commercial power, and to assume a prominent economic and political role¹²⁴.

Meanwhile, the independent Spanish American republics and the Brazilian constitutional monarchy were trapped into nation building problems. In the Spanish American republics, Simon Bolivar's dream of a united republic vanished as a consequence of continuous clashes of local oligarchies. Moreover, grievances on the settlements of boundaries created a series of conflicts among the young republics. The Brazilian monarchy, obsessed with its southern problems, dedicated much of its energies to build up resources against Argentine claims and to secure the territory conquered by the Portuguese colonisers¹²⁵.

Therefore, no other nation in the hemisphere, apart from the United States, was able to develop a continental ambition. Occupied as they were defending their national unity the best they could, the Latin American nations could not master any regional, let alone global, ambition. Too weak economically and with serious problems of national integration, the nineteenth century witnessed the emergence of a state system in Latin America which was both inward looking and the theatre of fiercely commercial competition among the major colonial powers.

This did not mean the absence of conflicts throughout the hemisphere. Boundary problems, as well as local rivalries based on power ambitions, led to several inter-state conflicts. A local system resembling a balance of power was developed in South America¹²⁶.

124 A polemic interpretation of the rivalry between the United States and the United Kingdom on Latin America is Joseph Smith *Illusions of Conflict, Anglo-American Diplomacy toward Latin America 1865-1896* Pittsburgh, University of Pittsburgh Press, 1979.

125 A good account of the early years of Brazilian diplomacy in South America is by Ron Seckinger, *The Brazilian Monarchy and the South American Republics, 1822-1831, Diplomacy and State Building* Baton Rouge, Louisiana State University Press, 1984.

126 See the studies of Robert N. Burr: *By Reason or Force: Chile and the Balancing of Power in South America, 1830-1905* Berkeley and Los Angeles, University of California Press, 1965 and "The Balance

Nonetheless, no nation had the intention or the ability to forge or implement a project of continental expansion. As a consequence, even before Washington was able to develop a foreign project with global interests, she sustained local interests in Mexico, Central America and the Caribbean. The notion of the Caribbean as an American lake, and the search for a passage through the Central American isthmus were part of the initial expansionist drive of successive American administrations.

The consolidation of her commercial interests in Latin America, substituting the UK as the greater commercial partner, was achieved by the beginning of the twentieth century. Thus with commercial expansion came inevitably the need to secure both properties and citizens, which a recently formed capable navy was able to provide¹²⁷. Moreover, plans for contingency landings in several Latin American republics were developed by the army¹²⁸.

Until the 1930s, with the inauguration of Franklin Roosevelt's administration, Washington acted unilaterally to defend its commercial and political interests in the hemisphere. In Central America, plagued with endemic political instability, she used her military forces to sustain governments, and trained armed forces to keep them in power. Roosevelt, however, developed a new set of hemispheric policies, based on respecting the territorial integrity of the republics and in a non-interference posture¹²⁹.

of Power in Nineteenth Century South America: An Exploratory Essay" *Hispanic American Historical Review* February 1955, pp. 37-60.

127 Analyses on the formation of a powerful Navy could be found in LaFeber, op. cit., and Combs, op. cit. The classical books and articles by Mahan are the most famous defence of the constitution of a powerful Navy.

128 See John Child: "From 'Color' to 'Rainbow': U.S. Strategic Planning for Latin America, 1919-1945" *Journal of Inter-American Studies and World Affairs* v. 21 n. 2 May 1979, pp. 233-60.

129 See Gerald K. Haines: "Under the Eagle's Wing: The Franklin Roosevelt Administration Forges an American Hemisphere" *Diplomatic History* n. 1 Fall 1977, pp. 373-88. Extensive studies were made by Bryce Wood: *The Making of the Good Neighbor Policy* New York, Columbia University Press, 1961 and

Despite the pitfalls of the ‘good neighbour policy’, it worked as far as reversing a policy of unilateral interference was concerned. It was this new posture which helped to boost Washington’s credibility in the hemisphere, permitting the republics to rally to her support when she proposed a collective security system against threats from the European powers in 1939¹³⁰. In Havana, during the Second Meeting of Consultation of Ministers of Foreign Affairs, 21-30 July 1940, the republics unanimously supported Washington’s appeal for the establishment of an Inter-American Commission for Territorial Administration to prevent Germany from taking charge of territories in the hemisphere¹³¹.

With the United States’ entering WWII against the Axis, Washington appealed to the continent for support. All the republics, except Argentina and Chile, severed diplomatic relations with the Axis powers¹³². Eventually, Brazil sent an expeditionary force to fight in Italy along American’s Fifth Army, and Mexico sent an Air Force squadron to the Philippines¹³³. In 1942, an Inter-American

The Dismantling of the Good Neighbor Policy Austin, University of Texas Press, 1985. The best critical study is David Green, *The Containment of Latin America* Chicago, Quadrangle, 1971.

130 See by Arthur Withaker: *The Western Hemisphere Idea* Ithaca, Cornell University Press, 1954.

131 See Gordon Connel-Smith, *The Inter-American System* London, Oxford University Press, 1966, pp. 112-14.

132 Argentina was a dissenting voice in the hemisphere during the war. Buenos Aires kept diplomatic relations with the Axis powers up to 1945. She remained neutral, profiting from commercial relations with both sides. A military coup which occurred during the war, brought to power officers considered sympathetic with the Nazi ideology. The problematic relationship between Buenos Aires and Washington were recently analysed in: Alberto P. Vannucci: “The Influence of Latin American Governments on the Shaping of United States Foreign Policy: The Case of U.S.-Argentine Relations, 1943-1948” *Journal of Latin American Studies* v. 18 n. 2 November 1986, pp. 355-82 and Callum A. Macdonald: “The Politics of Intervention, The U.S. and Argentina 1941-1946” *Journal of Latin American Studies* v. 12 n. 2 November 1980, pp. 365-96. It is interesting to contrast Washington’s policy towards Argentina with her policy towards the Portuguese neutrality, as described by Douglas L. Wheeler “The Price of Neutrality: Portugal, The Wolfram Question, and World War II” *Luso-Brazilian Review* v. 23 n. 1, pp. 107-28 and n. 2, pp. 97-112, Winter 1986.

133 The Brazilian-American alliance during the war was analysed by: Frank D. MacCann *The Brazilian-American Alliance* Princeton, Princeton University Press, 1973 and “Brazil, the U.S. and WWII: A Commentary” *Diplomatic History* n. 3, Winter 1979, pp. 59-73; Stanley Hilton “Brazilian Diplomacy

Defence Board (IADB) was settled, seeking to co-ordinate the defence policies of the republics. These arrangements made during the war became the roots for a permanent collective security system formally established after the war.

In 1945, a Conference on War and Peace took place in Mexico. The Chapultepec Conference sought to resolve many crucial issues over a hemispheric post-war order. Its main motivation was to build up a framework for inter-American economic, political and military cooperation, which could last the end of the war¹³⁴.

Nonetheless, the Chapultepec Conference was not a success. It ended in setting the pattern for inter-American relations for the next decades. From Washington's point of view, the main role of a regional organization should be to provide collective security against foreign threats. For the Latin American republics, the main issue was economic aid. Therefore, the subsequent decades witnessed a permanent tension between Washington's commitment to strengthen military links and to give priority to politico-military issues, and Latin American repeated pleas for economic aid and developmental plans¹³⁵.

Moreover, the Chapultepec Conference in 1945 had an agenda full of immediate problems. One major issue was how to harmonise the build-up of a regional organization with the founding of a global organization such as the United Nations¹³⁶. Another pressing issue was related to Argentina. It was the Argentine issue which contributed more than anything else to the delays in implementing

and the Washington-Rio de Janeiro Axis During the WWII Era" *Hispanic American Historical Review* n. 45, May 1979, pp. 201-31 and Moura, op. cit.

134 See Stephen G. Rabe: "The Elusive Conference: United States Economic Relations with Latin America, 1945-1952" *Diplomatic History* v. 2 n. 3, Summer 1978, pp. 279-94.

135 The best recent analysis of this tension is Stephen G. Rabe: *Eisenhower and Latin America* Chapel Hill, University of North Carolina Press, 1988.

136 See J. Tillapaugh: "Closed Hemisphere and Open World? The Dispute over Regional Security at the UN Conference, 1945" *Diplomatic History* v. 2 n. 1, Winter 1978, pp. 25-42.

a formal structure for inter-American cooperation. In 1947, resolving the Argentine issue, a conference in Rio de Janeiro created the Inter-American Treaty for Reciprocal Assistance (IATRA). The Rio Pact, later considered as the first in a series of 'cold-war pacts', institutionalised the measures of collective security first designed in Havana. In 1948, in Bogota, the Organisation of American States (OAS) was established, with an OAS Charter as the framework for an all-encompassing system for regional cooperation¹³⁷.

Despite this regional framework, based on notions of sovereignty and non-intervention, peaceful resolution of conflicts and the maintenance of democratic and representative institutions, the striking feature was the disparity of resources between the United States and the other republics. Therefore, the relationship which developed between them could be defined as a sphere of influence relationship¹³⁸.

In this relationship, the national security of the dominating partner, the United States, settled the priorities and the direction of the inter-American politico-military agenda¹³⁹. As the only partner

137 See Jerome Slater: *The OAS and the United States Foreign Policy* Columbus, Ohio State University Press, 1967.

138 On a theoretical investigation on the notion of sphere of influence and its applicability for the United States-Latin American relationship see the collective volume edited by Jan F. Triska *Dominant Powers and Subordinate States, The United States in Latin America and the Soviet Union in Eastern Europe* Durham, Duke University Press, 1986. The following chapters were the most important: David B. Abernethy "Dominant-Subordinate Relationship: How Shall We Define Them? Do We Compare Them?" pp. 103-23; Paul Keal "On Influence and Spheres of Influence", pp. 124-44; Gabriel A. Almond "Sphere-of-Interest Behaviour: A Literature Search and Methodological Reflections, pp. 145-67. See as well Paul E. Keal: "Contemporary Understanding About Spheres of Influence" *Review of International Studies* v. 9 n. 3, 1983, pp. 153-72; Michael Handel: "Does the Dog Wag the Tail or Vice Versa? Patron-Client Relations" *Jerusalem Journal of International Relations* v. 6 n. 2, 1982, pp. 24-35. A use of the notion in an historical perspective was by Robert F. Smith, *The United States and the Latin American Sphere of Influence, An Introductory Essay* 2 Vols. Huntington, N.Y., Krieger Publ., 1982.

139 An article which analyses Washington's security towards Latin America as pre-dating the containment doctrine is Melvyn P. Leffler: "The American Conception of National Security and the Beginning of the Cold War" *American Historical Review* v. 89, April 1984, pp. 346-81. A very useful collection of articles is Norman A. Graebner (ed.) *The National Security, Its Theory and Practice, 1945-1960* New York, Oxford University Press, 1986.

with global interests, she was able to develop and implement a foreign policy with global dimension, which subordinated her regional interests to her global interests. Her main global interest since 1947 can be encapsulated under the concept of the containment of Soviet power¹⁴⁰. Therefore, disregarding specific continental issues and demands, Washington conducted a foreign policy of global dimensions, and a regional strategy subordinated to this global strategy.

Hence the tension already mentioned between her priority on security issues, and Latin Americans' priority on economic issues. This tension must be understood as a result of the low priority given to the region. The European and Asian theatres of superpower competition were, in the containment strategy, greater priorities. As a region relatively isolated from superpower competition and firmly integrated into the world economy as an exporter of raw materials, Latin America could not be considered a short-term threat to her hegemony. Washington could maintain a low-key set of policies towards the area, aiming principally to sustain the hemisphere as safe and trouble-free.

To the constant demands in favour of a developmental plan, similar to the successful Marshal Plan, Washington's advice was that private foreign investment was the solution. But as a superpower with global interests, she was investing large sums of private and public money in the troublesome regions of Europe and Asia. In building up, for instance, a collective security system in Europe with real teeth and an effective and unified command, the US was making clear that her priorities lay in the North Atlantic area.

140 The classical study is John Lewis Gaddis: *Strategies of Containment* New York, Oxford University Press, 1982.

The low priority given to Latin America as a security risk was reflected in the evolution of the collective military system. The IADB maintained its symbolic adviser role, serving at least to voice the demands of the Latin American military establishments for more and better arms. The IADB was never considered, however, as a serious organ which could generate a continental unified defence policy or a unified command. The collective defence system was in fact Washington based and depended on unilateral Washington actions¹⁴¹.

Nonetheless, Washington's foreign policy for the region was gradually assuming its global containment dimension. In 1954, at the Tenth Inter-American Conference held in Caracas, the Eisenhower administration sought to impose anti-communism as the core value into the regional framework¹⁴². Looking to gain support for its unilateral policy against the Guatemalan government – for its alleged sympathy for deep social and political reforms – she sought to make anti-communism the guiding principle of hemispheric affairs. Meanwhile, one principle of the OAS Charter, encouragement of representative institutions, was by-passed by events, with the complacency of first the Truman and then the Eisenhower administrations. The ephemeral nature of most democratically elected governments, which followed the victory over the dictators in Europe and Japan, were replaced by authoritarian governments throughout the continent¹⁴³. They were not molested by the Truman or the Eisenhower administrations.

141 See Child, *op. cit.*; R.A. Humphreys *Latin America and the Second World War* 2 vols, London, Athone Press, 1982 and Lars Shoultz *National Security and United States Policy toward Latin America* Princeton, Princeton University Press, 1987.

142 See Connel-Smith, *op. cit.*, pp. 229-31.

143 See Leslie Bethell and Ian Roxborough "Latin America between the Second World War and the Cold War: Some Reflections on the 1945-8 Conjunction" *Journal of Latin American Studies* v. 20, part 1, 1988, pp. 167-89.

Eventually the reformist administration of Arbenz in Guatemala was toppled by an unilateral American decision in 1954. She armed and trained a small rebel force which was able to replace the constitutional government in Guatemala¹⁴⁴. Security issues in the region, including the nature of domestic regimes, were decided unilaterally by the dominant state in a typical sphere of influence relationship. Another manifestation of this sphere of influence relationship was the bilateral military relationship between the United States and the Latin American republics.

Because the multilateral security organs such as the IADB were totally ineffective, bilateral military relations were implemented as a basis for arms transfers and training. Since 1942, with the extension of the Lend-Lease programme to Latin America, Brazil, as the main Latin American ally during the war, was granted a small amount to spend on US weapons. Other Latin American republics also contemplated a Lend-Lease programme, albeit on a smaller scale. After the war, the republics sought to continue and expand military collaboration, because they perceived in the formidable American military machine, a way to modernise their backward armed forces. But Washington's interest in keeping extensive arms transfer programmes was low. Her priorities lay elsewhere.

After a long battle in Congress, the Eisenhower administration was able to extend the Military Assistance Program (MAP) to Latin America¹⁴⁵. Under its terms, for a nation to qualify as a recipient for arms and training it had to enter into a bilateral military pact with Washington. Many republics did so, starting with Ecuador in 1951. Brazil signed a military pact in 1952, which provoked a heated

144 See Richard H Immerman: "Guatemala as Cold War History" *Political Science Quarterly* v. 95 n. 4 Winter 1980-81, pp. 629-53 and José M. Aybar de Soto: *Dependency and Intervention: The Case of Guatemala in 1954* Westview Press, 1978.

145 A complete analysis on the Military Assistance Program is Harold H. Hovey *United States Military Assistance* New York, Praeger, 1965. The programme's impact on Latin America will be discussed later on.

debate when presented for ratification to the Brazilian Congress¹⁴⁶. The essence of the pact consisted in a grant, decided by Congress annually, which the nation could use to buy US made arms. The training of Latin American officers in American military academies would also be intensified.

The Brazilians, as an example, were disappointed with the amount of grant she qualified to receive with the MAP, seeking to increase the quantity and quality of the arms transferred. Nevertheless Washington used the grant very carefully, subordinating it to her policy of not introducing updated weaponry into the region, and keeping a reasonable parity in the amount get aside nations. This policy infuriated the Brazilians, who considered themselves as special partners, and so refused to accept a level of military aid similar to the one granted to Buenos Aires, a neutral up to 1945¹⁴⁷.

It was the Cuban revolution in 1959 which, more than any single event, modified this situation. The revolution became an electoral issue in the United States, and also inspired many insurgencies throughout the continent which alarmed both the conservative and liberal elites alike. As a consequence of the revolution and the challenge posed by the insurgencies, the somehow dormant military institutions began to find an invigorated role. Forging a common counter-insurgency policy to equip the continent's armed forces became the paramount objective of the collective security system. The containment doctrine achieved in plenitude its regional dimension, notwithstanding the nature of the enemy.

146 See "Esclarecimentos do Ministro João Neves Sobre o Convênio Militar Brasil-EE.UU." *Diário de S. Paulo* 2 November 1952; "Aprovado e Promulgado o Acordo Militar com os Estados Unidos" *Correio da Manhã*, 1 May 1953.

147 See Stanley Hilton: "The U.S., Brazil, and the Cold War, 1945-60: End of the Special Relationship" *Journal of American History* 68, December 1981, pp. 599-624 for a description of Brazil's reaction.

In contrast to the Soviet military machine, the threat to be contained in Latin America was domestic, not external. Insurgency tactics, rural and urban, loosely inspired by Castro's success in Cuba, were met with a combination of anti-insurgency tactics. They were the lessons learned in Malaysia by the British, and in Indochina by the French. These domestic threats reinvigorated many Latin American military establishments and the inter-American security institutions. It gave them a sense of mission, after years of impotence caused by subordination, in material and doctrinal terms, to the American armed forces.

Nevertheless, this period of active inter-American collaboration, of widespread training for counter-insurgency did not last. The quick success against insurgency, symbolised by the death of Ernesto Che Guevara in the Bolivian Andes in 1967, gave credit to the counter-insurgency doctrine, but did not answer the other more compelling demands of the Latin American armed forces, that is military modernization. The constant demands for updated war material did not disappear with the relative success against the insurgencies. Varying from nation to nation, the climax of inter-American military cooperation achieved during the counter-insurgency period, instead of satisfying some military establishments, gave them a more acute drive towards modernization. For some military officers, now faced with governmental responsibilities, military modernization could not be separated from economic modernization. Moreover, military officers in power had to coexist with a traditionally low level of spending on security.

2.2. The Meaning of Militarism and Militarization in Latin America: The Experience of the Sixties

Despite traditional low levels of defence spending, some voices throughout Latin America began to argue in the late fifties for regional arms control measures. First Costa Rica and then Chile

announced plans to diversify defence spending towards more pressing social demands¹⁴⁸. Conventional as well as nuclear arms control and disarmament measures were proposed aiming to restrict defence spending to a minimum. In the arguments raised over the ways to fight poverty in Latin America, for instance, resources spent on armaments were presented as unnecessary or even immoral.

Nevertheless, the lack of a tradition of discussing defence budgets publicly, even in national parliaments, led to unsuccessful proposals, which were either too ambitious or too vague¹⁴⁹. The need for more resources for economic and social development and the self-image of Latin America as a unique pacific region were used in favour of those who pledged disarmament or arms control. Moreover, a link between spending in armaments with a greater military participation in politics was also voiced by civilians fearful of military domination.

Although some politicians were pressing for a halt in defence spending altogether, military sectors were increasingly voicing their concern at the low level of defence spending and the backwardness of their armed forces. The level of defence spending, as well as the share of defence spending in national budgets in Latin America, became since the fifties a delicate political issue in inter-American relations. As a result of Washington's Lend-Lease programme, the military establishments of the area had received surplus American military equipment.

Receiving surplus American war equipment as grants, however, served to freeze the demand for more sophisticated armaments. Moreover, it implied accepting Washington's policy of maintaining

148 See Hugh B. Stinson and James D. Cochrane: "The Movement for Regional Arms Control in Latin America" *Journal of Inter-American Studies and World Affairs* v. 13, January 1971, pp. 1-17; Maria Eliana Castillo R. *Control de Armamentos: El Caso Latinoamericano* Contribuciones n. 31, Santiago de Chile, FLACSO, 1985, mimeo. and Edward B. Glick, "The Feasibility of Arms Control and Disarmament in Latin America" *Orbis* v. 9 n. 3 Fall 1965, pp. 743-59.

149 See Stinson and Cochrane, art. cit., p. 2-5.

parity among the armed forces of the area. Hence, restraining the level of defence spending as well as freezing the demand for more sophisticated armaments was a means to follow Washington's goals. A continental collective defence, established and led by Washington, gave some minor tasks to the Latin American armed forces. Nonetheless, it kept them under-funded and under-prepared for modern defence.

In this context, it is fundamental to take into account the Latin American political tradition of military involvement in politics. The Spanish-speaking tradition of *caudilismo* and the Brazilian tradition of military involvement since a Republic was established in the late nineteenth century, had been a feature of Latin American history for over a century and a half¹⁵⁰. But the historical and political phenomenon of military involvement in politics has been complex and diverse, despite being given a broad label of 'militarism'.

Those civilians who pledged to control the level of defence spending were certainly inspired by the fear of domestic military domination. Yet the view that high levels of defence spending and the political dominance of the military were related could not be demonstrated empirically. Militarism in Latin America was a phenomenon related with domestic causes. Military establishments as policy-makers became more concerned with domestic issues than with defence policy and foreign threats.

In spite of the in-depth historical roots of military interference in politics in Latin America, the 1950's literature on political modernisation sought to prove that military rule was a product of the lack of social and political modernisation. Latin America provided,

150 On caudillism an early but still useful analysis is R. A. Humphreys: "The Caudillo Tradition" in Michael Howard (ed.) *Soldiers and Governments: Nine Studies* London, Eyre & Spottiswoode, 1957. A recent analysis on caudillism is Frank Safford "Politics, Ideology and Society" in Leslie Bethell (ed.) *The Cambridge History of Latin America* vol.3 Cambridge, Cambridge University Press, 1985, pp. 347-422. On Brazil's military history a general and helpful source is Nelson Werneck Sodre *A História Militar do Brasil*, Rio de Janeiro, Editora Civilização Brasileira, second edition, 1968.

along with the new African and Asian states, case-studies in this literature. However, the late fifties appeared to be a period in Latin America of the “Twilight of the Tyrants”¹⁵¹, a period in the cyclical alternations between civilian and military rulers which appeared to favour the former.

Nonetheless, despite this optimistic prediction, a new wave of military coups in the region was coming. In the early sixties, as in the late forties, a series of military coups occurred. Between 1962 and 1964, seven coups occurred in Latin America¹⁵². In South America Peru, Ecuador and Brazil fell under military rule. In contrast with previous coups, however, the cycle of the early sixties was organised by officers who had passed through many years of training in the United States. Trained at U.S. military academies, or with strong links to Washington’s military establishment, these officers responsible for the coups reflected a collective defence mentality. As a result, throughout the hemisphere, a new wave of military coups, started by the Peruvian *coup d’etat* in 1962, resulted in a debate on Washington’s role in the indoctrination of the armed forces.

In Washington a debate had already begun concerning the continuity of the Military Assistance Program towards Latin America, and the consequences of such a programme on the Latin American armed forces. The training of the Latin American armed forces in the US – meaning a first-hand contact with their advanced colleagues of the North – had, undoubtedly, a tremendous impact on the military establishments south of the Rio Grande. Similar to the ‘revolution of rising expectations’ that was occurring within the impoverished masses in the region, great expectations were also being raised in the armed forces. Moreover, the limited

151 This is the title of a book published in 1959 by the journalist Tad Szulc. It reflects the optimism of the late fifties on the possibility of sustained liberal democracy in Latin America.

152 See Nicolle Ball: *Security and Economy in the Third World* London, Adamantine Press, 1988, introduction.

scope of the tasks attributed to the armed forces of Latin America by the collective defence approach, and their precarious military equipment generated dissatisfaction. The officers sought to apply at home the techniques and the equipment learnt from abroad.

Although this tradition of military involvement in Latin America, military participation in or dominance of politics has been, historically, a widespread phenomenon. Therefore, the literature on militarism as a political phenomenon is very extensive. From the initial systematic studies made by Vagts and the early conceptualisation of Lasswell, until the modern social scientific studies of Huntington, Janowitz, Finer and Perlmutter, the area has developed as a field of study in itself – that of civil-military relations¹⁵³. Although it was a perennial theme in social studies, militarism began to be better understood with the aid of modern social science tools.

The historical examples of Prussia and Japan were extensively used in the modern literature to define militarism as a historical, social and political category¹⁵⁴. The explanation of militarism as a political phenomenon, which appeared in certain historical contexts but not in others, was understood by the political modernisation literature as a consequence of an incomplete or partial achievement of a modern democratic polity. In the classical examples of nineteenth century Prussia and twentieth century Japan, a

153 The literature on militarism and civil-military relations is very extensive. Particularly interesting are the attempts of synthesis made by John Erickson and Hans Mommsen "Militarism" in C.D. Kerning (ed.) *Marxism, Communism and Western Society* v. 5 New York, Herber and Herber, 1973, and Volker R. Berghahn *Militarism, The History of an International Debate 1861-1979* London, Berg Publishers 1981. As landmarks of the literature on civil-military relations see Alfred Vagts, *A History of Militarism*, London, Hollis and Carter, 1959; Harold Lasswell "The Garrison State and the Specialists on Violence" *The American Journal of Sociology* v. 47 January 1941, pp. 455-68. In the modern social science literature see Samuel Huntington *The Soldier and The State* Cambridge, Harvard University Press 1957; Samuel E. Finer, *The Man on Horseback: The Role Of The Military in Politics* Boulder, Westview Press, third edition, 1988; Morris Janowitz *Military Institutions And Coercion In The Developing Countries* Chicago, University of Chicago Press, expanded edition, 1977.

154 Berghahn, op. cit. chapter 3 and Huntington, op. cit. chapter 2.

complete defeat in total wars was necessary to transform them in modern democratic polities.

Thereafter, comparing distinct historical examples of how to achieve politically neutral armed forces became a feature of a relevant branch of political history. As the field of civil-military relations evolved to become a modern field of studies, using extensively a comparative approach, it showed that the means of achieving political stability combined with military neutrality had been historically diverse¹⁵⁵. They were related with particular historical conditions. Thus, far from being isolated events, the Prussian and the Japanese cases were extremes on a continuum.

The concept of militarism was first coined and employed during the French Second Empire¹⁵⁶. The polemic between the conservatives and the socialists over the role of the armed forces, and the officers' opposition to republican values, led to the use of militarism as a derogatory expression. Those civilians or military who considered military values as the genuine examples of honour and virtue, as compared with degenerate republican values, were accused by the republicans of being militarists. As a reaction against the extension of the liberal and democratic aspirations of citizens, the French aristocratic defence of hierarchy and conservative virtues, embodied by then in military institutions, could be well understood in the context of the Second Empire. The French society was still trying to cope with one century of revolutionary transformations, which had turned the most prosperous European society upside down.

155 For a useful study see Claude Welch E. Jr. (ed.): *Civilian Control of the Military: Theory and Cases From Developing Countries* Albany, State University of New York Press 1976.

156 As Erickson and Mommsen pointed out, the term militarism has gained currency as a political slogan during the anti-Bonapartist polemics of republicans and socialists under the Second Empire. The first systematic analysis of militarism as a social and political phenomenon was made by Herbert Spencer in the 1890's. However, as Berghahn showed, since the seventeenth century writers and politicians were interested in the role of the military in the emergent national states.

What is more complex to explain was the resurgence of militarism in the modern French society of the twentieth century, as showed in the late fifties and early sixties¹⁵⁷. The reaction of part of the French colonial armed forces against the independence of Algeria was an example of the complex relationship between armed forces and society at large, revealing the pervasiveness of military values in mid- twentieth century Europe. Therefore, the Prussian and Japanese classical examples, as well as the persistence of political-military problems in Southern Europe in the late twentieth century, i.e. Greece, Turkey, Spain and Portugal, showed the complexity in achieving politically neutral armed forces. Instead of being the 'normal' pattern, the Anglo-Saxon way of stabilising civil-military relations was, on the contrary, the exception¹⁵⁸.

Due to its insularity and its unique constitutional development, Britain was able to delay the creation of a powerful standing army until she was constitutionally well prepared to co-exist with and control it. Similarly, in the United States, its peculiar political development and the natural barriers of the two oceans forced the country to develop a maritime strategy, postponing the development of a powerful army.

Excepting some extreme examples, such as Switzerland, with its militia organization, and Costa Rica, which had abolished the armed forces altogether in 1948 – creating a national guard with a ceiling of 1,200 men – the task of achieving politically neutral armed forces has proven difficult and complex. The other successful

157 Raoul Girardet "Pouvoir Civil and Pouvoir Military Dans La France Contemporaine" *Revue Francaise de Science Politique* March 1960 pp. 5-38; on the influence of the colonial army on French military doctrine and domestic politics see Douglas Porch "Begeaud, Gallieni, Lyautey: The Development of French Colonial Warfare" in Peter Paret (ed.) *Makers of Modern Strategy* Oxford, Claredon Press, pp. 376-407.

158 On the American case see Huntington, op. cit.; Stephen E. Ambrose and James Alden Barber (ed.) *The Military in American Society* New York, The Free Press 1972. On the British case see Michael Howard (ed.) op. cit. and John Brewer *The Sinews of Power* London, Unwin Hyman, 1989.

example in creating a neutral role for the armed forces in the twentieth century was the communist model, with its iron subordination of the armed forces to the party structure. That subordination however was usually achieved at a high political cost. In Cuba, for instance, with the building of what Jorge Domínguez has called 'the civic soldier', it involved a kind of militarization of the society altogether¹⁵⁹.

Besides Europe, North America and the communist states, a plethora of old and new states have been struggling to achieve civilian-led polities. The literature on political modernisation therefore dealt with diverse geographical, historical and political contexts. Nonetheless, in these places where the attempts to stabilise civil-military relations have failed, the presence of the military in politics begun to be considered as an inevitable feature, and perhaps as a virtue. Military intervention in politics, hitherto regarded as an example of despotism or dictatorship, and a consequence of a failed political development, began to be perceived as a positive phenomenon. Military officers could be efficient agents for nation building.

The decolonisation of the old European Empires involved the highly complex process of the formation of new states. The aim of the nationalist movements which fought the colonisers in the name of nationalism and self-determination was achieved. Nonetheless, coming from the guerrilla struggle, or from incipient political movements, the leaders of the new nations had been educated politically through violence, in their clashes against the old colonial rulers. Therefore, in the nation building process of the new independent nations of Africa and Asia, a prominent role was accorded to the military professionals.

159 Jorge Domínguez "The Civic Soldier in Cuba" in Abraham F. Lowenthal (ed.) *Armies and Politics in Latin America* New York, Holmes & Meier 1976. In his study, Domínguez showed how the build-up of Cuban revolutionary armed forces was achieved by militarising the whole society.

In most of Africa, for instance, as the only reasonably modern institution amid tribal societies, the armed forces achieved prominence. As guerrilla fighters became regular soldiers, or the colonial soldier, who had been trained and equipped with modern weaponry, became the modern officer, they constituted a 'natural' group to assume governmental functions. Thus, from the early sixties onwards, as the process of independence spread throughout the African continent, a positive role was attributed to the armed forces. As a result keeping the unity of fragile and disorganised polities became a common feature in the literature about civil-military relations in the Third World. In this task, the armed forces could perform a necessary and positive role¹⁶⁰.

Moreover, this notion of the armed forces as a modernizing and cohesive influence also penetrated the field of Latin American studies, particularly in the US. Aiming to explain the endemic interference of the armed forces in Latin American politics – with a new cycle appearing – it evolved to discover virtues in these interferences. Interventionist military officers were regarded not any more as causes of political instability, but as a symptom, and perhaps as a remedy against corrupt oligarchies. Thus a new reasoning had been created and applied to explain political instability and military participation. From being considered a problem – sometimes *the* problem – in the consolidation of a liberal democratic order in Latin America, some authors had begun to

160 An early article using this argument is Guy Paulker: "Southeast Asia as a Problem Area in the Next Decade" *World Politics* v. 11, April 1959, pp. 325-42. The most prominent author of the modernising role of the armed forces in the political modernising literature was Lucien Pye: "Armies in the Process of Political Modernization" in John J. Johnson (ed.) *The Role of the Military in Underdeveloped Countries* Princeton, Princeton University Press 1962. For a critical balance of this literature see Nicolle Ball, op. cit. and *The Military in the Development Process: A Guide to Issues* Claremont, Regina Books, 1981; Arturo Valenzuela "The Military and Social Science Theory" *Third World Quarterly* v. 7 n. 1, January 1985, pp. 132-44.

describe the military as virtuosos in the art of nation building, due principally to their administrative skills¹⁶¹.

However, the debate on the role of the military in Latin American politics is as old as the phenomenon itself. In the Spanish-speaking nations the conjunction of Spanish culture and a lack of institutionalised ways for transferring political power, led to *caudillism*, political factionalism and endemic violence¹⁶². Few nations, such as Chile and Uruguay, and in the twentieth century Mexico and Costa Rica, were able to evolve towards a less violent political culture. Hence political violence and caudillism have been perceived as a hindrance to political modernization and stability.

In Brazil, on the other hand, the Monarchy was able to provide the country with political stability and national unity. The major role played by the armed forces was to repress local separatist rebellions. Nonetheless with their prestige boosted by the victory in the Paraguayan War and clashes with civilian politicians, sectors of the Army began to oppose the Monarchy. Therefore, when for many reasons the situation came to be perceived as intolerable to the army – culminating in what was termed as the ‘*questão militar*’, meaning an unresolved succession of clashes between the Army and the Monarchy – it led to the proclamation of a Republic in 1889. The Proclamation was in fact an army coup, eventually leading towards the establishment of a constitutional republic. Nonetheless, the

161 The collection of essays edited by Johnson, op. cit. is a useful example of this tendency. See also John J. Johnson: *The Military and Society in Latin America* Stanford, Stanford University Press, 1964.

162 Victor Alba “The Stages of Militarism in Latin America” in Johnson (ed.) op. cit. pp. 165-84. As Humphreys explained: “A military class enjoying special privileges, the *fuero militar*, had made its appearance in Spanish America before the wars of independence began. But it was the wars that fastened militarism on so many of the republics. A relatively large standing army, such as was retained in Mexico, too often proved a menace rather than a protection to the state whose security it was designed to serve. Military interests became distinct from civil interests, military loyalties from civil loyalties. Generals who had commanded armies, moreover, aspired to govern countries.” In Humphreys, art.cit., pp. 156-57.

first decades of the republic were full of army and, on a lesser scale, naval rebellions¹⁶³.

Despite this history of political instability and endemic violence, part of the literature on political modernization mentioned developed an approach praising the role of the armed forces against localism, corruption and despotism of civilian politicians. This approach presumed that the armed forces could have in Latin America the same modernizing and positive role as they were perceived as having in Africa. Moreover as in Latin America the influence of foreign training was greater than elsewhere, it could boost this positive function. With a proper training, this it was said positive role could have a beneficial influence in shaping a better polity.

A notion such as praetorianism was employed by the modernising social science literature, seeking to explain political instability in Latin America¹⁶⁴. Although an ancient notion, derived from the praetorian guard of the Roman Empire, its modern usage in the field of civil-military relations dated from the early sixties. The idea was to explain the motivation of the armed forces, as an institution, to intervene in politics. Weak political organizations, insufficient to canalise and organise excessive political demands, meant that instability became a feature of a completely polarised political system. As possessors of the ultimate political tools – violence – the armed forces had to intervene¹⁶⁵.

163 On the “questão militar” see Sodre, op. cit. and June E. Hahner: *Civilian-Military Relations in Brazil, 1889-1898* Columbia, University of South Carolina Press, 1969. On the rebellions of the first years of the republic see José Murilo de Carvalho, “As Forças Armadas na Primeira República: O Poder Desestabilizador” Belo Horizonte, *Cadernos do Instituto de Ciência Política* n. 1, UFMG, 1974.

164 On the notion of praetorianism and its application to Latin America in the sixties see Amos Perlmutter and Valerie Plave Bennet *The Political Influence of the Military, a Comparative Reader* New Haven, Yale University Press 1980, pp. 197-480. The most important political scientist to employ the notion was Samuel P. Huntington in *Political Order in Changing Societies* New Haven, Yale University Press, 1968.

165 See Huntington (1968), op. cit.

In relation to Latin America, part of the argument centred, however, on the role played by the training of Latin American officers in the US. Should the military need to intervene, the argument went, Washington could influence the nature of the intervention through the training programme. The formation of a new military mentality, reformist and technocratic, could help to forge a process of social, economic and political modernization.

Since the training programme, as well as the transfer of armaments, occurred through the Military Assistance Program, it is worth analysing the nature of the debate which occurred on the results of the MAP to Latin America. They began during the Eisenhower administration, when critics of his Latin American policy sought to evaluate its alleged support for authoritarian governments¹⁶⁶. Military assistance, as the critics argued, could play a great role in the stability of unpopular governments.

2.3. Militarism and Inter-American Relations: The Military Assistance Program

The MAP was created by the American Congress after long clashes with the Executive. It was a product of the containment doctrine. It aimed to help nations which needed direct military assistance to fight against the possibility of a Soviet invasion, or a Soviet-inspired domestic insurgency¹⁶⁷. It sought principally to arm nations in areas contiguous to the Soviet empire, as in Europe or in Asia.

In 1951, however, through the Mutual Security Act, the American Congress approved an extension of the programme to Latin America. Nevertheless, it ultimately concentrated the

¹⁶⁶ This is well analysed in Rabe (1988), op. cit.

¹⁶⁷ See Hovey, op. cit. On the role of training see Ernest W. Lefever "The Military Assistance Training Program" *The Annals of the American Academy of Political and Social Science* 424 March 1976, pp. 85-91.

military aid for training rather than supplying the armaments demanded by the Latin American armed forces. Training consumed, in monetary terms, a greater part of the assistance. Due to the high number of officers trained, it had great repercussions in the Latin American military establishments¹⁶⁸.

In spite of the large differences in the number of officers trained amongst the nations of the area, and the different impact which the training had on quite diverse military and political institutions, it is generally accepted that it had a great impact. It was an extensive training programme, not unique to Latin America, but one which had a unique impact throughout the region.

The development of an impressive training programme, however, was not originally intended to professionalise the officer corps, in the sense of preventing their involvement in politics. Its original purpose was to strengthen their capacity to manage modern war, and to familiarise them with American military equipment and doctrine¹⁶⁹. What was initially planned, at best, as a by-product, namely politically neutral armed forces, evolved to become one of the main issues in the debate. The primary task of a military training programme, that is, preparing for a modern and efficient defence,

168 The literature on training is extensive. A very useful tool, including North American and Latin American points of view is a special collective volume edited by CIDE: "La Dependencia Militar Latinoamericana" *EEUU Perspectiva Latinoamericana* CIDE August-December 1978. In this volume, the article by Claude Heller, "La Asistencia Militar Norteamericana a América Latina: una Perspectiva Política", gave the following numbers for Latin American officers trained in the U.S.: 1950-63: 24 421; 1964-68: 22 058. The four year period of the mid-sixties was almost equal to the whole previous decade. It showed the increasing in the programme after the Cuban revolution.

169 Nonetheless, in terms of equipment received, the data was much less impressive. While through the Lend Lease programme established in 1942, Latin America received 400 million dollars of equipment, the amount approved by the 1951's Mutual Security Act was 38 million dollars for the whole area. In a paper to the Rand Corporation, critical of the assistance programme to Latin America, the following data was given to the period 1952-65:

Europe - \$ 17.4 billion; Southeast Asia - \$8.2 billion; Latin America - \$ 500 million. In L. Einaudi, H Heyman Jr, D. Ronfelt and C. Sereseres "Transferencia de Armas a Latinoamérica: Hacia una Política de Respeto Mutuo", Spanish translation of a Rand corporation report included in *EEUU Perspectiva Latinoamericana* op. cit.

was not the key issue in the debate. In this respect, the consensus was that the armed forces of the Latin American states – even the most advanced of them – were ill-prepared to defend against a foreign threat and to wage a modern war.

In these circumstances, training alone, even combined with the delivery of surplus equipment dating from the Second World War, proved not to be a panacea in creating an efficient defence against a foreign threat. Moreover, lacking industrial capacity to forge an indigenous arms industry, and political stability to forge a common sense of threat, a clear-cut defence policy was missing. Henceforth the lack of both – sophisticated weaponry and a foreign defence role – evolved to be understood as factors contributing to the military involvement in politics.

A turning point in this highly unsatisfactory situation – from the Latin American point of view – came out with the occurrence of two key events, which gave a new perception for a proper role to the armed forces, and a new rationale for the continuation of the military training in the United States. These events were the Cuban revolution and the regional policies of the Kennedy Administration. The former gave a new sense of mission to the armed forces, namely to defend the nation against a domestic political threat, which they were capable of performing with appropriate training without sophisticated or expensive armaments. The latter brought out a reformist mentality. It included a plea for social, economic and political reforms throughout the region, and a greater commitment in favour of representative governments.

As a consequence, new policies were examined and implemented during the Kennedy and Johnson administrations. The quality and quantity of the military assistance to Latin America, and even the continuation of the training altogether, were discussed. These issues were on the agenda as a consequence of the new think-

ing on security brought out by McNamara and his young protégés¹⁷⁰. The intense discussions on the consequences of military training for political stability in Latin America started during Eisenhower's term and acquired a greater urgency under a review of the Latin American policies implemented by Kennedy. Hence, the policy of the Kennedy administration, later on abandoned by Johnson, in ostracising authoritarian regimes in the area, including not just Cuba, but also conservative governments such as the Dominican Republic, Haiti and El Salvador. It was, for sure, a policy based on fierce anti-communism, but it encouraged reformism. Therefore it was praised by some reformist sectors in Latin America, for being reform-minded and anti-authoritarian.

In terms of doctrine, from 1961 onwards, the military assistance policy of the Kennedy administration began to shift emphasis in favour of training for counter-insurgency and the grant of special equipment for this task¹⁷¹. The establishment of the Inter-American Police Academy and the employment of military personnel for civic action were important components of the new training, elements in a strategy to fight insurgency of the Cuban type. Using the French examples of the counter-insurgency philosophy of the *guerre révolutionnaire*, and later on the Americans' own experiences in Southeast Asia, efforts were made to develop a counter-insurgency strategy suitable to Latin America¹⁷².

170 See Robert S. McNamara: *The Essence of Security: Reflections in Office* London, Hodder & Stoughton 1968. On the role of Congress in the search for new policies see Francis J. Michael "Military Aid to Latin America in the U.S. Congress" *Journal of Inter-American Studies* v. 6 n. 3 July 1964, pp. 389-404.

171 See John Baines "U.S. Military Assistance to Latin America" *Journal of Inter American Studies and World Affairs* v. 14 n. 4 November 1972, pp. 469-87 and Charles Wolf "The Political Effects of Military Programs: Some Indications from Latin America" *Orbis* v. 8 n. 4 Winter 1965, pp. 871-93.

172 On the development of a civic action doctrine see William F. Barber and C. Neale Ronning: *International Security and Military Power, Counterinsurgency and Civic Action in Latin America* Columbus, Ohio State University Press, 1966. On the French colonial military doctrine, which had a great influence on the Latin American officers see Porch art. cit.

However, Washington's involvement in the development of a counter-insurgency doctrine to deal with potential revolutionary wars in Latin America attracted much criticism. Her support for an anti-communist crusade throughout the region, therefore continuing a policy implemented by Eisenhower, could be perceived as contradicting Kennedy's alleged reformism and encouragement of more liberal and representative government in the region. The counter-insurgency doctrine was accused of ultimately being responsible for the build up of a 'national security doctrine', utilised by repressive military regimes of the 1960's and 1970's, especially in the Southern cone of the hemisphere¹⁷³. This 'national security doctrine' implemented by a few Latin American military establishments performed a highly repressive role, and had an appalling human rights records.

The armed forces, trapped in the fight against domestic insurgency became, as an institution, responsible for law and order. Therefore, behind the argument of fighting a domestic threat, they conceived a political system wherein a narrow conception of security predominated. The whole society could be perceived as enemies and therefore repressed in name of a concept of national security that was narrow and ill-defined.

Washington's responsibility for the indoctrination of the Latin American officers with a counter-insurgency mentality is a fact. Nonetheless there was no automatic relationship between training and the build-up of a national security state. Moreover, critics used as evidence of Washington's involvement in the formation of a 'national security doctrine', among other arguments, the foundation of War Colleges or Military Academies throughout the area. Inspired by, or with the direct assistance of the United States, they became the focus for the creation and dissemination of

173 As an example of this accusation see P. Joseph Comblin *A Ideologia da Segurança Nacional* Rio de Janeiro, Editora Civilização Brasileira, second edition, 1978.

a 'national security doctrine'. A majority of the leaders of the War Colleges, considered as instrumental in the 1960's military coups, were highly influenced by Washington's world view¹⁷⁴.

Nonetheless the Peruvian as well as the Brazilian cases showed that there was not a single, unified 'national security doctrine'. Different national contexts led to distinct emphasis and priorities. The idea that all military coups were part of a regional typology of military take-overs, based on an alleged indoctrination of counter-insurgency, cannot be adequately demonstrated. For example, in contrast to Argentina, Chile or Uruguay – which turned out to typify repressive and violent military regimes – in Peru and in Brazil a 'national security doctrine' attempted to enlarge the notion of national security. In the Peruvian case, the Alvarado regime became highly critical of Washington's policy towards Latin America and engaged, albeit unsuccessfully, in deep social and economic reforms¹⁷⁵. The Brazilian case will be treated extensively later on.

As part of the evaluation of the assistance programme towards Latin America, a vigorous debate took place among American scholars. This debate was best represented by two distinguished Latin American specialists, Edwin Lieuwen and John Johnson. Lieuwen was the single scholar most responsible, in the American academic community, for the diffusion of the idea of militarism

174 A balanced study of the Latin American military which does not put too much emphasis on Washington's role is Genaro Arriagada Herrera *El Pensamiento Político de los Militares* Santiago de Chile, CISEC, n/d. It was followed by Genaro Arriagada H. and Manuel Antonio Garretón "América Latina en al Hora de las Doctrinas de Seguridad Nacional" in María Angelica Perez (ed.) *Las Fuerzas Armadas en la Sociedad Civil* Santiago de Chile, CISEC 1978.

175 For an attempt to drawn a typology on military regimes in Latin America see Abraham Lowenthal "Armies and Politics in Latin America" in Abraham Lowenthal (ed.) op. cit. Alfred Stepan in "The New Professionalism of Internal Warfare and Military Role Expansion", *ibid.* sought to analyse the Brazilian and Peruvian case. In Alfred Stepan *The State and Society: Peru in Comparative Perspective* Princeton, Princeton University Press, 1978, the Peruvian case is analysed. A comprehensive work of analysis is by Alain Rouquie *El Estado Militar en América Latina* Buenos Aires, Emece, 1984.

in Latin America as a serious political threat and a hindrance to political stability¹⁷⁶.

The polemic is very instructive, because it touched upon one of the most important directions which the MAP had taken, namely the idea of professionalising the Latin American armed forces. With the influence of the theory of social and political modernisation, Johnson defended the professionalism of the armed forces as the best, indeed the only way, to encourage the Latin American officers to achieve political neutrality. Developing skills necessary to adequately perform the tasks of national defence should bring political neutrality as a consequence¹⁷⁷. The training programme could also be useful in teaching inexperienced young officers modern managerial techniques, turning them into a useful group for the society as a whole. Therefore, when returning to their backward nations, the officers could effectively play a positive role in favour of social and political modernization. Applying their professional skills they could contribute to the spread of modern techniques and managerial processes to the society as a whole.

As a typical product of the political modernization theory, this approach was based on the idea that a lack of education was a main cause for underdevelopment. Basic and high education, as well as technical and managerial training, were then sought as inevitable steps in building up a modern polity. As a group which could bring these techniques to Latin America, being trained in more advanced centres, military officers became a symbol of the

176 The most influential book by Lieuwen was *Arms and Politics in Latin America* New York, Praeger, 1960. It was followed by *Generals vs Presidents, Neomilitarism in Latin America* London, Pall Mall Press, 1964. His criticism of Washington's policy was voiced in "Militarism in Latin America, a Threat to the Alliance for Progress" *World Today* v. 19 n. 5 May 1963, pp. 193-99 and "Neo-Militarism in Latin America: The Kennedy Administration Inadequate Response" *Inter-American Economic Affairs* v. 16 n. 4 Spring 1963, pp. 11-20.

177 For Johnson's reasoning see the collection of articles he edited, Johnson (ed.) (1962) and Johnson (1964).

new and modern elite, able of acquiring and promoting a reformist outlook. Therefore their abilities could serve socially as a whole by contributing a useful input into civilian developmental tasks.

This is a simplified version of the reasoning behind what was named as 'civic action'. Stimulated by Washington, using the armed forces for much needed tasks such as, for example, roads and bridge building, environmental protection, epidemic control, basic education, sanitation and so on, it was expected to help in changing the popular perceptions of the armed forces which the societies at large cultivated. The notion of civic action as a compatible role for armed forces trained in modern war doctrines, combined with the social and political modernisation theory with the tactics of the *guerre revolutionnaire*¹⁷⁸.

As an historian schooled in Latin American civil-military relations, Lieuwen was more sceptical over this alleged positive modernizing role played by the armed forces of Latin America. For him, the past experience of violence, caudillism and military coups, made the armed forces a real hindrance to political stabilization. For these reasons he developed his criticism of Washington's policy of training. Expecting too much of corrupt armed forces, whose past was neither democratic nor law-abiding, was a serious mistake. He pointed out the responsibility of the Kennedy administration, a supposed supporter of reform and representative governments, in the implementation of the counter-insurgency policy.

For Lieuwen, nothing could be expected from the training of the Latin officers. Therefore the only viable policy to promote political stability was to be resolutely in favour of civilian and representative governments. Finally, he pointed out the ambiguity suffered by previous American administrations which rhetorically

178 On the importance of civic action in the counter-insurgency doctrine see John Shy and Thomas W. Collier: "Revolutionary War" in Peter Paret (ed.), op. cit., pp. 815-62.

criticised tyrannies or authoritarian regimes, while simultaneously doing business with them.

With this historical as well as normative argument, Lieuwen was able to influence to a great extent the analysis of militarism in Latin America. His studies stimulated the research on the military, a field which became better investigated empirically. It paved the way for a more consistent and systematic production of research and in-depth case studies. He influenced a series of studies with the aim to relate militarism – the participation of the armed forces in the political system – with militarization – a critical look at the levels of defence spending.

2.4. Defence Spending and Militarization

Several empirical investigations have appeared as a direct result or as a by-product of the Lieuwen-Johnson controversy¹⁷⁹. Seeking to test hypotheses on the influence of the MAP on the Latin American military establishments, they studied the history and composition of the armed forces, as well as the evolution of the level of defence spending. The major aim was to correlate training with professionalism, and with the ultimate goal of achieving political neutrality for the armed forces.

In a perceptive article, Fitch offered a balanced interpretation of the role played by military training in the political involvement of the armed forces¹⁸⁰. He demonstrated that the training had a real impact on establishing more professional and capable armed

179 Two useful review articles on the abundant literature on the Latin American military are Lyle N. McAlister, "Recent Research and Writing on the Role of the Military in Latin America" *Latin American Research Review* v. 2 n. 1 Fall 1966, pp. 5-36 and Richard C. Rankin, "The Expanding Institutional Concerns of the Latin American Military Establishments: A Review Article" *Latin American Research Review* v. 9 1974, pp. 81-108.

180 John S. Fitch "Consecuencias Políticas de la Ayuda Militar Estadounidense a América Latina" in *EEUU Perspectiva Latinoamericana* op. cit. See also John S. Fitch, *The Military Coup d'Etat as a Political Process: Ecuador, 1948-1966* Baltimore, Johns Hopkins University Press, 1976.

forces. More professional armed forces would have a political impact proportional to the relevance of the armed forces *vis-a-vis* the political institutions and, of course, the size of the country. Separating himself from those who understood that training was a rational and well-developed imperialist plot, as well as from those who were convinced that it had no impact at all in the Latin American polities, he developed the concept of an ‘institutionalised *coup d’etat*’.

Based on the military coup in Ecuador, but also including Brazil, Peru and Guatemala as examples, Fitch explored the complex and ambivalent role played by training. On the one hand, it did modernize the armed forces, but while strengthening them as an institution, it helped to consolidate their influence on the political system – especially the army. Better prepared officers meant a greater propensity to intervene, when the political conditions arose.

Despite Fitch’s persuasive argument, it was undermined by the empirical studies which intended to prove the lack of correlation between training and the behaviour of the Latin American officers¹⁸¹. They produced useful material for the study of defence spending in Latin America. Seeking to quantify the assistance programme’s influence, they provided an assessment of the link between military involvement in politics and the level of defence spending.

It is impossible to understand the debate on, and the fear of, strengthened armed forces in Latin America without taking into consideration the historical pattern of civil-military relations. The authors who perceived the rise of defence spending during the mid-sixties as constituting an ‘arms race’ were principally reacting against domestic political issues. Therefore as a consequence of the military take-over in some relevant Latin American nations,

181 For example the articles of Baines and Wolf cited in f. n. 51.

the use of the label 'arms race' is understandable. Nonetheless, paradoxically, a region plagued with militarism as a political issue had not in fact been all that impressive in terms of defence spending.

In fact, since 1945, the almost total dependence on American military assistance for defence had perpetuated a low pattern of defence spending in the area. By any account, a reasonable level of spending as a proportion of the national budget was the norm. Therefore, when the proposals for regional arms control and the freezing of defence spending were suggested, they received only a mild reception throughout the area. When the proposals evolved into a general condemnation of any spending on armaments whatsoever, in name of economy of resources for development priorities, they faced strong opposition.

Moreover, the situation to which the armed forces of some Latin American nations were reacting was one of lagging behind. The region was not initially included in the international arms transfer process initiated on a world scale during the fifties. Therefore, these drastic changes did have an impact in the region¹⁸². The nations which were asking for more sophisticated military equipment tended to fill an enormous gap. Moreover, they were planning to increase the levels of defence spending from a very low base. In this context, are we able to define this process as an arms race? If not, what was the rationale behind the movement to pursue supersonic jets and updated submarines? Can one perceive a coherent pattern of arms purchase from 1945 onwards, which has been radically altered by the mid-sixties, between the search for and acquisition of more sophisticated equipment? Or the

182 A good description of the arms transfer process is Geoffrey Kemp with Steven Miller "The Arms Transfer Phenomenon" in Andrew Pierre (ed.) *Arms Transfers and American Foreign Policy* New York, New York University Press 1979. An analytical account is by Cristian Catrina, *Arms Transfers and Dependence* New York, Taylor & Francis and UNIDIR, 1988.

period between 1945 and 1965, when the armed forces accepted constraints in their armaments purchase, abnormal? Was Latin America following a similar pattern of arms purchases to that the underdeveloped world or was it following a particular path, due to its special security relationship with Washington? These are the main questions which should be answered in a correct assessment of the idea of an arms race in Latin America.

In the period before the Second World War, Latin America bought its armaments from Europe. Due to the influence of the military missions sent by several European nations – notably France, Britain, Germany and Italy – the Latin American countries established close links with the doctrines and practice of those with whom they trained¹⁸³. It was the spread of German and Italian military influence in the region which provided Washington's main cause for alarm in relation to hemispheric security.

With the war and the development of the inter-American security system, the armed forces of Latin America consolidated the change in armaments purchase and training from Europe to the United States. In particular, the case of Brazil, which participated more intensively in the allied war effort, the pattern of relations quickly established typical supplier-recipient relationship in terms of military equipment. For example the accord signed in 1942 allowed the use of Brazilian territory for American bases in exchange for the supply of military equipment under the terms of the Lend-Lease act. Brazil sought to bargain as hard as it could to secure Washington's aid against the use of its territory.

After the war and the extension of the MAP to Latin America, the region began to receive surplus US military equipment. Although it was halted during the Korean War, the supply of American equip-

183 An original interpretation of the role of the European military missions in Latin America is done by Frederick M. Nunn in *Yesterday's Soldiers: European Military Professionalism in South America* Lincoln, University of Nebraska Press, 1983.

ment was the only way to maintain a minimum standard for the armed forces, which had by then severed their links with the broken Europeans. In fact, Britain was the only European nation which continued to supply armaments to Latin America after the war¹⁸⁴. London sold Meteor jet fighters to Argentina and Brazil in the late forties, and continued to carry on with its traditional role as a supplier of ships to several Latin American navies¹⁸⁵. With the single exception of the UK, Washington became the only supplier of military equipment in the immediate post-war years.

In 1955, the extensive Egyptian-Soviet programme of military assistance marked the beginning of a new era in arms transfers. It set a whole new pattern for commercial relations between suppliers and recipients of weaponry. From this time onwards, many underdeveloped nations became equally eager to acquire sophisticated armaments. As more nations entered the market, the suppliers eventually lost control of it, and with the parallel development of powerful commercial interests in the arms trade, it became much more competitive. The control exerted by the traditional suppliers of armaments began to erode, had given way to commercial competition.

As a consequence of the formation of a competitive arms market, the Latin American nations were able to increase their demands. For example, in the 1955-1965 period, new warships were delivered to Latin America, at a rate 44% greater than the decade 1945-1955¹⁸⁶. The main reason for the hardening competition was

184 A complete analysis of the post-war pattern of military spending in Latin America is Alain Joxe and Cecilia Cadena "Armamentismo Dependiente: Caso Latinoamericano" *Estudios Internacionales* n. 14 July-September 1970 pp. 3-81. The relationship between the UK and the United States immediately after the war in relation to the export of armaments to Latin America is analysed by John Knape "Anglo-American Rivalry in Post-War Latin America: The Question of Arms Sale" *Ibero-Amerikanishes Archiv* v. 15 n. 3, 1989, pp. 319-50.

185 Geoffrey Kemp "Rearmament in Latin America" *World Today* September 1967 pp. 375-84.

186 The data on arms purchases is from John L. Sutton and Geoffrey Kemp *Arms and Developing Countries, 1945-1965* Adelphi Paper n. 28 October 1966 London, IISS.

due principally to the entrance of newcomers such as Italy and the Soviet Union into the warship market. In 1955, Peru was the first Latin American nation to receive new types of submarines. By 1965, eight other countries had already bought them.

These examples were used to introduce the notion that there was a clear military logic to Latin American arms purchases in the period 1945-1965. Under Washington's sphere of influence, and under a collective defence system, there was a twofold explanation for the low level of defence spending in the region. One was lack of currency, meaning that the armaments had to come as grants from the US, not bought in an open market. The other was Washington's policy of restraining the sale of sophisticated arms, with the alleged intention of preventing competition among the nations of the hemisphere. This policy was justified as a strategy for conflict-prevention.

Under this policy, there was an assumption that the defence of the Latin American nations was basically a task for the United States to provide. Under the American nuclear umbrella, without any clear or present external threat apart from the Soviet global threat, there was no need to spare resources to buy sophisticated conventional weapons. The cases of regional rivalries, as between Argentina and Brazil, Argentina and Chile, Chile and Peru, Bolivia and Paraguay, Peru and Ecuador, Colombia and Venezuela, and so on, were used as evidence in favour of restraining the delivery of sophisticated weaponry.

In spite of its simplicity, the explanation based on regional competition appeared as reasonable. Nevertheless, as Kemp astutely pointed out, in a closer analysis of the purchasing policies of several Latin American nations, this explanation based on regional

competition lost persuasion¹⁸⁷. For example, the acquisition of submarines by Peru did not subsequently lead to the acquisition of anti-submarine equipment by Ecuador or Chile. Similarly, the purchase of sophisticated jet fighters by Venezuela did not lead to the purchase of anti-air defence by Colombia or Brazil. Therefore, it is not true that a model of regional competition is the key explanation for the purchasing policies of the Latin American armed forces. The symbolic reason for the preservation of national prestige, and a tendency to follow acquisition pattern of neighbours in new types of armaments, however, could well be a more persuasive explanation than one dictated by pure defensive goals. It is an abuse, however, to describe this tendency in terms of an 'arms race'.

In two different studies on the Latin American armed forces made in the mid-sixties, Sutton & Kemp, and Wood¹⁸⁸, anticipated the demand for supersonic jet fighters from some air forces, such as those of Argentina, Brazil, Chile and Peru. Soon after the studies were completed, the demands were effectively made¹⁸⁹. These two mid-sixties' analysis of the balance of military equipment and man-power in the region, both pointed out the antiquated conditions of the Latin American air forces. Compared with the reasonable conditions of the navies, which had been modernised in the previous

187 As Geoffrey Kemp pointed out in his article "Rearmament in Latin America": "If one considers the force structure of Latin America countries over the last twenty years, it will be seen that there has never been a military balance of power in the usual sense". p. 383.

188 Sutton and Kemp, op. cit.; David Wood *Armed Forces in Central and South America* Adelphi Paper n. 34 April 1967 London IISS.

189 As Wood pointed out: "Many of the Latin American air forces clearly need to re-equip their jet fighters squadrons because of their age, or, where they still have piston-engine fighters, to replace them with more modern aircraft. The prospect deliveries to Argentina, Venezuela, Chile and Peru has aroused a great deal of controversy, chiefly because of the high cost of such aircraft, and it seems that the US may at least be having second thoughts about authorizing any further sales of American equipment and thus setting a local arms race." Wood, op. cit., p. 5.

decade, the air forces were in a terrible state of neglect. Therefore, they wrote, sooner or later they had to be modernised¹⁹⁰.

The navies of some Latin American nations had passed through a process of modernisation, with the aim of achieving a minimum standard of performance in protecting their coastlines. The air forces, however, had not been touched. No supersonic jet fighter had been introduced in Latin America until the mid-sixties, while their transfer was occurring to other regions.

In 1964, Buenos Aires began the pattern, followed by Brazil, Peru, and Chile, which demanded supersonic jets, as a substitute for their aged piston-jets. With Washington's negative answer – it then had a policy not to introduce supersonic aircrafts in Latin America – they started looking elsewhere. With the resurgence of the arms industry in Europe, it became clear that the nations of Latin America had found substitutes for the supply of military equipment. Washington's attempt to prevent the introduction of supersonic aircraft into the hemisphere therefore failed. While Argentina finally decided to buy subsonic aircraft, first Chile, and then Peru and Brazil, bought supersonic fighters from France. These purchases had a notable symbolic effect in ending the near American monopoly in the area.

The introduction of supersonic aircraft and other sophisticated armaments into Latin America caused divergences with the United States. These divergences evolved into a deep conflict between the Peruvian military government and Washington, which culminated in Lima's purchase of Soviet military equipment, the first non-socialist Latin American nation to do so.

190 In Sutton and Kemp: "It is inevitable that some modernization will take place in the air forces of these countries. Moreover, the tendency to emphasize naval strength rather than air power has been close to the American policy - at least until after 1960 - of supporting South American navies as guardians of their respective coastlines and forming part of the defence of the American hemisphere". Sutton and Kemp, *op. cit.*, p. 11.

In conclusion, the purchase of supersonic aircraft was the single most important episode which triggered the idea of an arms race in Latin America in the mid-sixties. Because different nations bought costly Mirage aircraft from France, for reasons of national prestige or following the example of their neighbours, Washington's virtual monopoly, which had been jealously guarded, was ended. The leverage which the US possessed as the sole arms supplier in controlling the quantity and quality of the equipment transferred, as well as its sole influence in terms of military doctrine, was questioned.

The relatively low level of defence spending in Latin America, compared with other regions, is confirmed by the data available. The publications of the United States Arms Control and Disarmament Agency as well as the survey of arms transfer to the Third World made by SIPRI are the most useful information available¹⁹¹. Using their data, it is possible to compare the pattern of arms acquisition between Latin America and the other regions of the underdeveloped world. The data shows that from 1945 onwards, the average annual level of defence spending in Latin America, around 2% of the GNP, was the lowest in the world, alongside Africa. But Africa was a much poorer region, still struggling with the aftermath of decolonisation. As a region relatively isolated from world conflicts, at least until the Cuban revolution, it is understandable that Latin America spent less on defence than the more turbulent regions, such as the Middle East or Southeast Asia¹⁹².

191 *The Arms Trade with the Third World* SIPRI, revised and abridged edition, New York, Holmes & Meier 1975. The Latin American data is on pp. 259-280. The U.S. Arms Control and Disarmament Agency annual publications *World Military Expenditures and Arms Transfer* Washington, D.C., ACDA, started in 1963.

192 Useful data is also found in James D. Cochrane "Tendencia del Gasto Militar y del Tamaño de las Fuerzas Armadas en América Latina (1961-1970)" *Fuero Internacional* January-March 1976, pp. 380-400.

A more detailed analysis of the pattern of defence spending in Latin America is found in a study made by the Rand Corporation. In this study, Loftus analysed the pattern of defence spending in Latin America between 1938 and 1965¹⁹³. He reached some extremely relevant conclusions, which help to comprehend the nature of the arms race in Latin America. Loftus emphasized that it was incorrect to argue that defence spending was excessive in the early sixties. Moreover, he criticised Lieuwen for his severe judgment of the armed forces as policy-makers. He showed that the policy-makers who chose to spend in some types of armaments in the sixties were following a modernizing military logic and nothing else.

In his study, Loftus concluded that it was impossible to reach any definitive correlation between the level of defence spending and military governments. In addition he reached the conclusion that there was no sufficient evidence of any correlation between nations with border problems and their level of defence spending. Any significant increase in spending by those nations would depend on the kind of problems they faced, as well as on the particular relationship between the nations concerned.

This regional picture helps to situate the Brazilian case in a proper regional context. Brazil was one of the nations which was demanding economic aid and updated armaments from Washington. Moreover she was upheld as the best example in building up an elaborated version of a 'national security doctrine' after the 1964 military coup.

Competing views were expressed on the importance of the counter-insurgency doctrine in the dominance of a national security mentality in Brazil from the mid-sixties onwards. A more detailed analysis of the military role in Brazilian society, however,

193 Joseph E. Loftus *Latin American Defense Expenditure, 1938-1965* Santa Monica, The Rand Corporation, January 1968.

reveals that political involvement, apart from the traditional role in national defence, was a tradition throughout her republican history. Brazilian military thinking and action has long sought to offer solutions to challenges other than that of national defence.

An indigenous national security doctrine, incorporating a broader notion of security, began during the 1930's. It achieved another dimension after the war, and was partially implemented after 1964. The search for economic, social and political modernization as tasks resembling a total war provided the underlying principles which formed this view. Therefore, achieving updated technology, civilian as well as military, was considered fundamental to the realisation of this project.

Defending the access to updated technology as a pre-condition for upward international mobility became a priority in Brazilian foreign policy. Moreover, with industrialization and prosperity, the age-old concern with building up a modern defence industry could be tackled. After the 1964 military coup, as soon as the economy began to recover and the stabilisation programme implemented started to succeed, the military began to plan for a modern defence industry. With Washington maintaining its policy of not introducing updated military technology in the region, the military officers in government began to mobilise the industrial capacity of the nation. As a response to Washington's negative answer, a 'group for industrial mobilisation' was established in São Paulo – the Brazilian industrial heartland – aiming to unite industrialists and military officers of the three services to lay the foundations of a sophisticated arms industry¹⁹⁴. This led to the formation of a

194 Jean-Claude Eduardo Silberfeld "Mobilização Industrial" *Política e Estratégia* v. 5 n. 4 October-December 1987, pp. 584-606.

complex public and private arms industry, which achieved relative success in some sectors¹⁹⁵.

The evolution of the Brazilian concept of security, its proposals for regional arms control, and subsequent development of an indigenous arms industry, should nonetheless be understood within the context of her domestic and foreign policy goals. Any understanding of the nature of this national security policy, especially in relation to how it solidified the posture in favour of the right to gain access to updated technology, has to take into consideration both, the domestic context and the foreign policy implemented in the period 1961-64 and the transformations in policy made by the military regime after March 1964. These changes achieved during the first period of the military government (1964-1966), represented a break with the 'independent foreign policy' of the Jânio Quadros – João Goulart period. The defence of a closer alliance with Washington, the main priority of the Castelo Branco administration, was justified as a means to achieve the administration ultimate goal, namely economic modernization. However, this clear-cut alliance with American anti-communist policy did not last. With a more nationalistic faction of officers in power, under the leadership of Costa e Silva, Brazil began to implement some policies which led ultimately to tension with Washington.

One of the most visible of the policies in favour of the right to gain updated technology was the rejection of the Non-Proliferation Treaty. As a product of the search for economic prosperity, the

195 The most complete evaluation so far of Brazilian arms industry is Renato Peixoto Dagnino *A Indústria de Armamentos Brasileira: Uma Tentativa de Avaliação* unpublished PhD dissertation, UNICAMP August 1989. Useful analysis are: Ethan B. Kapstein "The Brazilian Defence Industry and the International System" *Political Science Quarterly* v. 15 n. 4, Winter 1990-91, pp. 579-96; Patrice Franko-Jones "Public-Private Partnership: Lessons from the Brazilian Armaments Industry" *Journal of Interamerican Studies and World Affairs* v. 29 n. 4 Winter 1987-88, pp. 41-68; Thomaz Guedes da Costa "A Indústria de Material Bélico no Brasil" *A Defesa Nacional* n. 703, September-October 1982, pp. 111-31.

new government became convinced that the access to updated technology should be kept open. The NPT was perceived as a barrier to the free transfer of updated technology.

To fulfil the intentions of modernising the economy, understood as a pre-condition for an effective national security, Itamaraty had to defend Brazilian interests against foreign pressures. Science and technology were thus considered as assets for national security. As a consequence, the nuclear field is privileged to analyse the nature of the Brazilian search for security, because it combined updated technology, politico-military issues and foreign policy.

To understand, however, the changes made by the military in Brazilian foreign and defence policies, one needs to examine the nature of the 'independent foreign policy'. It was during this period, lasting from 1961 to 64, that Brasilia took the initiative to propose Latin America as a nuclear weapon-free zone. Disarmament, arms control and nuclear non-proliferation became important themes in the Brazilian foreign policy agenda. In this pre-NPT era, an age of naivety in the debates on nuclear non-proliferation, Itamaraty was in the forefront campaigning in favour of arms control measures. Therefore it is to understand these policies that the analysis now turns.



3. THE RISE AND FALL OF THE BRAZILIAN 'INDEPENDENT FOREIGN POLICY': THE SEARCH FOR NATIONAL SECURITY

Although the notion of nuclear free-zones was not an original Latin American idea, the possibility of applying it south of the Rio Grande had, to some nations of the region, a greater political appeal than had been originally expected. Brazil was the original architect of the notion of Latin America and the Caribbean as a 'denuclearized' zone. Consequently, Brasilia had the virtue of bringing the theme of horizontal nuclear proliferation into the hemisphere.

One aim of this chapter is to explain how and why ideas for disarmament and arms control played such a relevant role in Brazilian foreign policy of the period concerned. For a nation which had so often played only a minor role in international affairs, and where foreign affairs had never been a prominent issue, to lead an initiative among the Latin American republics that was contrary to Washington's policies appeared as a surprise.

After an almost unaltered pattern of international relations centred on the relationship with the United States, especially since 1889 – the year of the proclamation of the Brazilian republic – Brazil deepened after 1961 a trend that was progressively developing in its foreign policy. These new set of policies were labelled as the 'independent foreign policy'. As the name suggests, 'independence'

meant freedom from foreign constraints and traditional alignments, which had been hitherto the core of her foreign policy.

From the inauguration of the presidency of Jânio Quadros in March 1961, Brazil experienced three years of upheaval in the priorities and implementation of her foreign relations. The traditional political and military alliance with Washington, culminating in the close relationship during the Second World War, was the result of a work planned and implemented by a Brazilian diplomat, who has since become a legend in its diplomatic history, namely the Barão do Rio Branco¹⁹⁶. He was the Brazilian Minister of Foreign Relations between 1902 and 1912. Impressed by the American example in building up a modern and progressive republic, Rio Branco left a legacy of an 'unwritten alliance' with the United States, which became a key to the understanding of Brazilian international relations in the twentieth century¹⁹⁷. For Brazil the relationship between the two countries acquired a special relevance. This was so because Brazil felt, from its first days of independence, insecure amongst her Spanish American neighbours. The political and military support from Washington was perceived as being essential to legitimate and counterbalance the hostilities of the Spanish American republics.

With the end of the Second World War and the beginning of the global rivalry between Washington and Moscow, a newly democratised Brazil – after eight years of an authoritarian regime greatly inspired by the fascist experiment which she helped defeat in Europe – committed herself fully to the political and military inter-

196 On the close relationship between Brazil and the United States during the Second World War see MacCann (1973) and Moura, op. cit.

197 See E. Bradford Burns *The Unwritten Alliance, Rio Branco and Brazilian American Relations* New York, Columbia University Press, 1966. On the importance of Rio Branco in the shaping of Brazilian foreign relations in the twentieth century see E. Bradford Burns "A Bibliography Essay on the Barão do Rio Branco and his Ministry" *Revista Interamericana de Bibliografia* v. 14 n. 4 October-December 1964, pp. 406-14.

-American alliance being developed by Washington. Along with other Latin American republics, she ceased diplomatic relations altogether with Moscow in 1947, an example of the precarious and short-lived pluralistic experiment throughout the hemisphere.

Imperfect though it was, Brazil was one of the few Latin American republics able to maintain almost twenty uninterrupted years of competitive elections and a reasonably pluralist political party system. But unsuccessful military attempts to interfere in politics did occur frequently during this period, culminating in the successful *coup d'état* of March 1964.

Private and public investment as well as military hardware had been continuously demanded by the Latin American republics, since the inter-American Chapultepec Conference on War and Peace held in Mexico City in 1945¹⁹⁸. Unsuccessful pledges for a Marshall Plan for Latin America met with Washington's promises of private investment as the best way to tackle the endemic economic problems of the area. Modernity and prosperity, it was assumed, would inevitably follow.

But the Latin American republics were pressing for more than this advice. In Brazil, the period of President Juscelino Kubitschek (1956-1960) marked the deepening of a process of modernization and industrialization started by President Getulio Vargas (1930-45 and 1951-54). A successful programme to attract foreign private investment was implemented. A huge influx of American private capital brought years of impressive economic growth and the accelerated building of a modern industrial infra-structure. This process culminated with the construction of an expensive new capital, Brasilia, completed in 1960.

Although successful in attracting private foreign capital to its modernization programme Brazil persisted, together with its

198 See Rabe (1978) art. cit.

Latin American neighbours, in asking for American public money. With the success of the Marshall Plan in the reconstruction of Western Europe, the Latin American nations pushed even further, through diplomatic channels, for a similar plan. But without any real serious security problem in the area, in contrast to the European and Asian theatres, Washington was able to follow a policy of minimum costs and low commitment towards the area.

In 1959, Kubitschek launched an appeal in favour of a huge programme of continental modernization: the so-called 'Operação Pan-Americana' (OPA)¹⁹⁹. The drive behind OPA was to force Washington's commitment to large scale public investment, directed by Latin Americans, which could transform the structure of the nations into advanced industrial economies. It also intended to be a first step towards Latin American economic and political integration. Based on the success of its own modernization programme, on the perception that Latin America was a low priority in Washington's global policy as well as on the impact which the insurgencies were beginning to have through the region, OPA was the product of a leader who sought to raise the Brazilian influence on continental affairs²⁰⁰. It also represented an attempt by the Brazilian diplomacy to strengthen its relationship with the Spanish-speaking nations, to try to end their suspicion towards Brazilian political and diplomatic influence in the region as a close ally of the United States. Two complicating factors of the launching of OPA were that neither Itamaraty nor the governments of the Latin American republics were consulted previously.

199 A defence of reasoning behind the Operação Pan-Americana may be found in José Honório Rodrigues "The Foundations of Brazil's Foreign Policy" *International Affairs* v. 38 n. 3 July 1962 pp. 324-38. The most complete analysis is by Licurgo Costa *Uma Nova Política Para as Américas: Doutrina Kubitschek e OPA* São Paulo, Martins Editora, 1960.

200 On the gradual erosion of the close Brazil-United States relationship from the peak established during the Second World War see Hilton (1981) art. cit.. On Kubitschek's attempt to develop a policy towards the Third World see Paul Manor "Le Tiers-Monde dans la Politique Exterieur du Gouvernement Kubitschek, 1959-1961" *Relations Internationales* n. 23 Autumn 1980, pp. 289-312.

Indeed, these very suspicions became one of the main constraints in launching a successful economic modernization programme along Kubitschek's line. The reluctant Spanish American leaders did not have much to go on to trust Kubitschek's, or indeed Brazil's, commitment to the well-being of the continent. Washington's reaction was also cautious. Spending public money on a relatively peaceful and secure region was not popular amongst its Latin American policy makers in the State Department. Washington's advice, namely that private investment and the mechanisms of a market economy were the best remedy to bring prosperity, remained the core of its policy towards Latin America.

So although OPA could be understood as a good public relations campaign, launched by a leader aiming to halt Brazil's regional isolation, it had to wait a change of administration in Washington to generate a greater support. With Kennedy and his young and progressive group of advisors, some novelties were introduced in the traditional US way of thinking on continental affairs. As a consequence a programme based on public investment to tackle Latin American poverty and structural economic problems appeared with a new formula and under a new name, the Alliance for Progress²⁰¹.

It was not only good intentions or fresh ways of thinking in Washington which helped launch a package of financial aid to Latin America. More important, Washington's views over security in the hemisphere were turned upside down by the Cuban revolution. Amongst other consequences, the revolution polarised the political debate throughout the region and eventually introduced the East-West confrontation into the region. The alarm resulted

201 On Alliance for Progress see Stephanie Griffith Jones "The Alliance for Progress: An attempt at Interpretation" *Development and Change* July 1979 pp. 423-442 and Jerome Levinson and Juan de Onis *The Alliance That Lost Its Way: A Critical Report on the Alliance for Progress* Chicago, Quadrangle, 1970. A recent attempt to assess the Alliance for Progress, congregating many participants of the project is L. Ronald Scheman (ed.) *Alliance for Progress: A Retrospective* New York, Praeger, 1989.

from the Soviet delivery of offensive nuclear weapons to Cuba in 1962 contributed to create the climate for new policies towards the region.

The original Brazilian proposal for a programme for regional economic development – OPA – was, at the time, considered to be the first truly independent initiative of Brazilian diplomacy²⁰². But breaking with traditional ways of thought and behaviour in foreign affairs required more than good intentions or frustration brought by past policies. It also required clear goals and competent implementation, not to mention a more aggressive leadership. Kubitschek, despite his political success and modernizing credentials, was not prepared to advance his timid attempts of reform. But his economic success surely paved the way for the attempt to lay the Brazilian foreign policy on new foundations.

For so long a stubborn defender of Western positions in multilateral diplomacy, it was not an easy task to develop a consistent new way of thinking about, and implementing, foreign affairs²⁰³. Caught within a region which was passing through a period of radical transformation, Brazilian diplomacy intended to build up new foreign policy foundations around certain explosive international issues. In addition, foreign affairs increasingly came to occupy a place in Brazilian politics hitherto unknown in the country's public affairs²⁰⁴.

202 This was the position of Honório Rodrigues in op. cit.

203 A good resume of the Brazilian multilateral positions at the major international organisations is Antônio Augusto Cançado Trindade "Posições do Brasil no Plano Multilateral" *Revista Brasileira de Estudos Políticos* n. 52 January 1981 pp. 147-217.

204 It even led to the founding by intellectuals and public figure of an ephemeral scholarly journal named *Política Externa Independente*.

3.1. The Nature of the Brazilian Independent Foreign Policy

One event which contributed to change the politico-diplomatic agenda in the hemisphere in the early sixties was the inauguration of a new administration in Brazil²⁰⁵. As a nation which had perceived itself as inheriting a Western oriented and Christian culture, which took as its model Western representative institutions (particularly the American Constitution), it was a natural result to be closely associated with Western global interests. Moreover, Brazil maintained a close relationship with Portugal, its former coloniser. As one of the last colonial empires, Portugal was isolated at the United Nations in her stubborn defence of its remaining colonial possessions in Africa. An emergent group of recently independent nations was fighting against colonialism as a unifying issue with which to oppose Western global supremacy. Defending Portuguese and French colonialism brought Brazilian diplomacy many foes amongst the newly independent nations.

Jânio Quadros, the new president elected at the end of 1960 was a young and singular politician. He was a self-made politician, who developed his meteoric political career in the city of São Paulo. From city Mayor to state governor and then President, was quite an achievement for a politician who was independent of the three main national political parties of the post-1945 era²⁰⁶.

He was a candidate backed by the conservative UDN party, however the then complex Brazilian electoral system was organised with separate ballots for President and Vice-President. Thus the elected Vice-President, João Goulart, was the heir of Getúlio

205 A useful analysis which put the independent foreign policy in a broader historical context is by E. Bradford Burns "Tradition and Variation in Brazilian Foreign Policy" *Journal of Inter-American Studies* v. 9 April 1967, pp. 195-212.

206 Jânio Quadros was elected by the UDN party, a coalition of liberal and conservative politicians which was born during the fight against the dictatorship of Getúlio Vargas. But the UDN was never strong in São Paulo, and Jânio became the national candidate for the party coming from a small paulista's party. He wanted always to emphasise his independence from the party machine.

Vargas and the candidate of the PTB, a centre-left coalition. This is relevant because President Quadros resigned only six months after taking office, opening a deep political and institutional crisis which was ultimately resolved only three years later with the military coup of March 1964.

Nevertheless, his six months in office were sufficient to start a new mode of conduct in Brazilian foreign affairs. President Quadros and his foreign minister, Afonso Arinos de Melo Franco, were quite successful in establishing a new set of foreign policy ideas²⁰⁷. These ideas differed, in important respects, from the previous pattern of automatic support of Western policies at multilateral organizations. First they made international relations and foreign affairs into a public issue – one much more debated than before. This was a considerable achievement, in a country which hitherto regarded these questions as a matter for the exclusive competence of professional diplomats²⁰⁸.

Secondly, as a charismatic and personally unstable leader, Quadros used the domestic debate over his new foreign policy to seek support for his style of government. He sought to raise Brazil's international profile, in marked contrast with the traditionally

207 Afonso Arinos came from a distinguished political and intellectual family in Brazil. Despite not being a professional diplomat, he had experience in foreign affairs working with his father, a former Brazilian representative at the League of Nations. It was his father who implemented the decision taken in 1926 to leave the League of Nations. See E. Bradford Burns "As Relações Internacionais do Brasil Durante a Primeira República" in Boris Fausto (ed.) *História Geral da Civilização Brasileira. O Brasil Republicano* T.3 v. 2, São Paulo, Difel, 1977, pp. 375-400.

208 The most complete analysis so far of the independent foreign policy is by Keith Larry Storrs *Brazil's Independent Foreign Policy, 1961-1964: Background, Tenets, Linkage to Domestic Politics, and Aftermath* Cornell University, Latin American Studies Program, Dissertation Series n. 44, January 1973. In his dissertation, Storrs, utilising James Rosenau's concept of linkage, analysed the foreign policy of the period as a result of the rigidity of the Brazilian political system. In this system, foreign policy became the only area where a reformist approach was possible to be attempted. Although not agreeing completely with Storrs's theoretical foundations, it is fundamental to keep in mind the complexities of Brazilian domestic policy in analysing the limits of her foreign policy. A brief and useful description is by Victor Vallis "Brazil's Experiment with an Independent Foreign Policy" in Yale H. Ferguson (ed.) *Contemporary Inter-American Relations* New York, Prentice-Hall, 1972.

cautious and discrete Brazilian diplomacy. In this process, the role of Afonso Arinos as Foreign Minister was very important. As a distinguished intellectual and politician from the conservative UDN party, Arinos gave substance and rationality to a vague presidential idea in expanding Brazil's international relations²⁰⁹.

The main lines of the new foreign policy were resumed in a formula developed by the diplomat Araújo Castro – the last Foreign Minister before the military coup of 1964 – as the 'three Ds': development, disarmament and decolonization²¹⁰. Development has for long been a feature of Brazilian diplomacy. Indeed, the struggle to achieve prosperity similar to Western lines was the main rationale which has guided its foreign policy. Its last important manifestation was the appeal for a joint inter-American development programme, as in Kubitschek's OPA. The changes introduced by Arinos were related with the means to achieve development more quickly, with a more aggressive approach to conquering foreign markets and broadening commercial relations. Moreover, Itamaraty wanted a more active diplomacy in terms of fighting for commercial advantages. Together with other nations complaining about the vile price paid for raw materials, Brazil forced a re-shaping of global commerce, as a way of creating a more just global order²¹¹.

After decades of basically depending on the United States as the main market for its raw products, the new administration sought to re-establish diplomatic and commercial relations with

209 Jânio intended to prove, however, that he was the main inspiring force of the new policies. His defence of the rationale behind the policies is in Jânio Quadros "Brazil's New Foreign Policy" *Foreign Affairs* v. 40 n. 1 October 1961, pp. 19-27.

210 See J. A. de Araújo Castro "Desarmamento, Descolonização e Desenvolvimento" in Araújo Castro pp. 25-42. See also Storrs, op. cit., p. 278.

211 For the Brazilian criticism of the unjust international economic order see the speech made by Araújo Castro in August 1963: "O Novo Chanceler Ressalta a Participação do País no Sistema Interamericano" *O Estado de S. Paulo* 24 August 1963. For a defence of the independent foreign policy in these terms see José Honório Rodrigues *Interesse Nacional e Política Externa* Rio de Janeiro, Editora Civilização Brasileira, 1966, especially pp. 186-93.

any country where new markets could be capable of absorbing Brazilian products, especially in the socialist bloc and in the Third World. Therefore, Brazil re-established diplomatic relations with the Soviet Union in November 1961. She also intended to re-discover her past relations with black Africa, which were quite impressive in colonial times²¹². As a consequence Itamaraty made a diplomatic effort to sell of an image of a mid-developed nation, defending the commercial rights of the new African and Asian nations. The policy of broadening diplomatic and commercial relations was judged as more realistic for national interests. Any opportunity to create new markets for Brazilian products had to be seized, independently of the political regime involved, geographical location or place in the international hierarchy of power and wealth.

The two other major topics of this new approach in foreign policy – disarmament and decolonization – were novel issues for Brazilian diplomacy. The position in favour of decolonization represented an enormous shift from the previous policy, in which she had been supporting European interests, especially Portuguese and French, in their political and diplomatic clashes against the anti-colonial movements. The influence of the Portuguese lobby over Brazilian decision-making on foreign affairs was strong, tied to an historical commitment to support the global interests of the ‘motherland’²¹³. Cultural as well as economic relations influenced the way Itamaraty supported France at the United Nations in her position against Algerian independence. As a consequence, Brazil was perceived by the new African and Asian states, as well as by the socialist bloc, as a close and loyal member of the Western bloc. To conquer new markets and establish close commercial and political

212 The historian José Honório Rodrigues wrote lengthily on Brazilian colonial relations with black Africa as a tradition to be cultivated in modern times. See Rodrigues (1966) and José Honório Rodrigues *Brasil e África: Outro Horizonte* Rio de Janeiro, Editora Civilização Brasileira, 1961.

213 See Letícia Pinheiro “Brasil, Portugal e Descolonização Africana” *Contexto Internacional* n. 9 January-June 1989, pp. 91-112.

relations with this group of nations, Brazil had to abandon old loyalties, which no longer were compatible with its new aims and ambitions.

Disarmament was the third main theme in the new foreign policy. In fact, disarmament has been a classical objective of weak nations, located outside the main centres of international power and prestige. Brazil, along with the other Latin American republics, was not an exception to this rule. Using a foreign policy discourse based on its alleged pacific tradition in foreign affairs within a particularly pacific region of the world, Brazil, along with its Latin American neighbours, intended to build up a mechanism for regional disarmament and arms control. However, the intention was to link these regional measures with global arms control measures, leading towards a 'general and complete disarmament'²¹⁴. Linking regional arms control and disarmament with global measures maintained a tradition from the days of its participation at the League of Nations. Itamaraty had traditionally stressed that it should be for the great powers of the day to conduct responsible as well as effective arms control and disarmament negotiations.

In the diplomatic language of the time, 'general and complete disarmament' meant the conventional as well as nuclear disarmament of the two blocs led by the superpowers. This was part of the pledge in favour of fewer resources to be spent on armaments, and then liberating them to be applied in development programmes. But the impotence of a nation such as Brazil in international affairs resulted only in symbolic pleas for more resources for civilian usage. The disarmament-development linkage was employed throughout the 1950's in several United

214 A good resume of the efforts made by several Latin American nations in the late fifties and early sixties in achieving regional arms control is Stinson and Cochrane art. cit. The authors described the Costa Rican proposal of 1957 to reduce regional military spending, the Chilean proposal of 1959 for halting the purchase of offensive weapons and the Brazilian-led declaration of 1963 to a nuclear weapon-free zone in Latin America. For a more recent analysis see Castillo R. op. cit.

Nations meetings without any concrete result. Besides, the appeal in favour of a 'general and complete disarmament' was clearly connected with cold war rivalry, becoming a discredited argument given its constant repetition by the Soviet bloc.

The linkage established between spending on armaments and lack of resources for development – a connection which the poor nations wished to explore in any debate over disarmament – became highly politicized. Nonetheless, stressing this connection and asking for resources, was all Brazil could do. Hence the efforts she made to participate more effectively in disarmament and arms control negotiations. This participation was perceived as a means for enhancing her capacity to influence the results, and so raise her international profile. However, to be able to influence the results of such a complex global matter, as for instance discussing on a Test Ban Treaty at the ENDC, she had to develop expertise on disarmament and arms control issues.

3.2. A Policy for Arms Control and Disarmament

After decades of repeating an ineffective approach, linking disarmament and development, and supporting pleas in favour of a 'general and complete disarmament', the event which gave a new impetus to the Brazilian quest for a more prominent international role was its inclusion in the Disarmament Committee of the United Nations. She was one of the eight new members representing the non-aligned nations which were added to the previous Ten Nations Disarmament Committee, and became the Eighteen Nations Disarmament Committee (ENDC). In order to solve the deadlock in the negotiation process within the Ten Nations Disarmament Committee – which was stalemated between the Western and Eastern blocs – eight new nations were incorporated²¹⁵. This event

215 The eight new members were: Brazil, Burma, Ethiopia, India, Mexico, Nigeria, Sweden and the United Arab Republic.

brought in new voices into a highly polarised body, paralysed by endless discussion and disputes²¹⁶.

Despite the impasse which permeated the work of the ENDC, especially in relation to the discussion of a complete Test Ban Treaty, Brazil went to Geneva well prepared and with serious intentions. She intended to use the meeting to boost her image of responsibility in international affairs²¹⁷. She sent as delegates important diplomats and respected public figures²¹⁸. Together with the other seven non-aligned nations, Brazil mediated for a compromise between the two blocs. The most prominent issue then discussed was how to control, and possibly ban, nuclear tests in the atmosphere²¹⁹. The argument then presented by the eight new nations to break the deadlock of the negotiations was the feasibility of an independent body of scientists to monitor the tests. Thereafter it would be an important step in the process of confidence-building measures between two otherwise irreconcilable blocs. The technical arguments used against the pollution of the atmosphere, and the moral and economic arguments used against the feeding of the arms race through new tests, were tied in with the argument in favour of the liberation of resources for development.

The calming of the international political climate was seen as another desirable side-effect of a Test Ban Treaty. This piece of

216 Interesting accounts of the work of the ENDC by two participants are included in: Myrdal op. cit. and Afonso Arinos de Melo Franco *Planalto* Rio de Janeiro, José Olympio Editora, 1968.

217 "For at least a decade Brazil has been at the forefront of efforts to bring about the limitation of nuclear arms. It is impossible, for instance, to study the history and deliberations of the UN sponsored Eighteen Nation Disarmament Conference, the Commission for Denuclearisation of Latin America, and the 1968 Non-Nuclear States Conference without being aware of Brazil's expertise and assertive diplomacy in these matters." In H. Jon Rosenbaum and Glenn M. Cooper "Brazil and the Nuclear Non-Proliferation Treaty" *International Affairs* v. 46 n. 1 January 1970, p.74.

218 As for example Afonso Arinos de Melo Franco and Santiago Dantas, a prominent politician and jurist and a future Minister of Foreign Affairs.

219 The standard work on the Test Ban Treaty is by Glenn T. Seaborg *Kennedy, Khrushchev, and the Test Ban* Berkeley, University of California Press, 1981.

detente could permit, the argument went, a joint crusade against poverty and underdevelopment. At the ENDC, the disarmament issue was perceived by the non-aligned nations as being linked to the development issue. As countries on the periphery of the main conflicts for world power and prestige, the eight nations combined technical, moral and economic aspects, using the UN tribune as an effort to alert world public opinion to their national drama.

The Brazilian role at the ENDC was cited in Brazil as an example of its new international status. It was described as a victory for its diplomacy and a sign of its international prestige²²⁰. Perhaps more important, Brazilian delegates, as well as the Mexican (the other Latin American member of the ENDC) discovered the appeal of the disarmament issue to domestic and regional publics. It was an issue which could be galvanised to highlight problems such as poverty and injustice, locating them at the centre of both, the domestic and international agenda. In this sense, the relation between disarmament and development could well be understood as a precedent for the subsequent discussions over a new international economic order.

Simultaneously with the efforts to link disarmament and development, the debates on arms control measures included the creation of nuclear weapon-free zones (NWFZ) as a way to enhance national, regional or global security. As a result of the French nuclear tests in the Sahara desert in the early sixties, the African nations brought the notion to the attention of the General Assembly in 1961. Protesting against the French use of African territory to a nuclear test, with unknown consequences for the population of North Africa, they also raised the issue at the ENDC. With the support of

220 One of the speeches by the Brazilian delegate at the ENDC, which caused a considerable impact at the time, was delivered by Santiago Dantas in March 1962. It was included in his book *Política Externa Independente* Rio de Janeiro, Editora Civilização Brasileira, 1962.

most of the underdeveloped world, the idea for a nuclear-free zone in the whole of the African continent was approved²²¹.

In fact, the notion of a NWFZ already had a successful precedent; the Antarctica Treaty of 1959 which, among other dispositions, prohibited the use of the Antarctic soil for manufacturing, deploying, testing or transporting any kind of nuclear materials, principally nuclear weapons. As a depopulated and inhospitable region, Antarctica was, of course, a much easier region than a complex continent such as Africa in which to achieve a common policy over the prohibition of nuclear tests. Besides, the Antarctic Treaty was achieved as a result of scientific motives. It was an agreement between nations interested in the preservation of its vast and unexplored resources. Therefore, it could not be taken as a model for any other nuclear-free zone in the inhabited world²²². The resistance of the nuclear powers to the idea of an African NWFZ, as well as to a total Test Ban Treaty, taught the Brazilian delegation the complexities of disarmament and arms control negotiations²²³.

Through an original Brazilian suggestion, the Sub-Committee of the ENDC responsible for the study and negotiation of the issue of underground nuclear tests evolved to accept a partial ban treaty. The Sub-Committee, made up of the United States, the Soviet Union and the United Kingdom, was at an impasse over how to achieve a complete test ban. Brazil offered an idea in March 1962, which it

221 The United Arab Republic, for instance, was a stubborn defender of the Ghana proposal for an African NWFZ at the ENDC. See Myrdal, *op. cit.* p. 202.

222 Article V of the Antarctic Treaty reads as follows: "1. Any nuclear explosions in Antarctica and the disposal there of radioactive waste material should be prohibited". In *Arms Control and Disarmament Agreements, Texts and Histories of Negotiations* Washington D.C., United States Arms Control and Disarmament Agency, 1982 edition p. 23.

223 As Alva Myrdal remarked: "A strong group of African nations was first to make known to the United Nations its plans to establish all of Africa as a nuclear-free zone. This plan received the approval of the entire world community. That was in 1961, the year after French had exploded a nuclear device in the Sahara and the same year that the Uden plan had been set forth in the General Assembly. A plan to set Africa nuclear-free has been on the books of the UN ever since. One wonders why there has been hardly any progress". Myrdal, *op. cit.* p. 202.

reaffirmed in July and August, that a partial treaty to ban nuclear tests in the atmosphere could be met, postponing the most complex task of achieving a complete test-ban treaty. In August, the three delegations of the Sub-Committee found the idea suitable, which led to the start of negotiations in Moscow which eventually led to the conclusion of the "Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water"²²⁴.

The Brazilian suggestion was in the spirit of the mediating role played by the eight nations. It was seen as a partial measure designed to bring confidence amongst nations unable to agree on a total test ban. But as reflected in Araújo Castro's speech at the General Assembly in 1963, Brazil, together with the seven other non-aligned members, was disappointed by the pace of the negotiations. Araújo Castro criticised the tactics employed by the three nations. By transferring to Moscow the final phase of negotiation on the Limited Test Ban Treaty, the 'big three' prevented greater participation by the other members. He also complained that the achievement of a partial test ban was small after so many years of disarmament negotiations, in his words, "the most important matter for the world community"²²⁵.

Apart the programmatic issues described in the 'three Ds', the issue which dominated inter-American relations, due to the complexity and gravity of the problems involved, was the response to the challenge raised by the Cuban revolution. Here, Itamaraty's

224 See United States Arms Control and Disarmament Agency, op. cit. pp. 34-47. As Glenn Seaborg remarked: "If all that stood in the way of a more comprehensive test ban agreement was verification, Brazil's Foreign Minister, João Augusto de Araújo Castro, had a suggestion. He proposed to the General Assembly a gradual approach beginning with the prohibition of those underground tests already verifiable by national technical means (seismic monitoring, satellite reconnaissance, and other methods of gathering intelligence without on-site inspection). The threshold would then be lowered progressively as further improvements were made in the techniques of verification." See Glenn T. Seaborg with Benjamin S. Loeb *Stemming the Tide, Arms Control in the Johnson Years* Lexington, Lexington Books, 1987, p. 213.

225 See Araújo Castro pp. 28-32.

new lines of thought and foreign policy priorities could also be tested. At the core of the Cuban issue, lay the relationship with the community of American nations and, especially, the relationship with the United States.

3.3. The Policy towards a Revolutionary Cuba

The Cuban revolution had a tremendous impact on inter-American affairs²²⁶. It differed from previous attempts to change the traditional manner in which Latin American nations related with Washington. Reformist attempts to change the oligarchical structure of society had met, in the cold war years, a military answer from Washington, as with Guatemala in 1954. On the contrary, the Cuban revolutionary leadership was able to survive the economic and diplomatic isolation directed from Washington. It also survived an ill-conceived attempt to overthrow the revolutionary government, the Bay of Pigs episode of April 1961, when about 1,400 exiled Cubans, trained and armed by the United States, attempted to land at Playa Giron²²⁷.

The novelty of the revolution lay in the challenge of the indisputable American supremacy in continental affairs, reinforced during the cold war years, and in the appeal of its revolutionary message to the impoverished masses throughout Latin America. Henceforth, the Cuban issue became the most prominent political and diplomatic issue in the hemisphere²²⁸. It also attracted the attention of politicians and intellectuals of every political

226 An early assessment was made by Boris Goldemberg *The Cuban Revolution and Latin America* New York, Frederick A. Praeger, 1965.

227 The best analysis so far of the relationship between Washington and Havana following the revolution is by Richard E. Welch, Jr. *Response to Revolution: The United States and the Cuban Revolution, 1959-1967* Chapel Hill, University of South Carolina Press, 1985.

228 See Joseph S. Tulchin "The United States and Latin America in the 1960s" *Journal of Interamerican Studies and World Affairs* v. 30 n. 1 Spring 1988, pp. 1-36 and Alan H. Luxenberg "Did Eisenhower Push Castro into the Arms of the Soviets?" *Journal of Interamerican Studies and World Affairs* v. 30 n. 1 Spring 1988, pp. 37-71.

persuasion. As a consequence of the political polarisation, lay a major question concerning the best policy towards the revolutionary government to be taken by the 'American family of nations'. Should it be a concerted policy to expel Havana from the inter-American system? Was Havana's regime incompatible with the inter-American system?

The answer to these questions reflected a deep division within the inter-American system. The romantic and popular appeal of the revolution to labour unions, students, left-wing parties and middle class associations meant that they endorsed enthusiastically the revolutionary message. Conservative and liberal groups, especially business associations, the Catholic church, and the liberal and conservative press were all passionately against it. Much of the middle class, which originally was sympathetic with the romantic nature of the revolution and its egalitarian principles, turned decisively against it following Fidel Castro's open alignment with the Soviet Union.

In terms of nations, the tiny and politically unstable republics of Central America were the most vociferous in opposing the revolution. They pledged themselves in favour of a military intervention to overthrow Castro. For geographical as well as political reasons, these republics of Central America felt deeply threatened by the Cuban example of a successful insurgency doctrine.

On the other hand, the more stable and economic powerful republics, such as Argentina, Brazil and Mexico, initially had a more moderate approach towards the revolutionary appeal, trusting in the survival of their more solid political systems. In terms of inter-American relations, the most relevant issue at stake was the possibility of co-existence between two diverse social and political ideologies within the same framework of hemispheric

organisation. Non-intervention in the domestic affairs of the republics constituted part of the OAS Charter, although being a relatively new reality in inter-American affairs, was influenced by Roosevelt's 'good neighbour policy'. The flexibility of the OAS Charter to deal with such a political situation was severely tested by Havana's challenge to the principles of a representative democracy while declaring herself a communist country.

The acceptance of an openly Soviet ally in the politico-military system, which contradicted the so-called established patterns of historical evolution in the Americas was a very complex issue. In the immediate post-war years, the building of the inter-American security system, through the Rio Pact of 1947, and the Charter of the Organisation of the American Republics in 1948 pledged in favour of pluralist, representative and freely elected governments. The problem was that the plea to respect representative regimes was included as a moral commitment, as an intention to defend Western values and head towards what was considered as political maturity. There were no mechanisms for enforcement or agreed sanctions. Moreover, enforcement would contradict the legal and political principle of non-interference into domestic affairs of any member state²²⁹.

The inter-American system included articles defending absolute sovereignty, prohibiting foreign intervention into the internal affairs of other nations. Nonetheless endemic political instability and foreign military interventions were historical features in much of the republics in Central America and the Caribbean. The preservation of liberal democratic institutions had been a major political issue in the hemisphere. In the context of the cold war, the pledge to respect representative governments was used as a defence of any social order which was nominally

229 An analysis of the ambiguities of Washington's posture towards the principles of the Organisation of American States is made in Slater *op. cit.*

liberal, meaning pro-Western. In the name of defence against insurgency and foreign inspired ideologies, authoritarian and repressive governments came to power and were accepted by the inter-American system as temporary exceptions, necessary to fight a resilient and destructive foe, namely international communism.

Indeed, the Caracas Resolution of 1954 condemned communism as incompatible with the inter-American system²³⁰. The success of the Cuban revolution and the transformation of an insurgent doctrine into a state ideology with a declared pro-Soviet stance, meant that Havana's co-existence within the inter-American system became problematic. The several explanations for Cuba's alliance with Moscow are too complex to be dealt with in detail here²³¹. However, these explanations which combine interests, perceptions and attitudes with regard to national security in Havana as well as in Washington tend to be closer to reality than single-factor explanations. A complicated set of actions and reactions, in which Havana's seizure of American properties, Washington's commercial blockade and the failure of the Bay of Pigs attempt were the most relevant events, led eventually towards a breaking point.

Since the beginning of the Cuban-American conflict, Brazil attempted to mediate²³². Kubitschek's foreign policy aimed to keep Cuba within the 'American family of nations', seeking to avoid conflicts amongst members of the Western hemisphere. In Itamaraty's tradition, a legal and conflict-avoiding solution was always considered as the best road to follow to resolve clashes of interests. Preserving the territorial integrity of Cuba and keeping

230 See John Lloyd Mechann *The United States and Interamerican Security, 1889-1960* Austin, University of Texas Press, 1961.

231 See Jaques Levesque *L'URSS et la Revolution Cubaine* Montreal, Presses de la Fondation de Science Politique et Presses de L'Universite de Montreal, 1977 and Luxenberg, art. cit.

232 An account on the Brazilian mediation role is found in H. Jon Rosenbaum "Brazil's Foreign Policy and Cuba" *Inter-American Economic Affairs* v. 23 n. 3 Winter 1969, pp. 25-45. Also in Storrs op. cit.

open possible channels of communications between the contenders were the main objectives of its mediation.

The independent foreign policy intended to continue and possibly enlarge the previous policy. Amongst its main goals, stressed on several occasions by prominent members of the Government, was respect for self-determination. Brasilia believed also that it was the right of each member of the inter-American system to choose its own political and economic system. Therefore Brazil's effort to mediate between Havana and Washington, almost as soon as they began to clash soon after the revolution, encountered in the Quadros' administration a more committed defender of Cuba's right to pursue its own political, social and economic agenda, without risk of being excluded from the inter-American system²³³.

But what appeared to be a conflict over the expropriation of American property or over traditional levels of political influence, turned out to be a much deeper conflict of global dimensions. With Havana's alliance with Moscow, it became internationalised and embroiled in cold war diplomacy. As a consequence, in January 1961, Washington broke diplomatic relations with Havana.

Itamaraty understood the American attempt to overthrow Castro, as in the Bay of Pigs invasion, as a sign that Washington was ready to renew its previous pattern of direct military intervention in Latin American domestic affairs²³⁴. With Cuba's gradual alliance

233 As President Quadros remarked: "In defending with intransigence the sovereignty of Cuba against interpretations of an historical fact which cannot be controlled a posteriori, we believe we are helping to awaken the continent to a true awareness of its responsibility". Jânio Quadros *op. cit.* p.24. In a speech during his campaign for President, Quadros pointed out: "I see in Cuba the just and powerful aspiration of a people seeking its social and political emancipation. ..Cuba does not require pressures, nor are sanctions of any type justified. Cuba requires understanding. We should take care not to punish it, but to aid it. To persecute it in the Continent will necessarily compel it to seek aid and security beyond the hemisphere". Cited in Storrs, *op. cit.* p.310.

234 A statement by President Quadros reads as follows: "Brazil, reiterating its unshakeable decision to defend in this continent and in the world the principles of self-determination of peoples and absolute respect for the sovereignty of nations, manifests its most profound apprehension concerning the events that are taking place in Cuba. The Ministry of Foreign Relations dispatched urgent instructions

with Moscow – which by and large required a great change in Moscow's conceptions about revolution in the underdeveloped nations – an inter-American issue was transformed into an East-West confrontation. Therefore, Brazil's efforts to mediate, using the legal machinery of the inter-American system, were intended to prevent the United States from fulfilling its intention to expel Cuba from the system. In Itamaraty's view, the expulsion would mean regional isolation for Havana, and as a consequence deepening its alliance with the Kremlin.

The locus in the searching for an appropriate set of measures to be taken against Cuba, by a concerted action of the American republics, was a meeting of the Foreign Ministers of the American republics held at Punta del Este, Uruguay²³⁵. Brazil took to Punta del Este, through Santiago Dantas the successor of Afonso Arinos as Minister of Foreign Relations, her policy in favour of self-determination. Continuing Arinos' previous position, Dantas went to the meeting prepared to resist any co-ordinated effort to expel Cuba from the inter-American system. Nonetheless this position had already resulted in a vociferous criticism within Brazil, from sectors defending Washington's approach towards Cuba²³⁶.

In the Brazilian Congress, criticism was voiced by the conservative and centre groups, united against any support for Havana. It backed the traditional alliance with Washington as being the fundamental issue to Brazilian foreign policy²³⁷. The

to our diplomatic missions asking them to obtain detailed information concerning these events". Cited in Storrs, op. cit., p. 313.

235 See Charles Fenwick "The Issue at Punta del Este: Non-Intervention v. Collective Security" *American Journal of International Law* v. 56 n. 2 April 1962, pp. 469-74.

236 The criticism of Santiago Dantas posture in Punta del Este, and the whole Itamaraty's approach towards the issue is well analysed in Storrs and Rosenbaum. The conservative newspaper *O Estado de S. Paulo* was the leading critic of Dantas' policy.

237 The main speeches and debates held by Dantas defending his posture at Punta del Este are found in Santiago Dantas, op. cit., pp. 132-170.

independent foreign policy was a major cause for opposition in a polarised domestic environment. The unexpected resignation of President Jânio Quadros, after barely six months in office, created a constitutional crisis. A coalition of civilian and military forces was formed to prevent the elected Vice-President, João Goulart, assuming office. Eventually, the temporary solution reached was to transform the political system from a Presidential into a Parliamentary system. Therefore, the President would lose constitutional power, having to share executive functions with Congress. The main accusation against the new president, Goulart, was that his past activity had been too close to the workers unions and the political left.

Thus the 1962 meeting at Punta del Este occurred amid a serious polarisation of political forces between right and left in Brazil. Nevertheless, the Parliamentary system, which had a brief existence of some months before turning again into a Presidential system as a result of a national referendum, served to prevent a constitutional crisis. The first Prime Minister to be appointed was Tancredo Neves, a respected moderate politician, who formed a coalition cabinet. He nominated an influential politician and intellectual from the moderate left, Santiago Dantas, as Minister of Foreign Relations.

Embarrassed at home, because of his so called anti-American position, Dantas adopted what had been Itamaraty's position since the Quadros presidency, challenging the legitimacy of the attempt to expel Cuba from the Organisation of American States and related bodies. With backing from several other nations – Argentina, Chile, Bolivia, Mexico, Uruguay and Ecuador – Brazil argued that a Consultative Meeting had the power to resolve conflicts of such

proportion²³⁸. Then, Dantas fought unsuccessfully against the expulsion of Cuba, abstaining in the crucial vote.

Back home, he delivered a speech on national television explaining his position. Using a legal argumentation against the expulsion of Cuba, he pointed out the importance of keeping open relations with Havana. Underlining the argument that Cuba was going to align itself with the Soviet Union because no other alternative was left, he defended Itamaraty's policy as the one which offered a possible alternative. Moreover, in a heated discussion in Congress, he repeated the same argument, emphasising that Itamaraty's policies were the best in legal as well as political terms.

Although Dantas argument was sound, the inter-American system had several precedents for a Consultative Meeting such as that held in Punta del Este. Assembling to discuss how to deal with threats of what were perceived as 'totalitarian attempts in the hemisphere' occurred in Bogota (1948), Washington (1951), Caracas (1954), Santiago (1959) and San Jose (1960). These made explicit declarations against the deliberate repudiation of representative regimes in Latin America by any member of the inter-American system. Thus the convocation of the Eighth Meeting of Consultation of the Foreign Ministers of the American Republics in Punta del Este in January 1962 had, according to the nations which defended it, historical precedents. The alleged reason for the meeting was Cuba's

238 At the Eighth Meeting of Consultation of the Foreign Ministers of the American republics held at Punta del Este between 22 and 31 January 1962, nine resolutions were passed. The most important were: 1. pledged for continental unity and affirmed that the principles of communism were incompatible with the inter-American system: approved by 20 votes against 1 (Cuba); 6. excluded Cuba from participating in the inter-American system: approved by 14 votes against one (Cuba) and 6 abstentions (Argentina, Bolivia, Brazil, Chile, Ecuador and Mexico); 8. created an immediate suspension of trade with Cuba in arms and war material, and studied the feasibility to extend the prohibition of trade to other items. Approved by 16 votes against 1 (Cuba) and 4 abstentions (Brazil, Chile, Ecuador and Mexico). See Connel-Smith op. cit., pp. 250-55.

explicit alignment with Moscow and its formal identification, in Castro's speech in December 1961, as a Marxist-Leninist regime²³⁹.

The Brazilian position on the validity of such a meeting to discuss a joint position towards Castro's communist option was different. Brazil was presented in all the previous meetings mentioned above, which discussed the mandatory character of a representative regime for any member of the inter-American system. Brasilia employed at Punta del Este the argument that the OAS Charter did not have a judicial mechanism to expel any member. Nor did a meeting at Foreign Minister level have the power to sanction such an extreme action. Santiago Dantas' rationale was the absence of any previous precedent for the application of the Bogota Charter of the OAS or the Rio Pact to a matter of domestic politics. He based his argument on the existence of Article 15 of the OAS Charter, which explicitly prohibited interference in the domestic affairs of any member state by others members of the regional organisations.

In fact, this last point had already been discussed in previous meetings, in relation with the occurrence of several military *coup d'etat* in the region. Indeed, the military governments themselves were not exactly great respecters of representative institutions, which seemed ironic when this was given as one argument in favour of expelling Cuba. Itamaraty was well aware of this situation, and decided to defend representative government as a general rule for the hemisphere. Therefore, Dantas explained the nature of the Cuban regime using this same argument. Since the military-authoritarian regimes in the region were seen as providing only temporary solutions to domestic problems, the

239 The main events leading to Castro's public announcement of Cuba as a communist nation were the following: in April 1961, in the day of the air strike preceding the Bay of Pigs invasion, he proclaimed the revolution as socialist. In the 1 of May, he reaffirmed in a speech the socialist nature of the revolution. Finally in December he made a lengthily speech on television advancing his ideas on the Marxist-Leninist nature of the revolution and the future of a socialist Cuba. See Bundy, *op. cit.*

Cuban regime, he argued, could in the same way be reformed in line with representative institutions. In the Brazilian view, excluding a nation from the inter-American system, for any reason whatsoever, was to set a dangerous precedent. It would also inevitably pave the way for a closer alignment between Havana and Moscow.

This was the core of the message which Dantas delivered to the Ambassadors of the American republics in Brasilia, a few days before the Punta del Este meeting²⁴⁰. The aim of the meeting with the Ambassadors of the American republics was to give them time before the Consultation Meeting started. It was intended as a means to gaining support in the difficult task of persuading some governments to deny backing to Washington's policy. Underlining Itamaraty's policy was a fear that Washington was reverting to its old interventionist ways and was attempting to introduce cold war confrontation into the region.

But besides legal arguments for defending self-determination, there was also a political dimension in Itamaraty's role. Seeking a mediating role during the clash could also be understood as a means of defending the new independent foreign policy towards the Spanish-speaking republics. Since the advent of the Kubitschek Presidency, Itamaraty was seeking a diplomatic means to improve its prestige in the hemisphere. In Havana, the Brazilian Ambassador Vasco Leitao da Cunha, following this goal, was pursuing warm and close personal relations with the Cuban leadership²⁴¹.

Brazil intended to play a role as a mediator to aggrandise its influence and prestige in Spanish America. Seeking to dissociate herself from Washington was a way to be regarded as a more

240 The meeting with the Ambassadors was held at the Itamaraty Palace in 12 January 1962. Danta's speech was reproduced in Santiago Dantas, *op. cit.*, pp. 105-109.

241 The Brazilian mediating role in the initial period of the revolution, and the establishment of close personal relationship between the Brazilian Ambassador and the revolutionary leadership, is described by Afonso Arinos, in *op. cit.*, pp. 81-103.

independent and secure nation. After solving its diplomatic problem with Havana, regarding the status of political refugees seeking asylum at the Brazilian embassy in Havana, Brasilia promised economic support for Cuba. This would act as a counterbalance to the traditional American role as Cuba's main economic partner while providing Havana an alternative to the alliance with the Soviet bloc.

Nevertheless, the main problem with Brasilia's intention to offer economic aid to Cuba was the inability of its economy to transform these intentions into deeds. With an economy in competition with, rather than complementary to Cuba, she had neither the industrial strength, trading incentive, nor the financial ability to substitute for Washington. The willingness to financially aid Havana, to prevent Cuba from looking for political and economic help elsewhere became a piece of rhetoric. On the contrary, Brasilia, as well as the other Latin American republics, were eager to collaborate with Washington in a new package of financial aid and economic assistance, in line with the long desired 'Latin American Marshall Plan'. Therefore, Brasilia could not replace the United States as its main economic partner on the continent.

In fact, the launching of the programme known as the 'Alliance for Progress' was the result of a crisis of America's traditional position towards the hemisphere. The aim of building a collective defence system – the US intention – began to collide with the Latin American priority, given to economic issues. Although it was true that since the Eisenhower administration, Washington had started to change its approach towards hemispheric demands – as for example in 1958 when Washington agreed to the formation of the inter-American Development Bank, seeking to organise public funding to the Latin American nations – a coherent new set of policies had not been developed.

However, as the Cuban issue entered the 1960's presidential campaign, the connection between economic and security in inter-American relations also entered the political agenda. When elected, President Kennedy used the national security argument to raise support for the Alliance for Progress programme in Congress. With the events of the late fifties fresh in the mind of the American public, especially the clashes over policies towards Cuba, the economic and security aspects of the USA's Latin American policy acquired another, more urgent, dimension²⁴². Hence Washington used its economic strength to assemble political support throughout Latin America. The launch of the Alliance for Progress in Kennedy's speech in March 1961 as a joint inter-American programme in Punta del Este in August 1961, was the result of a combination of economic and security diplomacy. The Cuban revolution, culminating in the breaking of diplomatic relations with the United States, demonstrated that Washington's passivity towards the region was backfiring.

From the Latin American point of view, the Alliance for Progress was the long awaited package to fight against poverty, demanded since the Chapultepec Conference on War and Peace in 1945. But inter-American relations had changed since 1945, when Washington's prestige and incontestable supremacy in the region was at its zenith. In the eyes of some Latin American elites – especially what was known at the time as the progressive or democratic left – Washington's role in the hemisphere had proved to be deceptive. The pledge in favour of a qualitatively different aid than private investment assumed another dimension after the Cuban revolution.

242 The main aspects of the long debate on Washington's policy for Latin America, relating economic and security aspects is well analysed by Schoultz op. cit.

From the beginning of the discussions over the launch of the programme, Cuba was stigmatised by Kennedy's 'task force' group. They were a group of close assessors and brilliant Latin American economists who worked at the United Nations Economic Commission for Latin America. Adlai Stevenson, Kennedy's respected delegate at the UN made a trip to some Latin American capitals to check their views on such a programme, while fostering the political and economic isolation of Cuba. Brazil, which regarded herself as the authentic owner of the Alliance's idea through the OPA programme launched in 1959, became a committed member of the programme²⁴³.

Nonetheless, the subsequent history of the Alliance for Progress showed that it could not survive the assassination of President Kennedy. The first phase of the Alliance, launched by Kennedy, had a reformist emphasis, even accepting the necessity of structural reform against oligarchic power in Latin America. This phase of the programme was not completely backed by the American business community. A second phase of the Alliance – during Johnson's term – evolved to become rather similar to the traditional approach towards inter-American issues, i.e., anti-communist and business orientated²⁴⁴.

Indeed, the Cuban representative in the meeting at Punta del Este, when the programme was launched, Ernesto Che Guevara, delivered a speech explaining why Cuba could not agree to become

243 In a memorandum to President Kennedy dated 14 March 1962, his principal assessor for the Alliance for Progress recognised: "If the Alliance for Progress had a predecessor it was Brazil's Operation Pan-America and not the policies of the previous administrations". The memorandum is included in Arthur Schlesinger Jr. "The Alliance for Progress: A Retrospect" in R.G. Hellman and H.J. Rosenbaum (eds.) *Latin America's New International Role: The End of Hemispheric Isolation* New York, Sage Publications, 1975, pp. 57-92.

244 For an account of the transformations in the Latin American policy occurred with Johnson's entry into the White House see James D. Cochrane "U.S. Policy Toward Recognition of Governments and Promotion of Democracy in Latin America Since 1963" *Journal of Latin American Studies* v. 4 n. 2 November 1972, pp. 275-91 and Stephen G. Rabe "The Johnson (Eisenhower?) Doctrine for Latin America" *Diplomatic History* 9 Winter 1985, pp. 95-100.

a member of the Alliance for Progress²⁴⁵. In the speech, he praised the reformist nature of the programme, predicting its failure for this very reason. Moreover, he advanced the process of Cuban self-exclusion from the programme with a violent criticism against every nation in the hemisphere which was not following the real, by which meant the Soviet-type, development pattern. Cuba's self-imposed isolation was pressed a step further when Havana proclaimed itself a Marxist-Leninist nation in December 1961. With its subsequent integration into the Soviet bloc, and the establishment of closer political and military links with the Kremlin, this process culminated in one of the most serious crises of the cold war, the missile crisis.

The Cuban and the disarmament issues were united in the Brazilian proposal at the United Nations to extend the plan for an African NWFZ to Latin America. Even if Brazil had been unable to influence the decision to expel Cuba from the inter-American system, to counter-balance Washington's economic and political power in the hemisphere, as well as to exert any active role during the missile crisis, these attempts marked a change in the nature of Brazilian foreign policy²⁴⁶. They represented an effort to break Brazil's economic and political isolation among its Spanish American neighbours and its traditional reliance on Washington. From Kubitchek's proposal for a large economic programme to Itamaraty's intention to foster closer links with the Third World, especially with its Latin American partners, the 'independent foreign policy' turned out to be a set of policies which laid new foundations for Brazil's

245 His speech is reproduced in Philippe Braillard and Mohamed-Reza Djalili (eds.) *The Third World & International Relations* London, Frances Pinter Publishers, 1986, pp. 74-78.

246 Goulart sent a close military advisor, General Albino Silva, to Havana during the crisis. Silva brought a letter from Goulart to Castro offering Brazilian role as a mediator. Apparently he met Castro and the Secretary General of the UN U-Thant, but without any concrete result. See "O Primeiro Ministro Expõe aos Deputados a Posição do Brasil" *O Estado de S. Paulo* 30 October 1962; "O Emissário Voltou de Cuba com Cartas de Fidel e U-Thant" *O Estado de S. Paulo* 2 November 1962; "Albino Diz que Não Trouxe Cartas de Fidel e U-Thant" *O Estado de S. Paulo* 6 November 1962.

foreign relations. Several issues firstly raised during this period became object of permanent preoccupation of Brazil's diplomacy²⁴⁷.

3.4. The Fall of the Independent Foreign Policy

On 31 March 1964, a successful military coup deposed Goulart, the constitutional President. After nineteen years of a reasonable pluralistic democracy, an elected President did not complete his mandate. The civilians and military who led the coup, however, alleged that they did it in the name of democracy. Their goal, they said, was to rebuild a real democracy, after years of economic mismanagement and communist infiltration in government. The fissure in public opinion, polarised between defenders of the ancient regime and promoters of the 'revolução de abril', assisted the rise of a new administration led by a respected and legalist military officer, Marshall Castelo Branco. Opinion towards the Goulart regime was already polarised in the months preceding the coup because the government was passing through a period of administrative paralysis. In many ways this atmosphere helped galvanise civilian and military support for the *coup d'état*²⁴⁸.

Although the independent foreign policy was not a main inspiration of the coup, it did help solidify much liberal and conservative support for the military. The events relating to Brazilian support to Cuba – Itamaraty's intransigent defence of the right of co-existence of a Soviet-type regime within the inter-American system – helped to alienate traditional defenders of the close alliance

247 A defence of the record of the independent foreign policy by one of its creators is found in Afonso Arinos de Melo Franco *Evolução da Crise Brasileira* São Paulo, Companhia Editora Nacional, 1965, pp. 244-58.

248 The best recent analysis of the political background of the coup is Wanderley Guilherme dos Santos *Sessenta e Quatro: Anatomia da Crise* São Paulo, Edições Vértice, 1986. A good summary of the voluminous literature produced in the first two years after the coup is by Amaury de Souza *Annotated Bibliography on the Brazilian Political Movement of 1964* Latin America Research Program, Bibliography Series, Report 2, University of California at Riverside, 1966.

with the United States. The emphasis on disarmament as a foreign policy priority, and the criticism of both, Washington and Moscow for their behaviour at the ENDC, also raised objections from those who defended a posture supportive of Western diplomacy. In this polarised context, neutralism was used as a derogatory expression to define the foreign policy of the Quadros-Goulart years.

For these reasons one of the first priorities of the new administration was to redefine Brazil's foreign policy. The 'three Ds' – development, disarmament and decolonization – were goals to be subordinated to a greater priority, that of the restoration of traditional alliances with the US. The accusation that the independent foreign policy was leading the nation into dangerous neutralism, alienating its traditional economic and political partners, was put forward as the main reason to justify the shift in foreign policy²⁴⁹. In a polarised international environment, manifested in the hemisphere by the Soviet offensive in actively supporting the revolutionary Castro's regime, it was felt that there could be no justification whatsoever for a 'neutral' posture. It required a firm and clear commitment in favour of the Western camp.

Castelo Branco criticised the previous emphasis in Brazilian foreign policy in terms of its detachment from clear-cut Western values. According to him, the empty rhetoric of independence had, by implementing a neutralist policy, alienated crucial American support. As a result, the first priority of the 'foreign policy of the revolution' was to restore friendly relations with Washington. This was one of the first tasks undertaken by the new Foreign Minister, Vasco Leitão da Cunha, and was hailed by the regime as one of the

249 The two more explicit critics of the independent foreign policy in these terms were a speech by President Castelo Branco at the Itamaraty Palace in August 1964, and an interview with Foreign Minister Vasco Leitão da Cunha in July 1964. See "Castelo Expõe as Normas da Política Externa do País" *O Estado de S. Paulo* 1 August 1964; "Entrevista do Chanceler Vasco Leitão da Cunha Sobre Política Exterior Brasileira" in *Revista Brasileira de Política Internacional* n. 27 September 1964, pp. 591-98.

first remarkable achievements of the new 'foreign policy of the revolution'²⁵⁰.

The top priority given to the restoration of traditional links with the United States, gave rise to mounting criticism of the new foreign policy at home. It was described as a policy subservient to American interests²⁵¹. Praising his policies in an important speech, President Castelo Branco defended the necessity of an associative model for Brazilian defence and foreign policies, under the aegis of the Western Alliance. He criticised the neutralist policy, arguing that it sought both to avoid taking sides in the cold war conflict while opportunistically trying to exploit short term advantages by playing both sides in the conflict. In his view, Brazil should definitively opt for an open alliance with the United States, fighting against the common enemy, namely the international communist conspiracy²⁵². Nonetheless, he also cautioned against a blind allegiance to any foreign power, which could lead to a subordinate position which might ever be detrimental to national interests. Both superpowers, he advised, had their own national interests and Brazil should not defend the goals and interests of any other power besides her own.

The speech could be considered simply as a nice piece of rhetoric. However these remarks on the dangers of a blind alignment with foreign interests has been used as a proof of the limits of the associative model of foreign and defence policies which, to his critics, characterised the Castelo Branco administration. The most prominent example cited by critics of Castelo Branco's foreign policy as a contradiction of his stated desire to avoid being too closely tied to the interests of any one foreign power was his despatch of troops

250 See Leitao da Cunha, art.cit.

251 A criticism in these lines is made by Carlos Estevam Martins "A Evolução da Política Externa: 1964-1974" in *Capitalismo de Estado e Modelo Político Brasileiro* Rio de Janeiro, Graal Editora, 1977, pp. 362-425.

252 See Castelo Branco, art. cit.

to the Dominican Republic in 1965. Along the Americans, Brazil was the nation which sent the greatest number of troops. As a result of the Tenth Consultative Meeting of the Foreign Ministers of the American States, held in May 1965, armed forces representing an hemispheric force was sent to Santo Domingo. A Brazilian Colonel, Carlos Meira Matos, was designated the commander of the Brazilian troops brought into Santo Domingo to restore order after an alleged coup attempt²⁵³. Nevertheless Washington's plans to transform the forces sent into a permanent inter-American Peace Force were abandoned altogether. Castelo Branco successor, Marshall Costa e Silva affirmed in September 1967 his opposition to the idea²⁵⁴.

As part of the dispute on the overall intentions and limits of the associative model of foreign and defence policies implemented by Castelo Branco, two other major shifts were initiated during this period in relation to Cuba and disarmament. The policies were completely altered. On 13 May 1964, Brasilia severed diplomatic relations with Havana, alleging that Castro was attempting to export its revolution to the rest of the hemisphere. Using the Venezuelan accusation that a coup in Caracas was masterminded by Havana, Brazil terminated a relationship which had been intensively cultivated since the Cuban revolution. Diplomatic relations with Cuba were only restored in 1985 by the civilian President, José Sarney.

In relation to disarmament, Castelo was clearly aligned with the interests and postures of the Western bloc. Allowing the complexity of the subject, he advised on the patience required to achieve a fair negotiating position, and defended the standard Western position

253 See "Ata Estabelecendo A Força InterAmericana de Paz" *Relatório Anual do Itamarati 1966* pp. 216-17.

254 On the Inter-American Peace Force, see J.J. Johnson "Será Que Queremos Uma Força Interamericana de Paz?" *Revista Brasileira de Política Internacional* n. 53-54, March-June 1971, pp. 90-99. On Costa e Silva declaration against the idea see "Na Diplomacia, a Evolução Gradativa" *O Estado de S. Paulo* 31 March 1974.

regarding the necessity of establishing mechanisms of control over any negotiation process. Following years of praising 'general and complete disarmament' as a major goal in Brazilian foreign policy, and the criticism of the 'condominium of the great powers' for their unwillingness to negotiate in good faith, Castelo changed the discourse previously set by Itamaraty. Instead of speeches in favour of unattainable goals and a rhetoric of neutralism, he defended his posture as a more realistic approach to arms negotiations. This posture would consider the realities of power and side with its main ally, the United States.

Nevertheless, as Brazil changed its posture and the tone of its diplomatic discourse at multilateral level, it did not abandon altogether the perceptions forged during the years of the independent foreign policy. When in the Costa e Silva administration, disarmament and arms control achieved a more acute dimension with the negotiations leading towards a Non-Proliferation Treaty, the view formed earlier against a 'condominium of the great powers' reappeared. A more pragmatic and 'realistic' line, defending Brazilian short-term interests, culminated in the abandonment of great visions on global disarmament for more concrete policies, giving priority to technological and scientific development. The main argument of the independent foreign policy period, however, was reshaped, but not dispersed altogether. The NPT became a new version of the 'condominium of the great powers'. Therefore it had to be opposed in the name of granting the nation's access to modern technology.

The reasoning behind this view on the right of access to updated technology, and principally nuclear technology, as a means to economic prosperity requires a deeper understanding of the Brazilian notion of economic prosperity and its relationship with foreign and defence policies. Thus it requires an analysis of the Brazilian notion of national security.

Enhancing national security was used as an argument for the military coup. The Cuban threat and restoring the traditional alliance with the United States was justified in the name of national security. Reaffirming the associate model of foreign and defence policies was thus the first major act of the Castelo Branco administration. Nevertheless, acting in the name of national security was not enough as a strategy for foreign and defence policies. Age-old concerns about economic prosperity and access to international capital, markets and technology were also part of the notion of national security.

3.5. A National Security Doctrine: Military and Economic Aspects

Perhaps it is possible to define in a single phrase the Brazilian search for national security. Brazil has been a nation satisfied in territorial terms, while struggling to increase her international profile. As a result of its sheer size, natural resources and population, Brazil is a nation obsessed by its own destiny. The Brazilian psyche tends to promote a self-perception based on the right to achieve greater international status and influence in global affairs. An obsession with protecting its national resources and a nationalistic drive both, to protect its domestic market and to have a greater access to foreign markets, capital and updated technology grown from this view.

Since Brazil's formation as a single nation state from the Portuguese colonial possessions, the main task of her diplomacy as well as her armed forces has been to guarantee its extensive territory and protect long and empty frontiers against ten different neighbours. In these tasks diplomacy was much more extensively used than force.

Along process of negotiation and arbitration with its neighbours has enabled Brazil to secure and even expand its frontiers without

resorting to the employment of force²⁵⁵. However the occupation of her vast territory and the forging of national integration is a process still being completed by the late twentieth century.

As diplomacy was being effectively used, the role of the armed forces during the monarchical period was mainly to help in the preservation of a united single nation. Clashing local separatist rebellions, expanding the knowledge on its huge and empty territory through diverse missions, and preserving a productive system based on slavery were amongst the main tasks of the armed forces. Moreover it was in the interest of the monarchy to maintain a weak national army, relying instead on local militia, such as the 'guarda nacional'²⁵⁶. With the exception of the campaigns against Argentina (1827 and 1851) and against Uruguay (1821 and 1864), and the war of the triple alliance – Argentina, Brazil and Uruguay – against Paraguay (1865-70), the armed forces had a minor defensive role.

With the changes implemented by the republic, especially the establishment of a close politico-diplomatic link with the United States, Brazil intended to expand its international profile. Her support for the Allied Powers in the First World War, following Washington's declaration of war against the Central Powers in 1917, was her first experience in participating in a major international event. Expecting advantages from the Versailles Peace Conference, she was able to retain the German ships hold in the Brazilian ports. The symbolic role which Brazil had played during the war was granted with a symbolic participation at Versailles.

The experience of the First World War, however, had an important domestic dimension. It led to a reappraisal of the need

255 See Teixeira Soares *História da Formação das Fronteiras do Brasil* Rio de Janeiro, Conselho Federal de Cultura, 1972.

256 An analysis of the Brazilian army during the Monarchy is John Schulz, "O Exército e o Império" in Sergio Buarque de Holanda (ed.) *História Geral da Civilização Brasileira. O Brasil Monárquico* T.2 v. 4, São Paulo, Difel, 1974, pp. 235-58. On the 'guarda nacional' see in the same volume Jeanne Berrance de Castro "A Guarda Nacional", pp. 274-98.

to modernise the armed forces in face of the nature of the first total war in Europe. The republic created in 1889 by a military coup, included in its ambitions the modernization of a rural and backward nation, which at the time depended essentially on the export of a few tropical crops to survive. As a consequence, a group of young officers was sent to Germany, which had by then the model of an efficient army, to study the means to organise a modern and efficient army. This small group of officers, which became known after their return as the 'young Turks', was highly impressed by what they learnt in Germany. They intended to build up professional and well equipped armed forces and prepare the nation for a modern war. They were directly responsible for improving military education and founded the leading military journal *A Defesa Nacional*²⁵⁷.

Nonetheless, with Germany's defeat in World War One, her prestige as the best European army passed to France. Then in 1922, a French Military Mission was sent to Brazil. The mission sought both to help in build a modern military education system and to establish a centralised command for the forces. In this way the intention was to establish the basis for neutral and apolitical armed services²⁵⁸.

In this latter ambition, however, the mission failed. The young Brazilian republic did not have the political and constitutional environment which made possible the formation of an apolitical armed service. Indeed, the history of the Brazilian republic was to witness the increasing participation of the armed forces – especially the army – in domestic politics. It is impossible here to describe in much detail the intensity of this participation, but it is

257 See Frank D. McCann (1984) and "The Brazilian General Staff and Brazil's Military Situation, 1900-1945" *Journal of Inter-American Studies and World Affairs* 25, August 1983, pp. 294-324.

258 See Nunn op. cit.

relevant to know that it has since been one of the most fundamental aspects of Brazilian political history²⁵⁹.

As an example of the extent of this participation, after the Second World War, even with a successful experience with a pluralist political system, the presence of military officers as politicians continued to be notable. The first free election for President after the 1945 re-democratisation was won by a military officer, Marshall Dutra, who was the Minister of War during the Vargas previous authoritarian regime. This regime lasted from the revolution of 1930 up to the re-democratisation brought about by a more liberal faction of the armed forces in 1945. Moreover, in every Presidential election held between 1945 and 1960, there was a high ranking officer as a candidate. Strong military personalities had a great influence on some political parties, and the Military Club has been an important forum for discussions on the major economic and political issues²⁶⁰.

In spite of the constitutional and representative regime implemented after 1945, with a quite remarkable political party system, the army attempted to seize political power through rebellions in 1954, 1955, 1961, until it finally succeeded in 1964. The 'Revolução de 1964' thus became a landmark in Brazilian contemporary history. It represented, as in 1889, 1930, 1937 and 1946, yet another military political involvement, bringing to power a military clique with a modernising mission. But in contrast to the previous breaks with the constitutional order, the military did not accept a civilian as leader. They developed a political system based

259 See José Murilo de Carvalho, "Armed Forces and Politics in Brazil, 1930-1945" *Hispanic American Historical Review* v. 62 n. 2, 1982, pp. 193-223 and "Forças Armadas e Política, 1930-1945" in *A Revolução de 30. Seminário Internacional Brasília*, Editora Universidade de Brasília, 1983, pp. 109-87.

260 On the role of the Military Club in discussing the main economic and political issues see Werneck Sodre op. cit., pp. 304-25.

on direct military rule, which evolved towards a regime which may be defined as bureaucratic-authoritarian²⁶¹.

This military regime has been analysed in many respects. One important aspect which has led to divergent interpretations was the role played by a 'national security doctrine' in the shaping of its domestic modernising policies and, at least initially, associative foreign and defence policies. Moreover, as the coup was one in a cycle of similar military coups which occurred throughout Latin America, one type of interpretation stressed Washington's role in the indoctrination of an anti-insurgency and national security mentality into the region, which paved the way for military interference in government. According to this view, the military regimes established throughout Latin America were obsessed with the military dimension of national security. Fighting rural or urban guerrilla groups, they transformed the armed forces into internal policing forces, including the use of brutally repressive methods. Eventually some military regimes like Argentina, Chile and Uruguay evolved to become highly repressive 'states of terror'. Thus the link established between repressive regimes and the counter-insurgency doctrine learnt by training in the United States²⁶².

Military training abroad was not a novelty for Brazilian military officers. The generation which sent officers to be trained in Germany or taught by a French military mission was, however,

261 See Guillermo O'Donnell *Bureaucratic Authoritarianism. Argentina, 1966-1973*, in *Comparative Perspective* Berkeley and Los Angeles, University of California Press, 1987.

262 Major examples are Comblin op. cit. and Ana Maria Bidegain de Uran, *Nacionalismo, Militarismo e Dominação na América Latina* Petrópolis, Editora Vozes, 1987, especially pp. 168-205. An analysis of the domestic consequences of the 'national security state' in Brazil and the role of a 'national security doctrine' in the shaping of the military regime are Maria Helena Moreira Alves *State and Opposition in Military Brazil* Austin, University of Texas Press, 1985 and Eliezer Rizzo de Oliveira *As Forças Armadas: Política e Ideologia no Brasil (1964-1969)* Petropolis, Editora Vozes, 1976. A defence of the domestic aspects of the national security doctrine is found in José Alfredo Amaral Gurgel *Segurança e Democracia* Rio de Janeiro, José Olympio Editora, 1976.

substituted after the Second World War by a generation trained in the United States²⁶³. The difference was that after 1945, it was not under a bilateral relationship, but under a collective security system, encompassing the whole hemisphere, in the context of an acute international rivalry. Of those who emphasised the USA's influence in the development of a national security doctrine, Alfred Stepan has had a major influence. He set out to explore the role played by the group of officers who founded and led the Escola Superior de Guerra (ESG) in the 1964 coup²⁶⁴. The School, founded in 1949 by the Joint Chiefs of Staff, mirrored the American National War Academy. Through the support and advice of the American government, ESG was established by a group of officers who had recently returned from Italy. The officers, who had been as part of the Brazilian Expeditionary Force to fight along the American Fifth Army, were highly influenced by the efficiency of the American military machine as well as by the nature of a modern war. This same group of officers were instrumental in the fall of the authoritarian government of Getulio Vargas in 1945. They proclaimed the take-over in the name of the same democracy which they helped to win in Europe and sought to introduce reforms in the military education system. Therefore, the American War Academy was used as the example to be followed.

Stepan centred his study on the influence exerted by the ESG group in the planning, preparation and execution of the 1964 coup. Moreover, he analysed the overall influence of the army in

263 In fact the influence of American training and equipment started before the Second World War. But until the 1940s the German and French influences were much greater than the American. See Frank D. MacCann "Influência Estrangeira no Exército Brasileiro" *A Defesa Nacional* n. 717 January-February 1985, pp. 83-117.

264 Alfred Stepan *The Military in Politics, Changing Patterns in Brazil* Princeton, Princeton University press 1971, especially chapter 8. Two criticism of Stepan are John Markoff and Silvio R. Duncan Barreta, "Professional Ideology and Military Activism in Brazil: A Critique of a Thesis of Alfred Stepan" *Comparative Politics* v. 17 n. 2, January 1985, pp. 175-91; João Martin de Moraes, "Alfred Stepan e o Mito do Poder Moderador" *Filosofia Política* n. 2, 1985, pp. 163-99.

the Brazilian society post-1945, and stressed the role played by the ESG generation in the ideology and administration of the regime implemented by the military in 1964. Even though Stepan disagreed with the assertion that training in counter-insurgency doctrine was a simple foreign indoctrination leading directly towards an intervention in domestic politics, he concluded that the generation of military officers gathered around ESG was fundamental for the coup's motivation and execution. Nevertheless, Stepan's interpretation on the relevance of ESG in forming a national security doctrine has since been disputed.

In a remarkable study on the role of the army in Brazilian society, the Brazilian sociologist Campos Coelho²⁶⁵ set out to explain the alleged influence of the ESG group by seeking to understand it within a broader historical context. In his historical and sociological analysis of the role played by the army – by far the most relevant branch of the armed forces – in Brazilian society, Campos used an organizational approach. He criticised the interpretation based on an instrumental approach to explain the role played by the army in Brazilian history. He also rejected explanations which used external variables to explain the historical behaviour of the army. According to Campos Coelho, throughout the Brazilian history the army had been searching for an identity as an institution, not serving any class-based or vested interests.

Therefore, for Campos Coelho the national security doctrine which appeared to be developed by the 1964 military regime was definitely neither a result of foreign indoctrination, nor a direct result of the influence of the officers gathered around the Escola Superior de Guerra. Instead, it represented a resurgence of a much

265 Edmundo Campos Coelho *Em Busca da Identidade: O Exército e a Política na Sociedade Brasileira* Rio de Janeiro, Forense-Universitária 1976. An analysis of the recent writing on the Brazilian military by the same author is found in "A Instituição Militar no Brasil" *Boletim Informativo e Bibliográfico em Ciências Sociais* n. 19, 1985, pp. 5-20.

older phenomenon within the Brazilian society, developed in a piecemeal way by the army since the 1930's. This phenomenon was best incarnated in the person of the military officer Pedro de Goes Monteiro. As a leading figure in the Brazilian army during the 1930's revolution, the Vargas regime and during the 1945-64 period, Goes Monteiro's project was to organise the army both intellectually and materially for a broader national security role²⁶⁶. The historical lack of a clear-cut defence function for the Brazilian armed forces, as a result of the absence of a foreign threat, coupled with the lack of a modern industrial infra-structure and an arms industry, were factors which led the army to become increasingly involved in politics. In other words, they were searching for a function and found one in the politics of domestic administration.

The deepening politicisation of the armed forces since the republic was established and the widespread rebellions of the 1920s led to divisions within the military forces and the formation of conflicting tendencies and factions. For Goes Monteiro, the unity of the forces was the major requirement, to be achieved at any cost. Against the background of these divisions over the role of the armed forces, which took place during the 1920s and 1930s, Goes Monteiro sought to achieve the unity of the military against what he considered to be their worst enemy, namely political factionalism. And this became his main task as military leader during the thirties.

In building up a more hierarchical structure after the purge of the rebel officers and soldiers involved in the 1935 communist rebellion – known as the 'intentona comunista' – the army evolved to contain its factions and succeeded in uniting itself under firm

266 A study based on Goes Monteiro as the founder of Brazilian national security doctrine is Antônio Carlos Pereira "Aspectos Totalizantes da Doutrina de Segurança Nacional" *Política e Estratégia* v. 6 n. 2 April-June 1988, pp. 252-71. Goes Monteiro wrote a book after the revolution of 1930, *A Revolução de 30 e a Finalidade Política do Exército* Rio de Janeiro, Anderson Editores, 1931. See also Lourival Coutinho, *O General Goes Depõe* Rio de Janeiro, Coelho Branco, 1955.

command. Moreover, the united and hierarchical army embraced an ideology centred on the defence of a strong gauged state and a disciplined society. Only a united army, it was thought, could be able to exert an influence sufficient to mould Brazil into a strong, disciplined society. These aspects of a national security doctrine, which were associated with the 1960's had, therefore, a long history. The military regime's predecessors, led by the strong personality of Goes Monteiro, developed a national security doctrine that was indigenously made. It could not be imputed to any external influence. The ESG doctrine of a strong state and a disciplined society represented the recrudescence of Goes Monteiro's thought, not the creation of a new doctrine. In stressing internal military unity, and a conservative and disciplined societal organization, it was following a long established tradition.

Campos Coelho did not give any credit to training in the US as a relevant variable in explaining the Brazilian armed forces behaviour in the 1960's. He explained it as a result of the domestic roots of the military influence in the Brazilian polity. Apart from being a genuine national product, a national security doctrine was not born as a single and all-encompassing doctrine. It was formed as part of an evolving process, responding to domestic as well as external political circumstances. Campos Coelho's position, disregarding any external influence on Brazil's notion of national security as irrelevant, perhaps overcame the continental influence of the anti-insurgency strategy. It was not a coincidence that several versions of a 'national security doctrine' were applied simultaneously throughout South America. But he is correct in stressing its indigenous components.

As one of the founders and first directors of the ESG remarked, national security, after the experience of 'total war' suffered by the Brazilian soldiers and officers in Italy, became more than

just a military issue, but a social, economic and political issue²⁶⁷. According to this doctrine, the whole society must be prepared to be mobilised, because every citizen becomes equally responsible for national security²⁶⁸. These 'totalising' aspects of the national security doctrine were, in practice, not so much a doctrine but a world view, profoundly influenced by the nature of the two total wars of the twentieth century.

Engaging the whole society in security tasks demanded a much broader concept of defence. All the resources and capabilities of the nation and the state should be made part of this effort, since a modern war requires a total mobilisation of society. Then the doctrine evolved to consider economic development and social and political modernization as a pre-condition for national security. Brazilian society, the army believed, had to be fully mobilised to achieve the goals of economic, social and political development. Therefore, the search for the correct diagnosis to explain national backwardness which, it was felt, could be only overcome through coherent planning, was sought as the only way to fight against endemic underdevelopment. Only then could the nation be prepared for the next total war, which by and large was considered as inevitable.

In this context of an evolving view of the national security as a process encompassing economic, political and social development, overcoming the obstacles to its attainment became the first and foremost task of all those involved in government. Domestic as well as foreign policy should be conducted accordingly, in the

267 Marshall Oswaldo Cordeiro de Faria "Razões que Levaram o Governo a Pensar na Organização da Escola Superior de Guerra" *Revista da Escola Superior de Guerra* v. 3 n. 7, 1986, pp. 9-23. This text is a reproduction of a speech made in 18 May 1949 by one of the founders and first director of ESG.

268 The FEB commander and one of the founders of ESG, Cordeiro de Farias, used a remark made by Eisenhower on the nature of total war to define the new role for the Brazilian army. See Aspasia Camargo and Walder de Goes (eds) *Meio Século de Combate: Diálogo com Cordeiro de Farias* Rio de Janeiro, Nova Fronteira 1981, pp. 407-28.

interest of achieving rapid economic growth and social and political modernization. As in a war, the whole society should be mobilised for these goals²⁶⁹.

The military rulers attempted to implement this broader notion of national security. Leaving aside the social and political costs it brought about, it helps to frame the policies of the military government in relation to foreign and defence issues²⁷⁰. It locates the Brazilian nuclear policy and especially the policy towards non-proliferation in a proper context. Similar to the notion of national security, the Brazilian nuclear history did not begin with the military regime. Nonetheless, during the military regime, nuclear policy had to face a much more complex international environment, where horizontal proliferation of nuclear weapons became a priority in the global diplomatic agenda. Therefore, it is to the history of the Brazilian nuclear programme, in its civilian and military dimension, that the following chapter now turns.

269 An interesting representative of this thought in the Brazilian army is Aurelio de Lyra Tavares, *Segurança Nacional; Antagonismos e Vulnerabilidades* Rio de Janeiro, Biblioteca do Exército, 1958.

270 The social and political consequences of the national security doctrine were analysed by Moreira Alves op. cit.

4. THE BRAZILIAN NUCLEAR POLICY, THE NON-PROLIFERATION TREATY AND THE TREATY OF TLATELOLCO

The first session of this chapter will describe the events which made possible the starting of a negotiation process for a NWFZ in Latin America. It was the missile crisis in Cuba which triggered the process. A Brazilian initiative in the United Nations was supported by other Latin American nations and especially by Mexico.

In the second part, the main features of the negotiation process, which took place in Mexico City, are assessed. It is not the intention here to describe it in detail, but to concentrate on some fundamental issues to understand Brazil's policy.

In the third part, an assessment is made of the major disagreements which occurred between Mexico and Brazil during the negotiation process for Tlatelolco, focusing on two items – the treaty's entering into force and the issue of 'peaceful nuclear explosions'. As the latter was allegedly one of the main reasons for Brazil's rejection of the NPT, it is necessary to understand this as relevant to Brazil's rejection of the non-proliferation regime. This rejection is a representative example of the group of nations which criticises the discriminatory nature of the NPT.

In the fourth session of this chapter, the differences between the two treaties, Tlatelolco and the NPT are analysed. The aim is to describe Brazil's attempt to amend the American-Soviet

preliminary draft of a non-proliferation treaty and to explain her main criticism of this draft. The policy of preserving Tlatelolco, free of the perceived constraints of the NPT, is examined.

The final section consists of an examination of the policies of the five nuclear powers towards the Tlatelolco Treaty. This is a very delicate issue. Critics of the NPT have pointed out that one of its main faults was an unsatisfactory system of security guarantees given by the five nuclear powers. With the introduction of two Additional Protocols to the Tlatelolco Treaty, the issue of security guarantees for the non-nuclear powers by the nuclear powers was tackled in a different way. Considered to be fundamental to the acceptance of a non-proliferation regime by the non-nuclear powers, appropriate security guarantees became a point of discord between the haves and the have nots. There was no article in the preliminary American-Soviet draft, or in the NPT, specifically dealing with guarantees of not using nuclear weapons against non-nuclear weapons states. It was only in 1978 that a resolution was passed in the Security Council of the United Nations – UN Security Council Resolution 255 – promising to respect the security of the non-nuclear nations²⁷¹. This resolution, however, was considered unsatisfactory by a number of states, which were asking for more specific security guarantees from the nuclear powers. Hence, the provisions introduced by the Additional Protocol number two of the Treaty of Tlatelolco were a real novelty.

4.1. The Cuban Missile Crisis and the Origins of a Successful NWFZ in Latin America

In February 1967, after almost three years of complex negotiations, a treaty making Latin America and the Caribbean a NWFZ, encompassing from Mexico to Argentina, was open to

271 On this point see Shaker, *op. cit.*

signatures in Mexico City. It was a novel event. Since the idea was first introduced in 1956, it was the first time that an inhabited region agreed to ban nuclear weapons.

The principal conditions which made the starting of negotiations altogether possible were: first, the Latin American diplomatic tradition in favour of multilateral treaties, which emphasised a legal approach to regional problems. Struggling as they did, since the end of the colonial era, to achieve political stability and international legitimacy, the elites of the area cultivated a faith in the mechanisms of traditional diplomacy and international law to deal with political and security issues.

Second, the existence of a collective security pact with the United States formalised through the Rio Pact of 1947. This helped to generate the view that the area was under the protection of Washington's nuclear umbrella. The third aspect was the relative absence of inter-regional strife. Although the problem of domestic political instability and regime type had a marked international dimension – much aggravated after the Cuban revolution of 1959 – the region was far away from the major spots of international tension and cold war rivalry. The perception of isolation even made it possible for the policy-makers of the area to regard the region as apart from the nuclear competition of the Northern Hemisphere. Lastly there was the leading role assumed by key members of the region – first Brazil and then Mexico – in fostering a free-zone approach.

Proposing a NWFZ for Latin America at the General Assembly of the United Nations in September 1962, following the African resolution in favour of Africa as a NWFZ, Brazil took the initiative. Speaking in the opening session of the General Assembly, Afonso Arinos de Melo Franco, the Brazilian Foreign Minister, sought to raise Latin American support for an idea which was now no

longer associated only with Moscow's propaganda. Nonetheless, the Arinos proposal could be expected to be one more ineffective plea in favour of regional disarmament. However an extraordinary event, the detonator of the whole process, happened some weeks after his speech. It was the Cuban missile crisis, which put the region on the strategic map of East-West confrontation.

The Brazilian proposal was variously received among the Latin American capitals, as a result of the questioning of Washington's traditional role in the area, which was then occurring in some countries²⁷². Washington's policy, forged in the fifties, of interpreting every single political episode in the area through cold war lenses, was still predominant. Her stubborn opposition towards a NWFZ in Central Europe had become a matter of principle, leading to advocacy against the notion *per se*²⁷³. Hence, to sustain the feasibility of the NWFZ notion, as Brasilia did despite Washington's opposition, required a more independent approach to foreign issues and firm regional support. Nevertheless little would have happened without the intense hemispheric repercussions of the missile crisis. It was not just concern at the gravity of the crisis, and the complexity of its solution, that shocked the area. More than anything else was the realisation that Latin America was part of the real world, which could not be spared from the possibility of nuclear destruction. Since the Cuban revolution three years earlier, fears had been

272 The Arinos idea for a NWFZ in Latin America and the Caribbean was initially not well received by Washington. Nonetheless it was immediately backed by some Latin American civilian-led governments such as Bolivia, Chile, Ecuador, and later on Mexico.

273 Washington was pressing, it is true, for conventional arms control in the region. However, the policy was intended to stabilise the region in military terms, avoiding deepening regional political rivalries. Moreover, a policy to stimulate the Latin American governments to restrain their level of defence spending resulted much more from her budgetary constraints, than from a deep understanding of the perceptions on security by the Latin American elites. See Glick art.cit. On the evolution of Washington's policy to the idea of a NWFZ in the region see Davis R. Robinson "The Treaty of Tlatelolco and the United States" *American Journal of International Law* v. 64 April 1970, pp. 282-309.

voiced that profound political and ideological divides could lead to unexpected consequences. Therefore, some months before the discovery of the Soviet shipments of offensive nuclear missiles to the island, there was a vociferous dispute going on, based on the nature of the new Cuban regime and the best way to handle it through inter-American diplomacy. However, the evidence of the missiles changed the nature of the debate. It contributed decisively in the process of Havana's hemispheric isolation. This process had already started with her ultimate expulsion from the inter-American organizations in February 1962²⁷⁴.

The debate over the nature of Havana's new regime, and Washington's attempt to expel her from the inter-American system, were relevant in explaining the take-off of the NWFZ notion in Latin America. Indeed, President Kennedy used the Organization of American States Council and the Rio Treaty as the forum for the denunciation of Moscow's shipments of offensive nuclear missiles to the island²⁷⁵. The Kennedy administration began to build up a new image of respect towards legal procedures in hemispheric affairs, aiming to erase memories of the ill-fated Bay of Pigs adventure. Henceforth, Kennedy wanted moral as well as diplomatic support from the Latin American republics to employ force, if necessary. Endorsement of Washington's position from the rest of the inter-American community could be useful in case that an invasion of the island was needed²⁷⁶.

274 See "O Conselho da OEA Exclui Formalmente o Governo Cubano da Comunidade Interamericana" *O Estado de S. Paulo* 15 February 1962.

275 See "Aplicado o Pacto do Rio Para Desfazer Ameaça Nuclear Contra o Hemisfério", *O Estado de S. Paulo*, 24 October 1962. The OAS Council meeting, summoned by Washington, in the name of the Rio Pact, approved two resolutions in favour of the employment of armed forces to stop the deployment of the missiles in the island.

276 An important recent reflection on the crisis is Raymond L. Garthoff *Reflections on the Cuban Missile Crisis*, Washington, D.C., The Brookings Institution, revised edition, 1989.

After almost thirty years, the crisis continues to be object of reinterpretations. With attempts to incorporate the Soviet and the Cuban views on the major events, new facts and interpretations of the major actors and occurrences have emerged²⁷⁷. Moreover, many specific issues of the Crisis have already been carefully analysed²⁷⁸. Nonetheless, a less researched issue has been the role, even if minor, played by the Latin American republics during the crisis.

As a whole, the Latin American role during the crisis was more symbolic than practical. As soon as the announcement of the discovery of the missiles was made, Kennedy assembled an emergency meeting of the OAS Council. In the context of the recent events – the Cuban expulsion from the inter-American system – it was a natural step to be made²⁷⁹. At the OAS Council, different from the clashes which occurred in Punta del Este – where Cuba was expelled from the inter-American system – Washington received broad backing from the Latin American republics. With different degrees of enthusiasm and commitment, the nations agreed on the naval blockade to the island²⁸⁰.

277 A very good account of the crisis by one of its decision-makers is Bundy op. cit., pp. 391-462. On the Soviet view of the crisis see Raymond L. Garthoff "Cuban Missile Crisis: The Soviet Story", *Foreign Policy* n. 72, Fall 1988, pp. 61-80. A recent article which takes into consideration the Soviet and the Cuban views is by Bruce J. Allyn, James G. Blight and David A. Welch "Essence of Revision: Moscow, Havana, and the Cuban Missile Crisis", *International Security* v. 14 n. 3, Winter 1989-90, pp. 136-72.

278 See Marc Trachtenberg "The Influence of Nuclear Weapons in the Cuban Missile Crisis", *International Security* v. 10 n. 1 Summer 1985, pp. 137-63; Jerome H. Kahan and Anne K. Long "The Cuban Missile Crisis: A Study of Its Strategic Context", *Political Science Quarterly*, December 1972, pp. 564-90; A study of the American decision-making process during the crisis became a classic of the 'bureaucratic approach' in international relations: Graham Allison, *Essence of Decision: Understanding the Cuban Missile Crisis*, Boston, Little Brown & Company, 1971. On the necessities of the Soviet ideology to adapt to the unexpected revolution in Cuba see Levesque op. cit.

279 As Robert Kennedy noted: "It was the vote of the Organization of the American States that gave a legal basis for the quarantine...It had a major psychological and practical effect on the Russians and changed our position from that of an outlaw acting in violation of international law into a country acting in accordance with twenty allies legally protecting their position". Robert Kennedy *Thirteen Days*, New York, W. W. Norton 1971, pp. 99.

280 See "A OEA Estudará Hoje As Sanções Contra Havana", *O Estado de S. Paulo*, 9 October 1962.

Amongst the lasting consequences of the crisis to the region, one was to introduce the idea of a Latin American nuclear weapon-free zone. The speech of the Brazilian delegate at the Seventeenth United Nations General Assembly, praising the African Resolution in favour of a NWFZ, and extending the proposal to include Latin America as well, had a different impact at the General Assembly due to the crisis²⁸¹. It was received with interest not only by the non-aligned group and the Soviet bloc – usual defenders of the NWFZ notion – and by some Latin American states but, as the crisis advanced, by the American delegation as well. The American delegation directly encouraged Arinos to present further his proposal, as a possible way out from the impasse with the Soviet Union²⁸². Nonetheless, with the eventual acceptance by Khrushchev of Kennedy's ultimatum and the withdrawal of the missiles from Cuba, the feasibility of a gradual application of the free-zone idea, starting with Cuba, lost its urgency. Indeed, Cuba was the first to repudiate the idea if not including many conditions.

Thus what had started as a Brazilian idea, inspired by the African example, gained another unexpected dimension. A previous Brazilian proposal to neutralise Cuba – seeking her political survival and co-existence in the continent – was supported with the discovery of the deployment of offensive missiles in the island. The NWFZ notion was judged as a possible solution to the withdrawal of the nuclear missiles from less than a hundred miles from the United States. Despite the lack of urgency with which the proposal was received at the United Nations, after the resolution of the crisis, the support of some Latin American states created

281 As Arinos remarked: "My declaration was made in September 20, 1962. It was the first time that anyone had spoken about this subject at the United Nations. As I expected, several delegations supported the Brazilian proposal, including the Mexicans and the Chileans. At the 1 of November, speaking at the Political Commission, I reaffirmed the proposal for Africa's denuclearization". See Afonso Arinos de Melo Franco (1968), p. 203 (my translation).

282 See "Brazil Propõe Desnuclearizar África e América Latina", *O Estado de S. Paulo*, 26 October 1962.

the momentum for a multilateral negotiation. This was conceived as a diplomatic process, where the idea could be pursued in a less urgent pace. Under Mexican leadership, a Preliminary Meeting was convened to take place at Mexico City, to discuss the possibility of actually implementing the notion of a free-zone, even without Cuban participation.

Barely one year before the announcement of the discovery of the missiles, only two Latin American states had supported the November 1961 General Assembly Resolution in favour of Africa as a NWFZ. By a large majority the Latin American states, following their traditional alignment with the United States, voted against or abstained on the Resolution. The only two states in the area which voted for the resolution were Cuba and Brazil²⁸³. Cuba voted in favour due to its recent alignment with the Soviet bloc, then the most vociferous supporter of the NWFZ idea.

The Brazilian support has more complex roots. Her traditional alliance with Washington had begun to erode, as a consequence of President Quadros' attempt at an 'independent foreign policy', which collided with Washington's policy to expel Cuba from the inter-American system.

Afonso Arinos, first as Foreign Minister, then as the Brazilian delegate to the ENDC, and later permanent representative at the United Nations, championed partial disarmament measures as a step towards general and complete disarmament. Any measure leading towards this final goal would be supported by Brazil, independent of which nation sponsored the project. The Brazilian diplomacy, traditionally cautious and firmly allied with the United

283 See 'General Assembly Resolution 1652 (XVI): Considerations of Africa as a Denuclearized Zone, November 24, 1961'. *Documents on Disarmament*, 1961, pp. 647-48. The three main points of the Resolution were: "a) To refrain from carrying out or continuing to carry out in Africa nuclear tests in any form; b) To refrain from using the territory, territorial waters or air space of Africa for testing, storing or transporting nuclear weapons; c) To consider and respect the continent of Africa as a denuclearized zone".

States, began to stress not only stability, but also justice as a goal worth fighting for through international diplomacy. Disarmament was perceived as a natural step towards a more just world order. Thus, Brasilia began to support, and to champion, measures in favour of partial or general disarmament, even if rejected by the Western powers and other Latin American republics, on the grounds that they were merely a Soviet propaganda²⁸⁴.

Arinos explains in his memoir that he had first thought of the idea for a NWFZ for Latin America in 1961, in a conversation with Santiago Dantas, then a leading intellectual and politician, under the influence of the African Resolution²⁸⁵. However, he then considered the moment not yet ripe for a similar proposal. He and Dantas discussed the idea with military advisers, and found them very reticent. The notion of collective defence through the Rio Pact was, for the military, untouchable and the NWFZ notion was perceived by them as being unable to co-exist with a security pact. Thus, Arinos and Dantas were conscious that they had a long way to go convincing the armed forces and other political opponents of the viability of the proposal. Nonetheless, Arinos went on with the idea in his opening speech at the General Assembly.

As the Brazilian support for the African Resolution was a product of her independent initiative, and had introduced the possibility of Latin America embarking in a similar trail, Arinos presented his proposal initially to assess the repercussions among the Latin American delegations. Indeed, the reception was

284 It is worth noting that between 1961 and 1964 – the duration of the independent foreign policy – all Foreign Ministers or formulators of the policy negated that Brasilia was following a path towards non-alignment. They often affirmed that Brazil remained firmly as a member of the Western bloc, explained the differences on policies as the protection of Brazilian interests. Thus, the discussion on appropriate terminology to characterise the nature of the independent foreign policy, if non-aligned or not, is irrelevant. In disarmament terms, albeit not only, Brazil could be included in what has been named a coalition of the non-aligned, even if she was never an active member of the non-aligned movement.

285 See Melo Franco (1968) p. 202.

immediate from some delegations. Moreover, the proposal was warmly received by the non-aligned nations. Tito, with his prestige as the leader of the non-aligned movement, sent a personal letter of support to President Goulart.

As a result of the support from other Latin American delegations, Brazil presented at the United Nations on the 8th of November a Resolution, co-sponsored by Bolivia, Chile and Ecuador, proposing a NWFZ for Latin America. Nevertheless, this Four-Power Draft Resolution presented at the Political Commission was deferred consideration to the Eighteenth Session of the General Assembly.

Meanwhile, private communication was established among the republics of Latin America. The Mexican President Lopes Mateos sent a personal letter to Goulart, expressing his support for the November proposal, and encouraging its re-presentation at the next General Assembly.

Mexican support was particularly relevant, because Mexico had been a very active promoter of disarmament measures. As a member of the ENDC, and with a traditional independence in foreign policy, she eventually led the process to achieve a regional free-zone. As a result of the exchanging of letters between Mateos and Goulart, a Five-Power Declaration was released in April 1963. It was simultaneously released in the five capitals as the following:

The Presidents of the Republics of Bolivia, Brasil, Chile, Ecuador and Mexico... in the name of their peoples and governments have agreed as follows:

- 1. To announce forthwith that their Governments are prepared to sign a multilateral agreement whereby countries would undertake not to manufacture, receive, store or test nuclear weapons or nuclear launching services;*

2. *To bring this declaration to the attention of the Heads of State of the other Latin American Republics, expressing the hope that their Governments will accede to it, through such procedures as they consider appropriate;*

3. *To co-operate, with one another and with such other Latin American Republics as accede to this declaration, in order that Latin America may be recognized as a denuclearized zone as soon as possible*²⁸⁶.

Argentina did not follow the Mexican way. With the most advanced nuclear programme in Latin America, Buenos Aires was not enthusiastic about a NWFZ in the region. She affirmed her willingness to continue to pursue nuclear technology by her own means, against any restriction which a treaty could impose²⁸⁷.

In fact, when Arinos first announced the proposal, there was no clear separation in his mind between the civilian and military applications of nuclear technology. Lacking a well-defined nuclear policy, Brazil, at this moment, did not make an unequivocal distinction between these two aspects of the nuclear issue. Influenced by the African Resolution, which was inspired principally by the French Sahara test site, the wording of the Five-Powers declaration was put in terms of 'denuclearization'. It could well be perceived as a rejection of nuclear technology altogether.

This fact led Argentina, which did have an advanced civilian nuclear programme, to adopt a critical posture towards the idea. As the example of the achievement of the South Pacific NWFZ has shown, a full NWFZ could well be understood as being a place without any trace of nuclear technology whatsoever²⁸⁸. A clear

286 See *The United Nations and Disarmament, 1945-1970*, United Nations, New York, 1971 p.334; "O Brasil Firma Acordo para Desnuclearização com 4 Outros Governos", *O Estado de S. Paulo*, 30 April 1963.

287 On Argentina's nuclear programme see Daniel Poneman *Nuclear Power in the Developing World*, London, George Allen & Unwin, 1982.

288 See Jozef Goldblat and Victor Millan "El Tratado de Tlatelolco y el Tratado de Rarotonga: Una Comparación Comentada", pp. 151-58; Pilar Armanet "El Tratado de Tlatelolco y el Tratado de

distinction between peaceful and non-peaceful aspects of a nuclear free-zone in Latin America was the main issue for the Argentine delegation. It also became an issue for the Brazilian delegation after the military coup of March 1964.

The Cuban missile crisis was ultimately resolved by an American-Soviet bilateral negotiation. Despite Castro's attempt to secure the missiles, the Soviet leadership retreated²⁸⁹. Nevertheless, Havana's position was reflected in its rejection of the Five-Power Resolution for a NWFZ for the whole Latin America and the Caribbean. Having previously followed the Soviet position defending the NWFZ idea worldwide, Castro now did not accept the proposal. The Cuban representative at the United Nations General Assembly set down the conditions to be met if Havana was to start any negotiations: the withdrawal of the US forces from the Guantanamo military base in Cuba, the inclusion of the American areas of Puerto Rico and the Caribbean Islands in the region and the inclusion of the Panama Canal.

As these set of conditions showed, Castro was doing everything he could to undermine the possibility of a feasible accord. As Cuba was preparing herself for regional isolation in the name of the pursuit of a more just social order, she raised the level of its anti-American rhetoric. The speech of her delegate at the UN, Armando Lechuga, was intended to harm any regional accord²⁹⁰. Then, in solidarity with Cuba, for the first time, the Socialist bloc abstained in the support of a NWFZ. This demonstrated the extent to which

Rarotonga: *Dos Iniciativas con Similares Objectivos*, pp. 183-98; Nigel Fyfe and Christopher Beeby "El Tratado de Rarotonga. Tratado Sobre La Zona Desnuclearizada Del Pacífico Sur", pp. 199-218, all chapters of the collective work *Vigesimo Aniversario Del Tratado De Tlateloco*, OPANAL, Mexico City, 1987.

289 The accusation that Castro wanted to keep the missiles in Cuba as a defence against a possible invasion by the United States was recently discussed in Greiner, art. cit.

290 See "O Delegado de Cuba Anuncia Perante a ONU que seu País não Firmará o Tratado Nuclear", *O Estado de S. Paulo*, 8 October 1963. Lechuga's speech was delivered in 7 October 1963. Washington's answer was delivered by Adlai Stevenson, negating any aggressive intention towards Havana.

measures towards arms control or disarmament are off-springs of broad foreign policy interests.

On the other hand, the United States and her allies, which had been firmly against the idea, perceived the matter, for the first time, in a rather sympathetic way. Washington's representative at the United Nations encouraged Arinos to maintain his proposal for a NWFZ in Latin America. Washington thought that it could help to break the deadlock between Washington, Moscow and Havana²⁹¹. However, the crisis was eventually resolved without any relevant contributions from third parties, and the idea lost its immediate appeal. This explains why it was referred to the General Assembly in 1962 to be re-presented at the General Assembly in 1963.

Nonetheless, even with the disappearance of the urgent cause for introducing the notion of a free-zone in the region, it was submitted by eleven Latin American nations at the Eighteenth General Assembly as a draft Resolution, presented by the Brazilian delegation. On 27 November 1963, it was adopted as Resolution 1911, by 91 votes against none, and 15 abstentions²⁹². Henceforth, under Mexican leadership a preliminary meeting was convened at Mexico City, starting the process which culminated with the signing of the Tlatelco Treaty in February 1967.

In contrast to Scandinavia, or the several other proposals for NWFZ as a means to enhance national and regional security, in Latin America it was possible to begin a serious diplomatic negotiation. Even if the single event most responsible for bringing in the nuclear issue to the area, the Cuban missile crisis, was

291 As Arinos described, he was personally stimulated by the UN American delegation to present the NWFZ idea at the Political Commission. As one commentator remarked: "...U.S. delegates, who are now beginning to resign themselves to the view that Dr. Castro is unlikely to accept unilateral UN controls, are frankly treating the Brazilian resolution as the backdoor to getting Cuba inspected to prevent further nuclear deliveries". In Nora Beloff "Hopes of Atom-Free Zone", *Observer*, 11 November 1962. Arinos used the expression "Finlandization" of Cuba to describe a way out of the crisis.

292 For the text of the Resolution, see *The United Nations and Disarmament, 1945-1970*, op. cit. p. 336-37.

ultimately resolved by superpower diplomacy, cold war rivalries and nuclear armament became features of the hemispheric political agenda. An agenda that has been dominated since 1959 by the mounting tension between Cuba and the United States.

This introduction of cold war rivalry in a region hitherto regarded as outside the main scenario of East-West confrontation had a great politico-military impact. The original Brazilian proposal for a NWFZ in Latin America, inspired by the African resolution, combined aspects of its Cuban policy with its disarmament policy. During the Cuban missile crisis, this proposal became absorbed by the frantic diplomacy which ensued. Although the original proposal had come from Brazil, it was Mexico which took the initiative and called a Preliminary Meeting to set in train a negotiating process. Once Mexico City was established as the site, the Mexican diplomat Alfonso Garcia Robles became its indisputable champion.

4.2. The Mexican Diplomatic Leadership and the Tlatelolco Negotiations

As the African example demonstrated, the previous record of the attempts to establish the concept of a NWFZ in an inhabited region was uninspiring. Garcia Robles was a diplomat and writer with both reputation and prestige. He had been the Mexican Ambassador to Brazil, and was now the Mexican representative at the United Nations. He had personal contacts with Afonso Arinos and wholeheartedly supported his proposal for a NWFZ in Latin America. As the other Latin American delegation, besides Brazil, at the ENDC in Geneva, Mexico was fully aware of the technical as well as the political problems involved in arms control and disarmament negotiations²⁹³. In 1962 at the ENDC, Mexico unilaterally declared

293 On the Mexican tradition in favour of arms control and disarmament see Miguel Marin Bosh "Mexico y el Desarme", *Foro Internacional*, v. 18 n. 1 July-September 1977, pp. 139-54. Garcia Robles won the Nobel Peace Prize in 1982 due to his role as an outspoken defender of the NWFZ concept.

herself as a nuclear weapon-free nation. Therefore, the idea of a regional NWFZ fitted in well with existing Mexican foreign policy. With the support of the ENDC, where Brazil and Mexico jointly explained the declaration in favour of Latin America as a NWFZ on May 1963²⁹⁴, and the approval of the UN General Assembly, a preparatory meeting was convened to take place at Mexico City, under the auspices of the Mexican government²⁹⁵.

This meeting – the ‘Preliminary Session on the Denuclearisation of Latin America’ (REUPRAL) – was held in Mexico City between 23 and 27 November 1964. It was attended by all the Latin American states which had voted in favour of the United Nations Resolution, with the exception of Guatemala²⁹⁶. With Garcia Robles as the President, and the Brazilian representative, Ambassador Sette Câmara as one of the Vice-Presidents, REUPRAL marks the beginning of more than two years of negotiations for a Latin American NWFZ, which culminated in the signing of the Treaty of Tlateloco in Mexico City on 14 February 1967. In this process, however, there had to be concessions and bargaining.

At REUPRAL two resolutions were unanimously approved. One concerned the term ‘denuclearisation’. For the convenience of a treaty implementing a NWFZ in an inhabited region denuclearisation was taken to refer to an absence of nuclear weapons, not nuclear technology altogether. The other resolution established

294 In 6 May 1963, the Brazilian and the Mexican representatives at the 128 session of the ENDC officially presented the five-nations declaration as their official position. The proposal was received with great interest by the other delegations. See Alfonso Garcia Robles, “La Proscripción de las Armas Nucleares en la América Latina” in *Vigesimo Aniversario del Tratado de Tlatelolco*, p. 12. It is worth noting that in this, as well as in other several publications on the history of the treaty, Robles did not mention that the idea was first raised by a Brazilian delegate at the Seventeenth UN General Assembly. For him, the history of the treaty began with the five-power resolution, achieved by the initiative of the Mexican President Adolfo Lopez Mateo. See op. cit. p.11.

295 On the Mexican initiative made after the end of the Eighteenth General Assembly to implement the resolution and convene the Preliminary Meeting see Alfonso Garcia Robles, op. cit. p. 17.

296 See Robles, op. cit. p. 17.

a 'Preparatory Commission for the Denuclearisation of Latin America' (COPREDAL), with the aim of preparing a preliminary draft of a multilateral treaty leading towards a NWFZ in Latin America²⁹⁷.

The diplomatic process which took place for over two years in Mexico City will not be fully described here. Members who attended the meetings, especially Garcia Robles, who later published extensively on the theme, have described the process in much detail in several books and articles²⁹⁸. It is notable, however, that in his copious publications on the negotiation process, Robles did not dwell on the bitter differences among the states, which almost prevented the successful achievement of the Tlatelolco Treaty. Probably because as a diplomat his aim was to minimize conflicts and praise the special harmonic manner in which Latin American nations achieved a unique international document, he mentioned the disputes but downgraded them in favour of the result. The very fact that the Latin American nations were able to achieve such an unprecedented treaty, which ought to serve as a shining example to other regions making similar attempts, became the centre of his account²⁹⁹.

297 See Robles, op. cit. p. 18. The final text of REUPRAL – 'Acta Final de la Reunión Preliminar sobre la Desnuclearización de la América Latina' – is included in Alfonso García Robles, *El Tratado de Tlatelolco: Génesis, Alcance y Propósitos de la Proscripción de Armas Nucleares en América Latina*, Mexico City, El Colegio de México, 1967, pp. 112-18.

298 Besides Garcia Robles, John Redick, in his PhD dissertation, described the process of negotiation step by step, based on the verbatim transcriptions of the four COPREDAL meetings. See John Redick, *The Politics of Denuclearization: a Study of the Treaty for the Prohibition of Nuclear Weapons in Latin America*, unpublished PhD dissertation, University of Virginia, 1970. Redick has published extensively on the Tlatelolco regime. Amongst its main publications see "Nuclear Proliferation in Latin America" in R. Fontaine and J. Theberge (eds.) *Latin America's New Internationalism: The End of Hemispheric Isolation*, New York, Praeger, 1976 pp. 267-309; "Regional Nuclear Arms Control in Latin America", *International Organization*, V.29 n. 2, Spring 1975, pp. 415-45; "The Tlatelolco Regime and Non-Proliferation in Latin America", *International Organization*, V.35 Winter 1981, pp. 103-34.

299 On a brief description of the Tlatelolco negotiations as an example for other NWFZ attempts see Alfonso García Robles, *The Latin American Nuclear-Weapon-Free Zone*, Muscatine, The Stanley Foundation, Occasional Paper, 1979. Another praise of this negotiation process is found in Alfonso

Nevertheless, despite the endless rhetoric on the peaceful tradition of Latin American and the wisdom and good will of their statesmen and diplomats, an important dimension of the negotiation is missing from Robles's descriptions – the conflicting views and the bargaining that pervaded the COPREDAL, which almost led to complete impasse. The final draft was achieved by so much compromising that it generated differing interpretations of such fundamental questions as what is and what is not permitted by the treaty.

The negotiations were dominated by two different groups, one led by Mexico and the other led by Brazil. As the Treaty of Rarotonga also showed, a successful regional negotiation requires that it be led, or at least not be opposed by, the leading regional power. When Australia resolved to lead the negotiations in the South Pacific area, the treaty achieved a real possibility of success³⁰⁰. Although a significant power, especially in Central America, Mexico was not the regional leader on nuclear issues, which rested with Argentina and Brasil, in that order³⁰¹. Much of the negotiation was designed to conciliate different objectives held by these two groups.

The Mexican aim was to achieve a unilateral surrender of the capacity to receive, store or produce nuclear weapons in the whole region as quickly as possible, without paying much attention to some political as well as technological aspects of the process. Brazil's aim after the military coup was to pursue the negotiations without rushing, seeking compensation for the unilateral obligations perceived as being the essence of the treaty. She did not want to

García Robles, "Latin America as a Nuclear Weapon-Free Zone", In: David Pitt and Gordon Thompson (eds.), *Nuclear-Free Zones*, London, Croom Helm, 1987.

300 On the negotiations which led to the Treaty of Rarotonga see David Sadleir, "Rarotonga: Tras los Pasos de Tlatelolco" and Fyfe and Beeby, art.cit., both in: *Vigesimo Aniversario del Tratado de Tlatelolco*, respectively pp. 159-82 and pp. 199-218. See also Pitt and Thompson, op. cit., and Graham, op. cit.

301 See Luddeman (1983), art. cit.

give up on some essentials, especially on the heated issue known as 'peaceful nuclear explosions'. Thereafter to satisfy the Brazilian demands, the treaty had to be carefully recast, requiring much bargaining and mutual recrimination. The most frequent accusation was that individual foreign policy goals were being placed above the well-being of the region.

As some Brazilian diplomats admitted, the treaty was perceived by Itamaraty as a Mexican treaty, an instrument of Mexican foreign policy. Either as a result of Mexico's intention to raise her regional and global prestige, or as a consequence of a sincere regional initiative, the fact is that Brazilian diplomats expressed their concerns for what they saw as Mexico's casual disregard for extremely sensitive issues³⁰².

The two main points of disagreement between Mexico and Brazil were the appropriate mechanism for the treaty's entering into force and the issue of 'peaceful nuclear explosions'. Another issue which delayed the end of negotiations was the role played by the five nuclear powers, as well as those four nations with territories in the area – France, the Netherlands, the United Kingdom and the United States. As a result of a Brazilian suggestion, they were finally dealt with by incorporating two Additional Protocols into the treaty. They made the nuclear powers and the states with territories within the boundaries of the treaty subjected to the Treaty's provisions.

The causes of the disagreements between Brazil and Mexico, apart from differences in diplomatic style, were rooted in changes in Brazilian foreign policy priorities. The domestic political turbulence

302 Redick describes several episodes which occurred between, on one side Mexico and on the other Argentina and Brazil. The latter accused the former, as a US neighbour, of disregarding insecurity feelings that they, as South Americans and distant from the US, could not. See Redick, *op. cit.*, chapter 2, especially pp. 76-77. Some Brazilian diplomats privately admitted to me with irony the political advantages that Mexico gained from being associated with the Tlatelolco Treaty.

which followed the 1964 military coup affected Brasilia's domestic as well as foreign nuclear posture. From being the main Latin American supporter of the NWFZ concept during the period of the 'política externa independente' – and the only country apart from Cuba which supported the African resolution – Brazil became aware of the dangers associated with this alleged unilateral posture. A policy of unconditional surrender of nuclear weapons was considered unrealistic, because it could prevent the development of peaceful nuclear research.

4.3. The Brazilian Posture at the Tlatelolco Negotiations

Although the original Brazilian proposal, as well as the Mexico-inspired five powers declaration in favour of a NWFZ in Latin America, occurred before March 1964, the effective negotiations at Mexico City started with a new administration installed in Brazil. With a new foreign policy discourse and priorities, Brazilian diplomacy in Mexico began to reflect the new concerns of the administration. The decision to give emphasis to a domestic nuclear policy was not taken immediately. It was only made by the second military president, Costa e Silva in 1967, when the negotiations in Mexico had already been concluded. However, the priority placed by the Quadros-Goulart administrations on favouring regional and global arms control and disarmament was immediately altered.

From being in the forefront supporting the idea of establishing a NWFZ in Latin America, evinced during the period of the 'política externa independente', the new Itamaraty posture began to give priority to improving 'national security', defined in terms of fighting against constraints for economic prosperity. It became a more prudent policy, avoiding commitment to unilateral decisions which were perceived to inhibit access to foreign technology. Under the influence of the motto 'development and security', any

unilateral measures, such as the ones implied in the NWFZ notion, had to be reappraised.

The substitution at the head of Itamaraty of those associated with regional and global arms control and disarmament as a foreign policy priority helped to strengthen the new posture. Even without clarity in terms of domestic nuclear policy, the new posture reflected rising concerns about security. The restoration of the shaken alliance with Washington became a first priority. However, Brasilia and Washington's understanding of the non-proliferation regime did not coincide. The stubborn defence of what was perceived as a right to master nuclear technology and to 'keep open the nuclear option', began gradually to dominate Brazilian foreign policy. The vacillation of the first months of Castelo Branco's administration in relation to the implementation of a new domestic and foreign nuclear policy evolved towards a clear-cut policy under Costa e Silva's administration. It became a policy based on defending the absolute right to master nuclear technology.

To start with, Brazil began at COPREDAL pressing for a clear-cut distinction between peaceful and non-peaceful purposes of nuclear technology. She stressed her intention not to accept any restriction whatsoever in the implementation of a peaceful nuclear programme. This aspect was generally agreed upon. Without much discussion, this suggestion was fully supported by the other members, who were equally impressed by the visions of progress associated with nuclear technology³⁰³.

Brazil pressed as well for the participation at the negotiations of all Latin American nations, aiming to make any regional treaty

303 In April 1967, one month after assuming power, Costa e Silva gave a speech in Montevideo, proposing a Latin American common market. In it, nuclear energy should be the starting point of cooperation. His speech was well received by other delegations. See "Política Nuclear Brasileira Começou com o CNPq", *Jornal do Brasil*, 15 December 1975.

as all-embracing as possible. For a military government which assumed power with a fiercely anti-communist posture, preparing to fight insurgency both, domestically and regionally, security became a major concern. As a consequence, the Brazilian government insisted that a NWFZ in Latin America must include the whole region. This was intended, of course, to put pressure on Havana to join the negotiations. As the only nation in the area which had had nuclear weapons installed on her territory, Cuba refused the invitation to send a delegation to Mexico City. Venezuela, with her border problem with Guyana, did not send a delegation to COPREDAL either, but joined the negotiations later on.

Enlarging the scope of the negotiations meant also including the five nuclear powers and the four nations with territorial possessions within the geographical boundaries of the treaty. Its rationale was that as the NWFZ notion implied a unilateral surrender of one form of self-defence, they might become defenceless against the nuclear powers. Thus, the five nuclear powers should also be part of the treaty, offering guarantees not to attack any member in the region with nuclear weapons. As shall be explored further on, this was a very difficult and complex question.

The negotiations at Mexico City – four sessions of the COPREDAL – started in March 1965. The first COPREDAL meeting occurred between 15 and 22 March 1965. A second session was held between 23 August and 2 September 1965. A third session, between 19 April and 4 May 1966, and the last session between 31 January and 14 February 1967. On 12 February 1967, the Treaty was approved unanimously, and was opened for signatures. In the first session of COPREDAL it was decided that a number of working groups should be established to draw up a preliminary draft at the third session, which would be distributed to the

delegations and then undergone amendments and be approved in a fourth and last session³⁰⁴.

Meanwhile, two Commissions, a Coordinator Commission and a Negotiator Commission were constituted, both having as members the Mexican and the Brazilian delegates. It was the job of the former to elaborate a first draft based on the advancement of the working groups. It would then be presented to all delegations. The latter intended to establish contacts through the United Nations with the four nuclear powers, aiming to gain their support of the treaty. The fifth nuclear power, China, then not a member of the United Nations, would be dealt with separately through other channels. The three working groups created – named A, B and C – were divided to study different technical aspects involved in implementing a NWFZ, with the results reported back at the second session. The idea was to have a set of technical papers submitted at the second session, and then start building up a first draft. Groups A and C had their headquarters at the United Nations in New York and group B gathered in Mexico City.

In mid-1965, however, group B, headed by Mexico and responsible for the aspects of verification, inspection, and control, presented a preliminary draft to the Coordination Commission. With the technical assistance of the United Nations, the group decided that they were able to present a preliminary collection of articles. Drafts of articles on verification, inspection and control were presented³⁰⁵. The Brazilian delegation, however, reacted negatively to this preliminary draft, arguing that it exceeded its responsibility, which did not include the preparation of a preliminary draft, but only technical papers. Thereafter Brazil, joined by

304 See the details in the introduction of Garcia Robles, *El Tratado de Tlatelolco*.

305 In Spanish the draft was called "Anteproyecto de Artículos para el Tratado de la América Latina relativos a Verificación, Inspección y Control". It was submitted annexed to the Resolution 9 (II) of the Preparatory Commission.

Colombia, prepared their own preliminary draft to be submitted at the third session as an alternative draft to the one prepared by group B, considered as a Mexican-inspired draft³⁰⁶.

The major disagreement related to these two preliminary drafts, because both were considered to be the Mexican and the Brazilian drafts. The main points of disagreement were: the definition of a nuclear weapon, the mechanism for the treaty's entering into force and 'peaceful nuclear explosions'³⁰⁷. The first issue, the definition of a nuclear weapon, was the easier to resolve. With United Nations technical support, group B collected all information available on the previous attempts to deal with verification, inspection and control of nuclear weapons. They took as a model the 1954's definition of nuclear weapon made by the Western Security Union, prohibiting the Federal Republic of Germany from obtaining nuclear weaponry³⁰⁸. This definition initially covered the means of delivery, but through the debates it consensually evolved to exclude them from the definition of a nuclear weapon.

The arguments on 'peaceful nuclear explosion' were the most heated. Brasilia wanted a treaty explicitly permitting nuclear explosions for peaceful purposes. In fact Brazil was impressed by the technological advance of the programme of peaceful nuclear explosions developed by the US and the Soviets. With a huge territory and unexplored natural resources, she intended employing 'clean and safe' explosions for economic purposes. The denial of access, or at least a right to have access, to a technology with a

306 On details on the Brazilian reaction against the draft, supported also by Argentina, see Redick thesis, chapter 6. In the *Revista Brasileira de Política Internacional* March-June 1967 there is an analysis of the Brazilian preliminary draft on pp. 96-97. This number of the *Revista Brasileira de Política Internacional* is a special number dedicated to Brazil's nuclear policy. It includes a most useful collection of speeches, articles, extracts and interviews on Brazil's policy towards the non-proliferation regime.

307 See Garcia Robles, (1967). The details are in the introduction.

308 See Redick, op. cit. The definition came from the 'Protocol on the Control of Armaments of the Western European Union', October 1954. The United Nations appointed the Canadian expert William Epstein as a technical advisor to Group B.

potentially bright future, was understood within Brazil as a means to build constraints to her technological advancement³⁰⁹.

The technical advances associated with peaceful nuclear explosions were widely publicized and discussed in Brazil. The US attempt to develop a major project for using nuclear explosions to help in exploring natural resources – Project Gnome – was seen in Brazil as a proof of the feasibility of explosions without radiation fallout³¹⁰. With Argentine and Colombian support, Brazil sought to benefit from the Plowshare programme to exploit her vast natural resources.

Peaceful nuclear explosions were discussed not only in Mexico City. In Brazil it became a symbol of nationalistic sentiment. The climax of this emotional defence of the right to autonomously pursue this technology, after it was agreed upon in Mexico, happened during a visit to Brazil by the American scientist Glenn Seaborg, head of the Atomic Energy Commission in July 1967. During this official visit to scientific research centres in Rio de Janeiro and São Paulo, Seaborg acted as an emissary of Washington's non-proliferation policy³¹¹. He defended non-proliferation and the prohibition of autonomous access to explosive fissile technology altogether³¹². During contact with politicians, scientists and the press, Seaborg hinted the possibility of a compensatory measure.

309 On a general discussion on 'peaceful nuclear explosions' on the context of the NPT negotiations see Shaker, *op. cit.*, chapter 7, pp. 379-459. On the Brazilian defence of its rights see 'Declaração do Coronel Alencar Araripe ao 'Grupo dos Oito Países' em Genebra sobre o Tema "Explosões Nucleares para Fins Pacíficos" and 'Trabalho do Major Helcio Modesto da Costa sobre 'Explosões Nucleares para fins Pacíficos', both in *Revista Brasileira de Política Internacional* (special number), pp. 114-24.

310 See David R. Inglis and Carl L. Sandler, "A Special Report on Plowshare. Prospects and Problems: Nonmilitary Uses of Nuclear Explosives", *Bulletin of the Atomic Scientists*, v. 23 n. 10, December 1967, pp. 46-53.

311 See "Bombas só para Uso Pacífico", *O Estado de São Paulo*, 5 July 1967. See Seaborg's conference in the Brazilian Academy of Science in "Palestra do Dr. Glenn T. Seaborg, Presidente da Comissão de Energia Atômica dos Estados Unidos", United States Information Service, Rio de Janeiro, 3 July 1967. Seaborg gave an account of his visit in *Stemming the Tide*, pp. 257-59.

312 On the Brazilian reactions see "Palestra Decepçiona Governo", *O Estado de São Paulo*, 5 July 1967.

Washington would consider selling Brazil the technology of peaceful nuclear explosions at a generous price, in exchange for Brazil's renunciation of the idea of developing the technology under her own means³¹³.

Seaborg's offer was badly received. The offer backfired, serving merely to confirm the importance of the technology for exploring natural resources³¹⁴. Eventually his visit helped to crystallise the perception that to bar peaceful explosions was another American attempt to monopolise a useful and economically sound technology. Prohibiting it for third countries was a strategy to safeguard her own interests. Giving credibility to the defenders of the feasibility of peaceful nuclear explosions, the offer strengthened those who were in favour of the idea that Brazil must develop nuclear technology independently³¹⁵. The perennial fear of depending on a foreign supplier for a vital technology re-emerged. Nationalists were eager to exploit Seaborg's visit by praising the necessity of investing in technology³¹⁶.

Moreover, the government was able to link Seaborg's offer with the discussions being held in Geneva on the NPT. Indeed, his visit was also aimed to raise support for the NPT³¹⁷. The superpowers, according to this view, were seeking to ban not only nuclear weapons but useful technology for peaceful purposes. Itamaraty was then able to raise domestic support for an anti-NPT posture. Moscow and Washington intended to protect not only their monopoly of

313 It was later on elaborated in a conference by the American Ambassador in "Tuthill Expõe Tese Nuclear dos EUA", *Correio da Manhã*, 6 August 1967.

314 See "Chanceler Chama os Técnicos para Estudar Energia Nuclear", *Jornal do Brasil*, 16 July 1967.

315 As an example of this reaction see "Brasil Precisa Triplicar o Número de seus Cientistas", *Jornal do Brasil*, 16 July 1967.

316 Seaborg's took the impression in his visit that: "We felt that this was an offer Brazil could not refuse if its interest in peaceful nuclear explosives was genuine. The reaction we got could best be described as a polite brush-off. This was clear evidence to us that the Brazilian's avowed interest in peaceful nuclear explosions was mainly a cover to keep alive a nuclear weapons option". Seaborg, op. cit., p. 259.

317 See Seaborg, op. cit., p. 258.

nuclear weaponry, the argument went, but also the monopoly of a potentially lucrative peaceful technology. To Brazil, employing peaceful explosions was plainly justifiable. The relevant issue was the purpose of the explosion, not the means employed. This argument was fiercely used by Itamaraty in Mexico City, which arrived at the same conclusion, that peaceful nuclear explosions should be legal under the Treaty of Tlatelolco³¹⁸.

Article 18 recognises the right to use peaceful nuclear explosives, alone or in collaboration with a foreign power. Nonetheless the Mexican interpretation of this article, made explicit by Robles, was that this was a meaningless concession. To Mexico, article 18 was merely recognition of an eventual future possibility. As there was no technology actually available for making possible a clean and economically viable nuclear explosion, allowing for them would be only a provision for the future. In addition the wording of this article presupposes a multilateral control of these explosions. They could not contradict other articles of the Treaty³¹⁹. Therefore, whether and when such technology became available, the mechanisms for the control of explosions, presented at article 18, should be activated. At the present state of the technology, permitting them was meaningless.

Moreover, the strong opposition from Washington, Moscow and London to the wording of article 18 has since been continuously stressed. The nuclear powers did not agree with the separation between peaceful and non-peaceful explosions, based only on purposes. While acceding to the Additional Protocol number two of the treaty, they explicitly condemned the inclusion of article 18.

318 See Sergio Correa da Costa speech at the 297th session of the ENDC in Geneva in 18 May 1967 in *Revista Brasileira de Política Internacional*, (special number), pp. 43-46.

319 See Robles, in the introduction of *El Tratado de Tlatelolco*.

To Brazil, with the strong support of Argentina, this issue became a matter of principle. Even with peaceful nuclear explosions disappearing from the horizon of the superpowers, she maintained until recently the policy supporting her access to it. It was transformed into a matter of principle, as a result of the nature of the joint US-USSR preliminary draft for a NPT. In Geneva, a vague promise was included, promising cooperation in sharing peaceful nuclear technology³²⁰. Thus, the prohibition of peaceful nuclear explosions was interpreted as interfering in the rights of a sovereign nation.

Equally heated debated was the issue concerning the mechanism for the treaty's entering into force. Two different mechanisms were proposed. One, led by Mexico, intended that the treaty would apply for any nation which deposited its instrument of ratification. Then, after eleven states had ratified it – the majority of the Latin American republics – the Agency for monitoring the treaty, OPANAL, would automatically be established. The other position, led by Brazil, proposed that it would come into force only when the following conditions had been met: all members of the COPREDAL, as well as those included in the two Additional Protocols, had signed and ratified the treaty; the signing of a safeguard system with the IAEA.

A compromise solution was impossible to obtain until the third session of COPREDAL. It was achieved by a formula suggested by the Coordinator Commission, included in its preliminary draft in December 1966. The solution was to create an article by which these Brazilian conditions were included, but with a paragraph allowing nations to waive these conditions. As a consequence, for them the treaty would come into force the moment when they deposited their instruments of ratification. It would come into force irrespective of the number of nations which had already ratified it. This compromise

320 See *Relatório Anual do Itamarati 1966*, Brasília, Ministério das Relações Exteriores, 1967 pp. 94-99.

formula was embodied in article 28 of the treaty. This compromise solution allowed the treaty to be completed³²¹.

At the fourth and last meeting at the COPREDAL in Mexico City, Brazil was represented by the deputy Foreign Minister Sergio Correa da Costa. As the leader of those who defended the right to peaceful nuclear explosions, his presence at Mexico symbolised the importance that Brazil was giving to the treaty. The fourth session was delayed for some months, as a result of, among other factors, a military coup in Argentina in 1966³²². On 30 August 1966, a one day session agreed to transfer the last session to 31 January 1967. Meanwhile, between August 1966 and January 1967, frantic negotiations had taken place. Washington's and London's opposition to any concession to the inclusion of the right to peaceful nuclear explosions in Geneva, was followed by the hardening of the Brazilian position. A final draft was eventually achieved on 28 December 1966, including articles 18 and 28. The two main elements of discord had been overcome.

Nevertheless, when Brazil signed the treaty on 9 May 1967, she deposited her signature in Mexico City with a note, making clear her interpretation of article 18. The note stresses that nothing in the treaty was against the right of any of the participants to use peaceful nuclear explosives³²³. It became the official Brazilian position towards any differing interpretations of this article.

As a result of the compromise which led to resolve the two most difficult issues, on peaceful nuclear explosions and on the treaty's entry into force, a NWFZ was established in Latin America. Nonetheless, due to the nature of the solutions achieved, Brazil did not become a full member of the treaty. Brazil and Chile,

321 An explanation of the conciliation formula may be found in Redick, *op. cit.*, chapters 7 and 8, and in Garcia Robles (1967), introduction.

322 See Redick, *op. cit.*, chapter 8.

323 See the text of the note in *Revista Brasileira de Política Internacional*, March-June, 1968, p. 94.

which signed and ratified the Treaty, did not waive the conditions included in article 28, as it is legitimate to do, thus the treaty does not apply to them. They anticipate full membership only when the conditions are fully met.

Therefore, even if the treaty was considered a victory of Brazil's diplomacy, because Tlatelolco included the conditions established by Brazil, it could not be considered a complete success.

4.4. Brazil's View on the Links between Tlatelolco and the NPT

Itamaraty's official explanation for the evolution of Brazil's nuclear diplomacy is straightforward, that Brazil has a consistent as well as a stable nuclear foreign policy. She did not change her position from a period when she was a main supporter of the NWFZ concept to a period when she imposed many conditions to accede to a treaty actually implementing it in Latin America. It has been, so the argument runs, a coherent and unambiguous policy. What changed were the international circumstances in which her nuclear diplomacy took place. With horizontal nuclear non-proliferation of nuclear weapons becoming a major issue in global affairs, and a main cause of concern for the superpowers, Washington and Moscow were able to surpass their political and ideological differences and agree upon a non-proliferation treaty disregarding the interests of third nations. Against this situation, Brazil could not remain passive³²⁴.

With Washington and Moscow not taking into consideration the opinions, suggestions and amendments proposed by third countries, as well as the five guiding principles to a non-proliferation treaty accorded in the UN General Assembly Resolution 2028 (XX),

324 For an explanation of the official Brazilian position see Castrioto de Azambuja, art.cit. For an overall analysis of the evolution of the security cooperation between the United States and the Soviet Union see Alexandre L. George et al (eds), *US-Soviet Security Cooperation. Achievements, Failures, Lessons*, New York, Oxford University Press, 1988.

Itamaraty, together with the seven other non-aligned members of the ENDC, felt bypassed by events³²⁵. According to Brazil, the nature as well as the spirit of the negotiations leading towards a non-proliferation regime as part of a more just global order had changed. The consensus in favour of achieving a balance between halting vertical and horizontal nuclear non-proliferation was undermined. The superpowers were trying to impose a preliminary draft of a non-proliferation treaty, achieved after negotiations between themselves, which excluded the views and interests of third parties. The spirit of the preliminary draft did not take into consideration a mutual balance of obligations as well as responsibilities between the haves and have nots³²⁶. Therefore, Brasilia began to introduce at the Mexico City negotiations the views which she felt she could not promote at the ENDC in Geneva.

However, Itamaraty's explanation of this line of continuity in Brazil's nuclear diplomacy, while convincing at a general level, ignored relevant domestic changes. The priorities and emphasis of the Brazilian nuclear foreign policy changed as a result of a new priority accorded to nuclear technology by the military government. The decision to implement a nuclear programme in Brazil, which was announced by President Costa e Silva in March, April and July 1967, made clear that a changed nuclear foreign policy was a response to domestic necessities³²⁷. Domestic as well

325 These five-points were achieved at the United Nations in 1965 as a starting basis for a non-proliferation treaty. They implied reciprocal obligations between nuclear and non-nuclear states. Part of Brazil's criticism of the NPT was that it did not follow the spirit of the five-points approved by the UN General Assembly. See Celso Souza e Silva, "Proliferação Nuclear e o Tratado de Não-Proliferação", *Revista Brasileira de Política Internacional*, n. 117-118, 1987/1 pp. 5-8. On the negotiations leading to the five-points, see Shaker, op. cit., pp. 35-66.

326 A different view on the negotiations leading to the NPT, favouring Washington's position and assessing the difficulties of achieving a treaty altogether is found in Seaborg with Loeb, op. cit., especially on pp. 119-98. See also Shaker, op. cit., and William B. Bader, *The United States and the Spread of Nuclear Weapons*, New York, Pegasus, 1968.

327 The speeches are included in *Revista Brasileira de Política Internacional*, March-June, 1967. An analysis which concentrated on the scientific aspect of this decision is by James W. Rowe "Science and Politics

as foreign nuclear issues were already discussed during the Castelo Branco administration, when the decision to harden the position at Mexico City took place³²⁸. But the decision to implement a domestic nuclear programme was taken by the new Costa e Silva administration soon after it took office in March 1967. The treaty just signed at Mexico City in February 1967 was then not considered to be an impediment to the development of a civilian nuclear programme. On the contrary, it was considered as a victory of Brazilian diplomacy, entitling her to implement a peaceful nuclear programme³²⁹. In March 1967, President Castelo Branco gave a speech where he stressed that Brazil had been successful in Mexico City in avoiding the constraints on her capacity to pursue an independent peaceful nuclear policy³³⁰.

The history of the Brazilian nuclear policy has been marked by institutional instability and rhetoric, instead of effective commitment to nuclear development. Costa e Silva's announcements of 1967 appeared to represent a real change. For the first time since the establishment of an independent agency for nuclear energy in 1956, the government appeared to be committed to giving a high priority to investment in science and technology, principally nuclear technology. Thereafter, from 1967 onwards, diplomacy was activated to defend this nuclear policy against any

in Brazil: Background of the 1967 Debate on Nuclear Energy Policy" in Kalman H. Silvert (ed.), *The Social Reality of Scientific Myth, Science and Social Change*, New York, American Universities Field Staff, 1969, pp. 89-122.

328 In 15 September 1965, a meeting took place at the Palácio das Laranjeiras in Rio de Janeiro to discuss Brazil's posture at the COPREDAL in Mexico City. With Castelo Branco's approval Itamaraty, CNEN and the National Security Council prepared the foundations to harden Brazil's position. A description of the meeting is found in Luis Viana Filho, *O Governo Castelo Branco*, Rio de Janeiro, José Olympio Editora, second edition, 1975, pp. 446-50.

329 See Viana Filho, op. cit., p. 449.

330 In his words, Brazil was successful "...in an instrument indispensable nowadays for the nation future, namely a full utilisation of the atomic science progress for pacific ends". See "Trecho de Discurso do Presidente Castelo Branco Pronunciado em 14 de Março de 1967" in *Revista Brasileira de Política Internacional* (special number on Brazilian nuclear policy), p. 95.

attempt to impede it by foreign pressure or multilateral means, such as the NPT.

Institutional as well as personnel changes were made in order to activate this ambitious commitment to invest in a peaceful nuclear programme. Even if some of the most respected national scientists were not convinced by Costa e Silva's speeches and promises, it is a matter of record that decisions were taken which represented the beginning of a new priority given to peaceful nuclear development as a national goal. Costa e Silva's Minister of Foreign Affairs, José de Magalhães Pinto, promised to encourage and support the return of the exiled scientific community and to put all the resources of the Brazilian diplomacy to protect its choice in favour of scientific and technological development³³¹.

Brazilian diplomacy now had to link her posture at Mexico and Geneva under the same argument of defending sovereignty and essential rights. These links were in fact real. However, it became usual in the non-proliferation literature to consider Tlatelolco as a regional application of the NPT³³². The two treaties were developed in parallel, and apparently had the same main objective: acting as a barrier to the horizontal spread of nuclear weapons. Both sets of negotiations started in the same year, 1965, and both were successfully completed, the former in 1967, and the latter in 1968. As a treaty of universal scope, co-sponsored by the superpowers and including, as a result of a Mexican suggestion, an article making it compatible with the concept of NWFZ, the NPT could well be

331 See "Pronunciamentos do Ministro de Estado das Relações Exteriores, José de Magalhães Pinto" in *Revista Brasileira de Política Internacional* op. cit., pp. 9-17. See also "Chanceler Chama os Técnicos para Estudar Energia Nuclear", *Jornal do Brasil*, 16 July 1967. A key figure in the formulation of both, Brazilian domestic and foreign nuclear policy, was the Secretary-General of Itamaraty and deputy Foreign Minister Sergio Correa da Costa.

332 In his unpublished PhD thesis, Redick considered Tlatelolco as a regional application of the NPT. Since then, many commentators had described and analysed Tlatelolco either as a regional application of the NPT, or a regional complement of the NPT.

considered as a more general instrument of non-proliferation of nuclear weapons, in which Tlatelolco and then Rarotonga became examples of specific, regional application.

In the American-Soviet preliminary draft, there was no separate article dealing with the notion of a NWFZ. Brazil also offered a separate amendment, in the same spirit as the Mexican, but aiming also to draw a distinction between peaceful and non-peaceful nuclear explosives. She was not successful³³³.

Moreover, the idea of a non-proliferation regime was tailored to encompass all the measures, instruments, processes, formal or informal, designed to curb the horizontal proliferation of nuclear weapons. Nevertheless, the view of Tlatelolco as a regional application of the NPT has been sharply criticised by those Latin American nations which did not sign the NPT, especially Argentina and Brazil. The consensus which emerged in these two nations against the discriminatory nature of the non-proliferation regime, symbolised by the NPT, led to efforts to separate the two treaties – to consider Tlatelolco as a legitimate regional effort in favour of regional solutions for regional problems, distinct from the NPT, ‘a condominium of the great powers’. The assimilation of two distinct pieces into one regime, controlled by the great powers, with the necessary application of full safeguards on all nuclear installations, was considered unjust. This assimilation has been given as the main reason why Argentina and Brazil have so far rejected full membership of Tlatelolco.

According to the Brazilian view – accompanied by the other nations’ critics of a non-proliferation regime – the joint American-Soviet preliminary draft in Geneva was making clear their hidden intentions. They were to create a joint custodianship of a nuclear

333 The details on the Mexican, the Brazilian as well as on the original American-Soviet draft in relation to the notion of NWFZ are well treated in Shaker, *op. cit.*, especially on pp. 903-905.

non-proliferation regime³³⁴. The effort to create reciprocity of rights and obligations, for example by a more precise compromise to curb vertical proliferation, or by a more precise cooperation to spread peaceful technology did not appear to be priorities for the superpowers. As a result, Brazil defended her right of access to nuclear technology principally through the issue on peaceful nuclear explosions.

Brazil presented in Geneva amendments to the preliminary American-Soviet draft for a non-proliferation treaty. She proposed several amendments, aiming to balance rights and obligations between the nuclear and the non-nuclear powers. Amongst the most significant amendments were the following: in article 1, Brazil introduced a paragraph asking for the nuclear powers to be placed under an obligation to create a fund to be distributed by the United Nations, to aid the progress of the less developed nations. A non-specified part of this fund would come from resources liberated by nuclear disarmament; she proposed a new article, which was provisionally called article 2-A. In this article the nuclear powers should promise to achieve a compromise, in the shortest period possible, for a treaty aiming to put an end on the nuclear arms race and to eliminate their nuclear arsenals altogether; in article 4, she introduced wording similar to the Mexico Treaty, in favour of the right to conduct peaceful nuclear explosions; in article 5, where the American-Soviet draft called for an international conference to be convened five years after the entry into force to evaluate the treaty, she introduced an amendment that the evaluation should include as well the proposed article 2-A³³⁵.

334 This was explicit made in *Relatório Anual do Itamaraty 1967*, Brasília, Ministério das Relações Exteriores, 1968, pp. 131-132.

335 The complete text of these amendments proposed in Geneva are included in *Revista Brasileira de Política Internacional* (special number), pp. 105-106.

The preoccupation with discrimination lied deep in the Brazilian criticism of the American-Soviet draft of the NPT³³⁶. The idea that the treaty would create two classes of nations – one class which had detonated a nuclear device up to 1 January 1967, and another which from 1967 onwards would be prohibited from acquiring any kind of explosives – was seen by Itamaraty as discriminatory. Besides, it created a number of obligations for the latter nations. The obligation to put all their nuclear facilities under the supervision of an international agency (IAEA), while leaving the nuclear powers without any obligation whatsoever to international supervision and control. This was unacceptable to Brazil.

Itamaraty believed these differing set of rights and obligations as an example of one law for the nuclear powers and another for everybody else. Therefore, the amendments it proposed were intended to create a more balanced set of rules. The commitment of the nuclear powers to negotiate in good will, aiming to achieve effective disarmament was, in Brazilian view, vague, asking only for intentions. For Itamaraty the years of negotiation did not enhance its faith in the good will of the superpowers. In its proposed amendments, Itamaraty asked for certain obligations of the nuclear powers as a compensation for the surrender of a perfectly legitimate right of sovereign states to seek advanced weapons system.

The policy to preserve the right to peaceful nuclear explosions adjusted well under the motto ‘security and development’, then being developed by the military government. This was justified in relation to the economic as well as the defence aspects of the explosions issue, that is, mastering nuclear technology was sought as a way to acquire technological autonomy and independence, in a word national security. Under the motto ‘security and development’, Brazilian

336 See Monica Hirst “Impasses e Descaminhos da Política de Não Proliferação Nuclear”, unpublished paper presented at the fourth meeting of ANPOCS, Nova Friburgo, 1980; Grabendorff, art.cit., and Rosebaum and Cooper, art. cit.

policy-makers were seeking to legitimise themselves through the achievement of rapid economic development.

It is evident that the military coup implied a realignment of Brazil's foreign policy within an anti-Cuban line. The new foreign policy was closer to Washington's conception of hemispheric security, giving priority to the fight against domestic and regional insurgency³³⁷. The distinct approach to foreign and defence issues which had prevailed during the period 1961-1964, emphasising more justice than stability in world affairs, was abandoned. Instead of a diplomacy which claimed to defend self-determination and redistribution, a new diplomacy was implemented in the spirit of a crusade.

However, as Brasilia was heading towards a modernising policy, the conditions were set for a course of conflict with Washington, because an associative model for foreign and defence policy presupposes a degree of subordination, in line with the security necessities of the dominant power. While Brazil was in need of political and financial support to tackle domestic instability, during the period 1964-66 for example, the alignment with the US in a crusade against hemispheric insurgency could well be justified as a trade-off. But when the economy recovered and began to rapidly expand, even if caused by massive foreign capital, the road was paved for inevitable conflicts of interest.

Therefore, Brazil's nuclear diplomacy began to be perceived domestically as a symbol of the stubborn defence of her interests. In this sense, the fundamentals laid down by the independent foreign policy – an intransigent defence of national interests even if this did mean opposing its main partner – was retained and built upon. The posture established by Araújo Castro in his criticism of the 'freezing

337 See an interview with the Brazilian Foreign Minister Vasco Leitão da Cunha given in 6 July 1964 and reproduced in the *Revista Brasileira de Política Internacional*, n. 27, September 1967, pp. 591-98.

of world power' was followed, even if the diplomatic language was less strident and more pragmatic³³⁸. With Costa e Silva's emphasis on science and technology, and especially on nuclear energy, the low priority given to a domestic nuclear programme began to be reversed. The 1967 announcement that Brazil was going to pursue a vigorous nuclear policy was the result of a coalition of interests between Itamaraty, scientists, politicians and military officers. They decided that the price of inevitable American opposition was worth paying.

For some, however, it was not worth paying. The debate on nuclear policy which occurred during the Castelo Branco administration was unable to arrive at a decision. Opposition from prominent members of his cabinet, especially the powerful Planning Minister Roberto Campos, blocked any commitment to an ambitious nuclear programme. Under the argument of financial as well as political costs, this opposition even employed the argument against the alleged difference between a peaceful and a non-peaceful nuclear explosion³³⁹.

Implementing a costly programme, aiming to master a technology beyond the nation's capacity was unthinkable in a period of a squeeze on public spending, even if it was in the name of security and technological autonomy³⁴⁰. This opposition, however, was marginalised during the Costa e Silva administration. The new coalition under Costa e Silva was apparently more nationalist, supporting the position of those in favour of investing in nuclear technology. Nevertheless, although military security was part of the

338 See Araújo Castro, "O Congelamento Do Poder Mundial", in *Araújo Castro*, pp. 197-212.

339 See "O Que Há Por Trás da Bomba", *Manchete*, 9 December 1967; "A Política Nuclear do Governo Mudou até a Doutrina da 'Sorbonne', mas Ainda Subsistem as Vozes Dissidentes", *Folha de São Paulo*, 16 July 1967; "Política Nuclear, os Projetos, as Alternativas e o Mistério", *Visão*, 9 September 1974; Eduardo Pinto, "Brasil, os Difíceis Caminhos da Energia Nuclear", *Jornal do Brasil*, 16 June 1974.

340 A good example of those against investing in nuclear technology is by Glycon de Paiva, "A Indústria Atômica no Brasil", *Carta Mensal*, April 1968, pp. 17-26.

decision to fight in favour of the right to peaceful nuclear explosions, the technological aspect predominated. Access to advanced science and technology, with eventual military application, was the determinant in the decision to launch a nuclear policy. In contrast to India, for example, where the military aspect had been salient since the beginning of its nuclear policy (and became even more prominent after the Chinese explosion of a nuclear device in 1964), in Brazil the announcement of 1967 was primarily motivated by developmental concerns. No external security issue appeared to be the prominent cause. The decision taken by the Costa e Silva government as well as the alleged regional competition with Argentina will be fully explored in the next chapter.

Perceiving that Brazil would achieve nothing in Geneva, where the US-Soviet preliminary draft indeed became, after some amendments, the Non-Proliferation Treaty, the solution according to Itamaraty was to use the negotiations at Mexico City to undue the wrongs made in Geneva. The insistence on the inclusion of the two Additional Protocols was part of this policy. The guarantees sought by the nuclear powers not to attack any member of a NWFZ with nuclear weapons, was intended as a concrete security guarantee, more precise than the promises included in the draft being discussed at Geneva. In Geneva there were no security guarantees whatsoever against the use of nuclear weapons against nations which did not possess them. Thus, the idea in Mexico was to achieve clearer commitment to the security of the non-nuclear powers, within the notion of a more just balance of rights and obligations.

The nuclear powers reacted swiftly to the solution arrived at Mexico. In signing the Additional Protocol II, Washington, Moscow and London voiced their commitment to respect the status of the area. They pledged not to employ nuclear weapons, only under certain conditions. The conditions were that this pledge

did not apply whether they entered into a state of belligerence against a nation in the area which was allied with another nuclear power. Indeed, it is an understandable provision in preserving their independence of manoeuvre. Moreover it was the first time ever that the three nuclear powers gave an explicit security guarantee to non-nuclear states. Also in this respect Tlatelolco was considered as a model for other NWFZ.

Besides the criticism of article 18, on the right to conduct peaceful nuclear explosions, the five nuclear powers reacted to the Treaty of Tlatelolco according to their own interests in relation to the region. Clearly, Washington had more interests to preserve in the region than had Moscow. Avoiding a repetition of the Cuban missile crisis could well be a good reason for Washington's support of the treaty. In Moscow, where the concept of a NWFZ first germinated, Havana's conditions to join the treaty were supported, despite the continuous Soviet plea in favour of the universal application of the concept. Because of the importance of the debate between the nuclear haves and have nots to the application of the NWFZ concept, the reactions of the five nuclear powers to a NWFZ in Latin America will be examined in more detail.

4.5. The Role of the Nuclear Powers

One of the most delicate tasks attributed to one of the groups at COPREDAL – group C, coordinated by Brazil – were the negotiations with the five nuclear powers. The negotiations were intended to gain political support and legal commitment in favour of the idea of a NWFZ in Latin America from the nuclear powers. One approach was to discuss generalities at the Political Committee of the United Nations, or to pass resolutions at the UN General Assembly favouring the principle of the NWFZ concept. Another was to apply the notion to a particular region. This was when all the difficulties began.

The NWFZ concept was developed and supported by the Soviet Bloc and fiercely opposed by the Western powers. However, due to the circumstances by which the idea arose in Latin America, that is to prevent another situation similar to that which happened over Cuba, it was supported this time by the Western powers and rejected by the Soviet bloc, with the exception of Yugoslavia and Rumania. As the main guarantors of Castro's political survival, Moscow, even if reluctantly, supported Havana's argument against a NWFZ in Latin America and the Caribbean. By not sending a delegation to REUPRAL, and maintaining her posture of denouncing Washington's policy towards Latin America as the single source for the region's political problems, Cuba re-affirmed her regional isolation. In this context of political polarisation, it was impossible to gain an equal support from the five nuclear powers.

Apart from the expected reaction from London – full support for the idea – France and China, the other two nuclear states, reacted badly to the idea. Beijing, isolated and excluded from the United Nations, was the only nuclear power outside the UN Security Council³⁴¹. Moreover, as a fierce critic of the idea of a non-proliferation regime, she was at the time the most intractable of the five nuclear powers. The first attempt made by COPREDAL to contact China was received with a mute silence. Eventually, after several unsuccessful attempts at diplomatic communication, Beijing responded with an encouraging political statement. Stressing that her nuclear arsenal was only for self-defence, due to the polarisation of the global order, she responded with her usual diatribes against both superpowers and the nature of the global order. However, in responding she opened the path for a successful contact.

341 A useful theoretical analysis of France and China behaviour as critics of the bipolar global order is made by Ole R. Holsti and John D. Sullivan, "National-International Linkages: France and China as Nonconforming Alliance Members", in James Rosenau (ed.), *Linkage Politics*, New York, The Free Press, 1969, pp. 147-95.

France, being also a critic of the idea of a non-proliferation regime, stayed out of the negotiations. As an original member of the ENDC, in which she never participated, she was pursuing the Gaullist path for an independent foreign and defence policy, which put so much strain on her relationship with Washington and London. She abstained on the vote for a NWFZ in Latin America, and did not want to be an active partner. Besides, possessing territories within the geographical boundaries of the treaty, she was also included in the negotiation process in this capacity. To Paris, at the time when France was vehemently asserting the independence of her foreign policy, the idea of surrendering the right to use her territories freely was a non-starter. She considered these territories to be an integral part of France. Thus, according to Paris, France was unable to surrender her sovereignty.

The treaty was actually negotiated without the direct participation of the nuclear powers, which only sent delegations to some meetings with observer status. Nonetheless when the negotiations appeared to be reaching a successful conclusion, with the introduction of an inedited mechanism for security guarantees, they realised the responsibility involved in this commitment. Therefore, the five reacted in a way which suited best their interests. Their reactions are summarily described below:

1) The United Kingdom was the first nation to sign and ratify the Protocol II. She signed on 20 December 1967, with the following notes accompanying the signature: that the treaty's legislation should not contradict the rules of international law. Second, she did not recognise Article 18, allowing peaceful nuclear explosions. In London's view, this article was incompatible with Articles 1 and 5. Moreover she affirmed that nothing in the treaty might affect the status of the territories by which she has legal possessions within the geographical boundaries of the treaty. Concluding her remarks, she reserved the right to use her own

nuclear weapons, if attacked by any signatory of the Treaty in alliance with, or with the support from, a nuclear power³⁴². London signed the Additional Protocol I in 20 December 1967, and ratified it in 11 December 1969.

2) Washington gave more moderate support to the notion, worried that the negotiations could lead to a treaty which might contradict the inter-American security arrangements. Besides, the lessons of the recent past in Cuba loomed large in her cautious posture. She was aware that the zone of application of such a treaty was contiguous to her own mainland. In addition, the geographical scope of the treaty included her territories of Puerto Rico, the Panama Canal Zone, the Virgin Islands as well as the military base of Guantanamo in the island of Cuba. Therefore, she was reticent to commit herself to support both Additional Protocols, especially regarding the status of the Panama Canal Zone. The issue of the transit of nuclear weapons within the area, which was not part of the treaty, was a major cause of concern. The encouragement which she gave to the idea during the Cuban crisis appeared to be ephemeral. Nevertheless, she finally supported the treaty, being the second nuclear power to sign the additional Protocol II in 1 April 1968. In her notes accompanying her signature, she gave the following qualifications: to preserve her right, according to international law, to make separate accords with any part of the treaty, in relation to questions of transport and transit of nuclear weapons, which was not mentioned in the treaty; she repeated London's pledge on the right to preserve the capacity to use nuclear weapons against any member of the treaty, whether this member was allied with or supported by a nuclear power; she also accompanied London in relation to the similarity between the technology of peaceful and non-peaceful

³⁴² The complete text of the British conditions in ratifying the treaty, as well as the text of the four other nuclear powers may be found in *Status of Multilateral Arms Regulations and Disarmament Agreements*, Third Edition, 1987, New York, United Nations, 1988.

nuclear explosions. She rejected article 18. However she offered her services to supply any nation which required using a nuclear device for peaceful purposes. When she ratified the Additional Protocol II in 12 May 1971, she reaffirmed all these observations. Finally she signed Additional Protocol I in 26 March 1977, and ratified it in 23 November 1981³⁴³.

3) France was the third nation to sign the Additional Protocol II in 18 July 1973. She made the following declarations: she reaffirmed her right for self-defence, following article 51 of the United Nations Charter. In addition she interpreted the treaty as non-applicable to transit of nuclear weapons within its boundaries. She affirmed the priority given to international law over the articles in the treaty. She would not accept any amendment to the treaty as legally abiding; she eventually ratified it in 22 March 1974. Paris signed the Additional Protocol I on 2 March 1979, but never ratified it³⁴⁴.

4) The fourth nation to sign it was China, on 21 August 1973. When signing, she made only a general declaration, not making any specific comment on any article or its two Additional Protocols. What she made was a general political statement, in line with the tone of her foreign policy, condemning the nuclear arms race conducted by both superpowers and supporting the idea of a NWFZ as a useful step towards a general and complete disarmament. She gave explicit guarantees not to use nuclear weapons against any nation which did not possess them. She ratified Protocol II in 12 June 1974³⁴⁵.

343 The full observations are included in *ibid.* op. cit; see also "Prohibition of Nuclear Weapons in Latin America", Hearings, Committee on Foreign Relations, US Senate, Ninety-Seventh Congress, First Session, September 1981, and *Arms Control and Disarmament Agreements*, 1982 Edition, Washington D.C., US Arms Control and Disarmament Agency, pp. 59-81.

344 Useful analysis of France's disarmament and non-proliferation policy are: Jean Klein «Continuite et Overture dans la Politique Francaise en Matiere de Desarmement», *Politique Etrangere*, n. 2 1979, pp. 213-47, and Bertrand Goldschmidt, «Le Controle de l'energie Atomique et la Non-Proliferation», *Politique Etrangere*, n. 3-4, 1977, pp. 413-30.

345 See *Status of Multinational Arms Regulation and Disarmament Agreements*.

5) The Soviet Union, originally the main supporter of the NWFZ notion abstained in the vote on the creation of a NWFZ for Latin America. As a consequence of her support for Cuba, it was a paradox for the nation which had more than any other been pressing for international recognition of the NWFZ concept as a viable means for regional and global arms control. Eventually, she resolved her drama by supporting the treaty, when she signed the additional Protocol II in 18 May 1978. She made then the following comments: she found it incompatible with the spirit of the treaty to permit peaceful nuclear explosions, as granted by Article 18; she was against extending the geographical boundaries of the treaty, including the territorial sea and the aerial space of the nations party to the treaty as stated in Article 3; she affirmed the supremacy of international law over the treaty; she interpreted Article 1 as not allowing the transit of nuclear weapons within its boundaries; she also followed London and Washington, affirming the right to employ nuclear weapons in the case of suffering an aggression committed by any member of the treaty supported by, or allied with, a nuclear power; like Paris, Moscow would not recognise any amendments to the treaty; she introduced a note in favour of the independence of the colonial possessions in the area, in line with a United Nations resolution. She ratified the Additional Protocol II in 8 January 1979³⁴⁶.

This summary of the evolution of the policies of the nuclear powers in relation to the Additional Protocol II of the treaty touches upon complex political issues. Dealing with the role of the nuclear powers in supporting the treaty and giving security guarantees, it made clear how the nuclear powers perceived their main security concerns. It is remarkable that each note which accompanied the signature of each nuclear power reflected their

346 See Michel Petrov, "La Unión Soviética y la Creación de una Zona Desnuclearizada en América Latina", *Vigésimo Aniversario del Tratado de Tlatelolco*, pp. 123-42.

specific interests and their particular relationship with the area. China, as a far distant nation, without a direct involvement in the area, used the opportunity for her habitual political proselytism. The Soviet Union, also as a distant geographical power, stressed the prohibition of transit of nuclear weapons within the area, but worried about Havana's security, affirmed her opposition to the 'colonial powers'. The United States, with his close interests in the region, as well as being contiguous to the free-zone, worried about any constraint on her use of the seas and her military basis in the Caribbean. The United Kingdom emphasised the legal aspects of the treaty and the preservation of her colonial possessions in the area. Similar to the UK, France also stressed the preservation of her colonial rights. As a critic of the non-proliferation regime, she sought also to preserve her room for manoeuvres.

While expressing their concerns on the illegality of peaceful nuclear explosions, Washington, Moscow and London were in fact accepting the treaty with reservations. Even if not explicitly reservations as such, they were interpreting the document in line with the provisions of the NPT, which prohibited them. As such, the issue became very sensitive to a nation like Brazil, because the refusal of the nuclear powers to recognise the distinction between different types of explosives, distinguished by intention, reinforced Brazil's reluctance to become a full member. Itamaraty, while pointing out the discriminatory nature of the NPT, took the notes against the explosions as a clear-cut example of an attempt to apply discriminatory rules to the regional treaty, similar to what happened in Geneva.

Defending the achievements of an alleged non-discriminatory treaty such as Tlatelolco, against a discriminatory one such as the NPT, Itamaraty was able to successfully defend its line in favour of 'keeping open the nuclear option'. Perceived as a legitimate right to gain access to technology, its defence of these aspects of the

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Tlatelolco Treaty in opposition to the NPT was meant to represent a fight against a coalition of superpowers and great powers. This coalition was perceived as one which aimed to preserve their lead in military as well as peaceful technological role in the field of nuclear technology.

5. BRAZIL'S NUCLEAR POLICY AND THE REGIONAL APPROACH TOWARDS NUCLEAR PROLIFERATION IN LATIN AMERICA

By hardening her posture in Mexico, Brazil achieved a final treaty with the inclusion of the highly contested article allowing peaceful nuclear explosions. She pressed also for the inclusion of two Additional Protocols. Meanwhile, the NPT was being drawn-up in Geneva, without either accepting the former or the security guarantees included in the latter. In addition, when a non-proliferation regime was being formed, Brasilia was embarking on a peaceful nuclear programme. After signing a contract with the American company Westinghouse Electric in 1971, importing the first commercial nuclear reactor, and signing a treaty with Washington in July 1972 to receive enriched uranium for thirty years³⁴⁷, the plan envisaged by the military administration was to continue expand the importation of nuclear reactors³⁴⁸.

However, the natural partner to export them – the United States – was passing through a period of revision regarding her nuclear policy, which eventually culminated in the decision to cut future promises to export enriched uranium³⁴⁹. As a consequence,

347 See “No Congresso Acordo Nuclear com os EUA”, *Jornal do Comércio*, 23 August 1972, and “Acordo Atômico”, *Jornal do Comércio*, 27 August 1972.

348 See Renato de Biasi, *A Energia Nuclear no Brasil*, Rio de Janeiro, Biblioteca do Exército Editora, 1979.

349 For the changes which occurred in Washington's policy in relation to the export of enriched uranium see Wonder, op. cit., and Brenner, op. cit.

Brazil's attempt to extend the deal with Westinghouse Electric, importing more nuclear reactors, which also included the importation of enriched uranium, was abandoned. Other American companies which could substitute Westinghouse Electric were also unsuccessfully contacted³⁵⁰.

As in the immediate post-war years, Brasilia felt that Washington was interfering in her plan to implement a national nuclear programme. As a result, Brasilia established contact with other nations, searching an alternative to Washington. The US, with its new policy of refusing to guarantee the export of enriched uranium, prevented the deal with an American company. As the nuclear industry was passing through a period of great expansion in Europe, Brazil was able to find a partner in the Federal Republic of Germany. Brasilia had already signed a scientific accord with Bonn in 1969, aimed principally to exchange information in the nuclear field. But as recent comers into the nuclear export market, German companies desperately wanted to sell reactors³⁵¹. Therefore, to guarantee the deal, they accepted to export 'sensitive technologies' to Brazil.

In Brazil the German companies found a perfect partner, willing to buy a complete package of nuclear know-how and equipment. Nevertheless, the world-wide dissemination of nuclear technology for peaceful purposes was gaining more relevance as a politico-diplomatic issue³⁵². Beneath commercial deals, there was a fear of proliferation of nuclear weapons. The demand to import the complete nuclear fuel cycle was perceived as

350 See Robert Gillete, "Nuclear Exports: A U.S. Firm's Troublesome Flirtation with Brazil", *Science*, 189, July 1975, pp. 267-69.

351 On the development of the German export strategy see Erwin Hackel, "The Politics of Nuclear Export in West Germany", in Robert Boardman and James Keeley (eds), *Nuclear Exports and World Politics. Policy and Regime*, New York, St. Martin Press, 1983.

352 See Robert Boardman and James Keeley, "Nuclear Export Policies and the Non-Proliferation Regime", in Boardman and Keeley (eds.), op. cit.

increasing this risk. Demands from nations situated near areas of regional conflict were used as an ultimate source of explanation for this booming market. The result of the domination of the complete nuclear fuel cycle could be devoted for military use.

It is the aim of this chapter to describe the evolution of Brazil's domestic and foreign nuclear policy and to frame them within the regional approach. Some significant Brazilian decisions in the nuclear field were understood as being taken to reflect rivalry with Argentina for regional predominance. Ultimately her motivation to master nuclear technology, according to this approach, can be explained as a result of a regional 'nuclear race'. Global prestige and primacy in South America were the two explanations most frequently employed under this approach.

The problem with this framework of analysis is that it does not explain well some Brazilian as well as Argentine postures and procedures. For instance, the Brazilian-German deal of 1975, perceived by many as being primarily motivated by a desire for non-peaceful goals, was not perceived in this way by Buenos Aires. Moreover, since the late 1970's Brazil and Argentina evolved an unprecedented degree of nuclear cooperation, under a project of economic, technical, political and diplomatic cooperation. Although it is too soon to evaluate the scope and result of this ambitious project, or to speculate on its future prospects, the fact is that it was implemented. The history of their technological cooperation, as well as diplomatic coordination in the nuclear field, complicates the explanation based on regional competition.

It is the argument of this chapter that particular regional causes made possible the coordination of their nuclear diplomacy against a non-proliferation regime perceived as undermining their best interests in favour of the industrialised nations of the Northern hemisphere. Argentina's international isolation and

Brazil's perception of being punished by not being a member of the NPT, led to a joint diplomatic posture towards the nuclear regime. In their denunciation of an alleged control of sophisticated technology by the industrialised nations, Brasilia and Buenos Aires discovered a common enemy. Therefore, it paved the way to substantial achievements in confidence-building measures in the nuclear field.

The first session of the chapter is devoted to analyse the evolution of Brazil's domestic nuclear policy, which culminated in the decision taken in 1967 to implement a nuclear programme for energy production. The emphasis will lay on Brazil's early ambition to gain access to nuclear know-how, and how it shaped the progress of her ambition to master complex technologies.

The second part will discuss the principal features of the non-proliferation regime as perceived by some critical nations such as Brazil, that is, as a means to undermine the attempt of several nations to control advanced technology. Within this discussion, the main argument of the regional approach towards nuclear proliferation will also be addressed.

The sessions which follow will explore the evolution of Brazil's nuclear programme and develop the argument that the cases of Brazil and Argentina contradict the hypothesis that it is possible to generalise for every single case the regional approach for nuclear weapons proliferation.

5.1. The Evolution of Brazil's Domestic Nuclear Policy

A satisfactory history of the development of the Brazilian domestic nuclear programme has yet to be written. More than four decades of political, scientific and administrative efforts to master nuclear technology generated different versions of this development. Social scientists, natural scientists, journalists and

military officers produced memoirs and partial analyses of certain specific elements of this historical evolution, using varying degrees of reliable evidence. The consensus appears to be that the single most important trait of this evolution has been its unstable nature. The lack of continuity, the difficulty of implementing decisions and overcoming institutionalised practices has characterised the Brazilian domestic nuclear policy since its inception in the early 1950s³⁵³.

Brazil's involvement with nuclear issues started even earlier. In the spirit of the United States-Brazil war pact, Brazil began to export to the United States a certain amount of radioactive minerals. As a result of the existence of abundant non-explored deposits of radioactive materials – especially monazite sands – in Brazilian soil, from which rare earth, uranium and thorium could be extracted, she became an original member of the first international meeting convened to discuss multilateral nuclear issues under the auspices of the United Nations – the Atomic Energy Commission.

The Brazilian representative at the Commission's meetings, Admiral Alvaro Alberto da Motta e Silva, became the founding father of nuclear nationalism in Brazil³⁵⁴. He developed, since his passage from the Commission, a deep interest on nuclear matters, and was astonished by the peaceful application of this technology and by the American national organisation for scientific research. As a consequence, he sought to gain support from American officials to aid Brazil's scientific and technological development through sharing scientific information.

353 A defence of the Brazilian necessity to master nuclear technology, combining political and technical arguments, and assessing the evolution of its nuclear programme is made by Guido Fernando Silva Soares, *Contribuição ao Estudo da Política Nuclear Brasileira*, unpublished PhD dissertation, Pontifícia Universidade Católica de São Paulo, 1974.

354 On Admiral Alvaro Alberto, see the biographical information contained in *Dicionário Histórico-Biográfico Brasileiro, 1930-1983*, edited by Israel Beloch and Alzira Alves de Abreu, Rio de Janeiro, FGV/Ed. Forense, 1984, pp. 38-39.

As an exporter of raw materials, and with a weak industrial base, Brazil developed a typically centre-periphery relationship with the US, as far as nuclear materials were concerned. There was nothing else that she could offer as a trade-off to fulfil Alberto's dreams of sharing scientific information with the US. Moreover, Brazil was not Canada or the Belgium colony of Congo, the two main exporters of uranium to the United States during the Manhattan project. She exported raw monazite sands, a less crucial mineral to the enrichment process. Despite this, Alberto's participation at the UN Commission led him to try unsuccessfully to gain free access to nuclear know-how, as well as technology and equipment.

In line with the wartime alliance between Rio de Janeiro and Washington, Itamaraty instructed Alberto to support the Baruch Plan³⁵⁵. One of the proposals of the Baruch Plan was to centralise the deposits of radioactive minerals under an international authority, which would have jeopardized Brazilian interests as an exporter of raw materials. As a consequence the instruction was not well received by Alberto, who nevertheless voted according to Itamaraty instructions. Alberto was saved, however, when the Soviets blocked the Plan. Meanwhile, he pursued his intention to convince the American delegation to share basic nuclear knowledge with Brazil. He was, of course, unsuccessful, sharing instead the disappointment of much more closer American allies such as the United Kingdom and Canada.

Alberto was a persistent personality. Fascinated by what he learnt on the potential of nuclear physics for scientific advancement and economic prosperity, as well as by the importance of state's intervention to foster science and technology, he pressed

355 The instructions from Itamaraty, including the telegram to Alberto containing the support of the Baruch Plan, dated from 20 June 1946, are discussed in Moura, *op. cit.*, p. 231-34.

the Brazilian government for the foundation of a public agency in Brazil. To coordinate scientific and technological development a centralised institution was needed³⁵⁶. Following his advice, President Eurico Gaspar Dutra established in 1951 a National Research Council (Conselho Nacional de Pesquisas – CNP), with Alberto as its first President. The idea was to concentrate at state level the planning and implementation of a national strategy for scientific research. Alberto dreamt of emulating the impressive American progress in science and technology. Impressed by the American industrial achievements during the war, especially with the success of the Manhattan project, he wanted to lay the foundations of a modern scientific base. As a result of his influence, in the foundation and organization of the CNP, nuclear research was a priority.

The perception of nuclear physics as marking the beginning of a new scientific and technological era became paramount among the tiny minority of the Brazilian elite interested in scientific and technical progress³⁵⁷. Nuclear technology, it was felt, would ultimately result in a third industrial revolution. Following coal and oil, it was likely to be, according to them, the major future source of energy. Since that time, this argument was continuously employed by those who defended an autonomous development of nuclear technology³⁵⁸. For them Brazil could not afford to miss it, after being a latecomer to the two previous industrial revolutions, this faith in the power of nuclear technology as a source of energy as well as a source of peaceful industrial development gained continuous support from the Brazilian nationalist and industrial-

356 See Regina Lucia de Moraes Morel, *Ciência e Estado: A Política Científica no Brasil*, São Paulo: T.A. Queiroz; Simon Scharzman, *Formação da Comunidade Científica no Brasil*, São Paulo e Rio de Janeiro, Companhia Editora Nacional/FINEP, 1979 and Spina Forjaz, art. cit.

357 See José Leite Lopes, "O Problema da Energia Nuclear no Brasil", *Revista do Clube Militar*, n. 153, 1958, pp. 19-30.

358 For an overall analysis of the beginning of the Brazilian nuclear programme see Leal, op. cit.

ising elites, civilian as well as military. Alberto's initial efforts to convince Washington to allow the Brazilian access to scientific knowledge and equipment became since a symbol for the nationalists. As a scientist and a navy officer, Alberto is remembered by these two influential parts of the Brazilian decision-makers in the nuclear field.

Unsuccessful in his request for sharing scientific knowledge, Alberto developed a strategy for dealing with Brazil's exports of radioactive minerals. It was the idea of framing them under 'specific compensations' (*compensações específicas*)³⁵⁹. This was intended as a means to gain more from the exports than a normal commercial transaction would provide, that is technology and scientific knowledge. Brazil would only export her radioactive minerals to the US if receiving scientific information and aid to gradually develop its own expertise on nuclear issues.

As expected, Washington did not agree with the notion of 'compensações específicas', and accordingly pressured Itamaraty to maintain its previous policy of exporting minerals without any specific compensations whatsoever. Some of the policy-makers responsible for controlling the export of radioactive materials, led by Itamaraty, wanted to keep the atomic accords made with Washington as they were³⁶⁰, without pressing for any kind of compensation. They were motivated by a strict alliance mentality as well as by immediate balance of payment concerns. The other group of policy-makers, led by Alberto and the CNP and backed by some sectors of the armed forces, sought to reverse, or at least to add some specific measures, to the traditional relationship between the exporter of raw materials and the receiver.

359 On 'compensações específicas' as a way to conduct the relationship with Washington and the problems involved with this strategy see Wrobel (1986), pp. 37-42.

360 The first atomic accord between Rio de Janeiro and Washington dated from 6 July 1945. See Moura, *op. cit.*, and Leal, *op. cit.*

Following the negative answer from Washington on any share of information or export of technology – a policy codified the MacMahon Act – Alberto turned his attention to import know-how and equipment from other nations. After an unsuccessful approach with the French, he was successful with the Germans, who agreed to sell some research equipment. They were few ultracentrifuge machines at research scale to train in the process of uranium enrichment. Nevertheless, when the sale was agreed, and Alberto was preparing secretly to embark this equipment to Brazil, it was embargoed by British officials under the request of the Americans³⁶¹. This happened in 1954, and when the Federal Republic of Germany did not enjoy full sovereign status. The allied powers had responsibilities for security in the FRG, and they prohibited the export of such equipment. When Washington discovered the sensitive nature of Germany's shipment to Brazil, they immediately prohibited it. They seized the equipment, which was eventually shipped only in 1957, after Bonn gained more autonomy. The equipment was then installed at the recently founded Research Institute on Nuclear Engineering (Instituto de Pesquisa em Engenharia Nuclear – IPEN) in São Paulo, but had a very short life and the project was soon abandoned.

The 'compensações específicas' notion and the attempt, led by Alberto, to interrupt or to reverse the export of radioactive minerals to the US, as well as the attempt to secretly import equipment from Germany were the main causes for Alberto's downfall from the presidency of CNP in 1956. By the evidence available, Alberto was forced to resign due to pressure exerted directly by the American embassy. In the interim government led by Vice-President Café Filho, after the suicide of President

361 For details of the American embargo and Alberto's reaction to it see the interview with Renato Archer located at the Centro de Pesquisa e Documentação de História Contemporânea do Brasil – Fundação Getúlio Vargas, Rio de Janeiro. Interview with Renato Archer, 1977/1978.

Getulio Vargas in 1954, the influence of General Juarez Tavora, an adversary of Alberto, was high. He was able to force Alberto's resignation of the presidency of the CNP, based on allegations of maladministration and corruption³⁶².

In 1956, during the Kubitschek government, a National Agency for Nuclear Energy (Comissão Nacional de Energia Nuclear – CNEN) was established. The idea of founding a centralised agency, subordinated directly to the President, and with autonomy to formulate and implement policy was based on the successful example of the US Atomic Energy Agency. At the same time many other nations were creating similar agencies to formulate and implement national nuclear programmes, like for instance Argentina, France and India.

The creation of a specialised agency to formulate a nuclear programme marked Brazil's effective entry into the nuclear era. Eventually, the foundation of research facilities – especially the Atomic Energy Institute (called Instituto de Energia Atômica – IEA – between 1956 and 1979, after 1979 called Instituto de Pesquisas Energéticas e Nucleares – IPEN) and the sending of students and technicians abroad consolidated the development of an initial technical capacity on the nuclear field. Research reactors were finally bought from the United States, which made them available by the revision of the MacMahon Act. Under the auspices of the Eisenhower's 'Atoms for Peace' programme, and through a nuclear accord signed between Rio de Janeiro and

362 The story of Alberto's resignation and the American role was investigated with the formation of a Commission of the Brazilian Congress (CPI) in 1956. The session of the CPI with General Juarez Tavora, discussing the downfall of Alberto as well as the texts of four documents written by the American Embassy in Rio de Janeiro criticising Alberto and proposing the continuity of the exports to the US, are included in Juarez Tavora, *Átomos para o Brasil*, Rio de Janeiro, José Olympio Editora, 1958.

Washington in 1955, Brazil began to have access to research in the nuclear field³⁶³.

This initial activity in establishing a research infrastructure in the country could give, however, a false impression that a coherent and well planned policy was being drawn-up and implemented. Despite the command of CNEN, the research facilities implemented were lacking in real coordination. They ended up following their own research interests, due to the absence of a clear-cut national programme. Apart from a modest policy of education, Brazil was neither financially nor technically capable to invest heavily in research facilities. Moreover, a robust private sector was lacking. A single private chemical plant – ORQUIMA – which transformed the monazite sands into chemical products was the only link with private capital. They were not interested on the diverse complementary metallurgic, chemical or other industrial activities essential to the development of an industrial infra-structure in the nuclear field.

As a result of divergences among the tiny nuclear physics community, as well as among politicians, on the most suitable line of development and the lacking of clear goals, CNEN eventually dispersed resources without any effective centralised direction. An industry like the nuclear sector demands huge investment in a high degree of technology and expertise, a clear-cut purpose and administrative continuity to bear fruit. Good intentions were not sufficient³⁶⁴.

A major source of this indecision, which characterised the first decade of the Brazilian nuclear policy, appears to be related

363 For two conflicting views given by nuclear physicists regarding the import of American research reactors, see José Leite Lopes, "A Física Nuclear no Brasil: Os Primeiros Vinte Anos", in *Ciência e Liberdade*, Rio de Janeiro, Editora Paz e Terra, 1969 pp. 133-46; "Nosso Tório foi Trocado por Sobras de Trigo" interview with Marcelo Damy de Souza Santos, *O Estado de São Paulo*, 2 September 1979.

364 A brief description of the principal disagreements among nuclear physicists on the best policy to follow is given by Wrobel (1986), pp. 71-81.

to the choice of the best technological pattern to follow. Two types of commercial reactors were being developed in the advanced nuclear nations. One was based on natural uranium and heavy water, while the other on enriched uranium. Reactors using enriched uranium were a by-product of the military use of this fissile material to explosives. The use of the natural uranium was developed by nations such as Canada, without military purpose.

In Brazil, some nuclear scientists defended the investment at research level on technology which could make use of Brazil's abundant mineral wealth, such as the thorium, or defended using natural uranium³⁶⁵. For them, a national nuclear policy should be aimed to gain independence in know-how and fuel technology. As Brazil lacked huge reserves of uranium and did not possess the complex and costly facilities to enrich it, a sound policy was one based on indigenous knowledge and minerals. As a consequence, one of the three major nuclear research centres, the Instituto de Pesquisa Radioativa (IPR) in Belo Horizonte, established a group which aimed to develop research on thorium as a fuel for nuclear reactors. This mineral was abundant and could be used as fuel for both research purposes and to power commercial reactors. They became known as the 'Grupo do Tório', led by the nuclear physicist Francisco Magalhães Gomes³⁶⁶.

Another group of scientists and policy-makers was defending a different path. They were in favour of importing a more developed and commercially experienced foreign nuclear technology. For them Brazil lacked both time and skill to spend resources on indigenous research. Importing foreign technology,

365 See Marcelo Damy de Souza Santos, J. Goldemberg and J. Leite Lopes, "O Papel do Tório no Aproveitamento Industrial da Energia Atômica", *O Estado de S. Paulo*, 25 April 1956.

366 On details of the 'grupo do tório' see José Murilo de Carvalho, *A Política Científica e Tecnológica do Brasil*, unpublished research, Rio de Janeiro, IUPERJ, mimeo., 1976 pp. 84-86 and the interview with Magalhães in Simon Scharzman (ed), *História da Ciência no Brasil – Acervo de Depoimentos*, Rio de Janeiro, CPDOC-FGV and FINEP, 1984.

especially by deepening the special relations with Washington, by then the leading power in nuclear technology, was seen as the solution. Thus Brazil should create facilities to absorb, not to produce nuclear technology. The indecision between those two competitive patterns of development which, by and large, were not restricted to the nuclear field, impeded the implementation of a clear-cut and stable programme.

Even the creation of a centralised agency, with the power to formulate and implement policy did not resolve the impasse. Moreover the huge public investment in infra-structure made during President Kubitschek administration contributed to postpone the formulation of a coherent nuclear policy. It was not a priority among top policy makers. More pressing demands for public investment shadowed a long-term and carefully planned nuclear programme.

During the short period of President Quadros and the unstable period of President Goulart – 1961-1964 – the emphasis laid on the first pattern of nuclear development. A leading member of the scientific community became the head of the CNEN, the nuclear physicist Marcelo Damy³⁶⁷. Nevertheless, the turbulent political scenery did not create the conditions for stability. Moreover, both administrations gave priority to domestic reforms and a reformist foreign policy based on defending arms control and disarmament. As a consequence a massive investment in nuclear technology was certainly not a priority.

When Foreign Minister Afonso Arinos was expressing at the ENDC a vigorous policy in favour of regional and global nuclear disarmament, he was certainly expressing the priority of Brazil's 'independent foreign policy'. The idea that Brazil's future prosperity

367 See two interviews with Marcelo Damy de Sousa Santos: in Simon Scharzman, *op. cit.*, and with *O Estado de São Paulo*.

lay in exploiting nuclear technology for peaceful purposes did not cease to be a powerful drive in the imagination of a handful of scientists, politicians and military officers. But Marcelo Damy, then responsible for the domestic nuclear policy, was committed to a modest programme. He criticised any ambitious programme or the commitment of huge investment in a nation which still lacked basic modern facilities. He defended a long-term strategy, preserving independence from foreign constraints and emphasised research rather than the importation of technological packages. Nevertheless, the opportunity which the latter group was expecting to influence policy-making on nuclear issues arrived with the coup of March 1964.

The alliance between the armed forces and the technocrats who implemented a modernising strategy, turned out to emphasise the role which nuclear technology could play in closing the gap between Brazil and the industrialised nations. However, this was not immediately implemented. Great difficulties in finding financial resources as well as the expertise to develop a clear-cut and long-term programme did not disappear with the change of intentions. Civilians trained on the complex issues involved in mastering nuclear technology as well as politicians and diplomats played a decisive role in this change of emphasis. Itamaraty's officials at a high rank, led by Sergio Correa da Costa, were fundamental in the movement in favour of investing in an extensive nuclear programme³⁶⁸. As Itamaraty was responsible, with the approval of the military, for challenging the nuclear non-proliferation regime at Geneva and Mexico City, it was determined

368 Sergio Correa da Costa assumed in February 1966 the direction of the 'Secretaria-Geral Adjunta de Organismos Internacionais', a key formulator of the nuclear diplomacy, and later on he was the Secretary-General of the Minister of Foreign Relations under Minister Magalhães Pinto. See Silva Soares, *op. cit.*, and Viana Filho, *op. cit.* p. 449.

to support a vigorous domestic programme for developing nuclear technology.

The second military President, Marshal Costa e Silva, assumed office in March 1967, after an economic adjustment implemented by Castelo Branco and his orthodox economic ministers. They implemented a successful anti-inflationary and stabilisation policy. Considered as politically more radical as well as more nationalist than the members of the Castelo Branco administration, Costa e Silva's government sought to reverse the economic recession of the previous period and implement a different economic policy. As a consequence, he tried to rally domestic support. In his first speeches, Costa e Silva put great emphasis on science and technology as pillars for his project of development. As part of this priority given to science and technology, nuclear technology re-gained its symbology as a most advanced technology.

In fact, influential diplomats already familiar with the nuclear issue were seeking to conquer the support of the armed forces for this project. Between May and July 1966, a course was organised by Itamaraty on the nuclear issue, coordinated by Sergio Correa da Costa. Scientists, diplomats and military officers gave lectures³⁶⁹. Attending the course was an influential and attentive section of opinion, capable of influencing the highest levels of policy-making in Brasilia. Frustrated by the direction by which the negotiations on the NPT in Geneva were following, contrary to Itamaraty views, this course helped to solidify the idea about the nature of the non-proliferation regime³⁷⁰. Brazil believed it was being bypassed in

369 See the transcripts of some lecturers of the course in *Revista Brasileira de Política Internacional* (special number on the Brazilian nuclear policy). The last lecture was given by Correa da Costa himself. It is on pp. 18-43. The course was organised with the collaboration of CNEN, then under the presidency of Luis Cintra do Prado, a nuclear nationalist. To sense the importance of the course, the Minister of Foreign Affairs, Juracy Magalhães opened the course and was presented in the final lecture.

370 Correa da Costa's lecture was named "The World Nuclear Development: Bases for a Brazilian Policy". See Silva Soares, *op. cit.*

Geneva by a superpower coalition. As a consequence, it helped those who were pressing for an extensive nuclear programme at home.

Meanwhile, Brazil was carefully conducting the negotiations in Mexico City. Sergio Correa da Costa substituted Sette Câmara at the fourth and last meeting of the COPREDAL, demonstrating his influence on nuclear policymaking and the importance which Itamaraty gave to the event. Without power to influence in Geneva, Correa da Costa, following Araújo Castro, sought to prevent being trapped in the 'freezing of international power', crystallised, according to him, by the American-Soviet handling of the negotiations on the NPT³⁷¹. With the perception that Brazilian interests in Geneva were not being taken into consideration, Itamaraty concentrated its expertise in creating a treaty at Mexico without any of the inhibitions to its nuclear development believed to be occurring in the joint American-Soviet treaty in Geneva.

Domestically, the institutional reforms in the nuclear field implemented by the new administration were profound. CNEN was put under the control of the Ministry of Mines and Energy, so subordinating the nuclear programme to the necessities of producing energy on a commercial scale. The 'grupo do tório' was disbanded, and the first priority was given to short-term commercial results. Under the motto 'security and development', the Costa e Silva administration sought to continue the economic policy based on foreign investment, with a moderate nationalistic tone. For this, he tried to mobilise the support of the scientific community. However, this part of his plans

371 A good example of Itamaraty's view of the negotiations held in Geneva is an Araújo Castro's speech at the ENDC in February 1968: "O Problema da Proliferação Nuclear" in *Araújo Castro*, pp. 53-60. See also an 'aide memoire' distributed by Itamaraty to the Latin American Ambassadors in Brasília in April 1968, explaining the Brazilian rejection of the American-Soviet preliminary draft: "O Brasil e o Projeto do Tratado de Não-Proliferação de Armas Nucleares", *Relatório do Itamaraty 1968*, Brasília, Minister of Foreign Relations, 1969, pp. 95-97.

failed³⁷². The scientific community did not trust the intentions of his administration, even with his open plea in favour of science and technology. The political climate at that moment was not conducive for supporting the government.

The new direction of the domestic nuclear programme led to a decision to import Brazil's first commercial reactor from the United States in 1969. It was planned to be located at the Southeast, at the core of Brazil's urban and industrial centres³⁷³. Studies by Eletrobras, the state-owned electricity company, were used to back the future energy needs in the crucial Southeast region. A gloomy prognosis of energy shortcomings was deemed incompatible with the intention to accelerate economic growth. The plan was to raise the GNP to an annual average of 7% and abundant energy supply was fundamental to achieve this target.

A group of experts were sent abroad to study the best technology available and chose the right model of commercial reactor³⁷⁴. With the choice of the PWR model, utilising enriched uranium, as the best type available on the market for energy production, the other alternatives based on natural uranium and thorium were abandoned and the research done by the scientists terminated³⁷⁵.

Apparently, the main disagreement regarding the best technology suitable to Brazilian conditions was resolved in favour of an American made technology, using enriched uranium as fuel. This decision evolved into the first contract with a foreign

372 See "Chanceler Chama os Técnicos para Estudar Política Nuclear", *Jornal do Brasil*, 16 July 1967; "Magalhaes: Política Atômica e Firme e não Sofrerá Alterações", *Jornal do Brasil*, 23 June 1967.

373 In fact, CNEN has already developed in the late fifties a plan to build a first commercial reactor to be located at the state of Rio de Janeiro. However, the 'Projeto Mambucaba', as it was named, failed. For details see Biase, *op. cit.*, pp. 47-50.

374 See *ibid.*, *op. cit.*

375 On details of this option see Marcelo Damy in both interviews cited.

company to import a commercial nuclear reactor. Westinghouse, then the leading firm in the production of PWR models of commercial nuclear reactors, was chosen. As part of the contract, the US government signed a term of compromise to export the amount of enriched uranium required, and Brazil agreed to put all the imported equipment under the safeguards of the International Atomic Energy Agency.

This decision which apparently resolved the old polemic over the appropriate type of fuel as well as the appropriate type of technology for a commercial nuclear reactor was, however, not consensually taken. In fact it alienated a great part of the scientific community, which persisted in favour of another technical solution. Their main argument was that their model did not depend on imported fuel and imported commercial reactors. Criticising the option made in favour of enriched uranium, with the consequence dependence on Washington's promise to export it, this group of scientists was once more supporting a more nationalistic option, which associated autonomy in technology with autonomy in economic as well as political terms. They were not persuaded by Costa e Silva's promises to invest heavily in science and technology. Neither were they persuaded by the choice made of importing a commercial nuclear reactor from Westinghouse.

Some scientists even began to expound their concerns on the real motivation behind these secret decisions. A military-led government, without control from the public opinion, could well be interested in nuclear development purely for non-peaceful purposes. Nevertheless, there was no evidence that the military as policy-makers at this stage had any hidden agenda, apart from a verbal commitment to 'national security' and great power aspirations. Moreover, the scope of the bilateral safeguards with the US, put all the sensitive materials under the full control of the IAEA.

What was more likely to give the appearance that Brazil was pursuing hidden military purposes in its commitment to dominate nuclear power was her nuclear diplomacy. As one of the leaders of the group of nations expressing concerns and proposing amendments to the NPT, Brazil aligned herself with a group of nations considered to be potential nuclear proliferators. Itamaraty continued, however, to stress Brazil's peaceful purposes, aiming to defuse domestic as well as foreign criticism. It employed as the standard answer against Brazil being a possible proliferator the notion that she had as much right for to 'keeping open the nuclear option' as any sovereign state.

Attempts to influence and change this decision were regularly made by Washington and Moscow alike since she refused to sign the NPT. Itamaraty was well prepared to defend Brazil's position. Brazilian diplomatic posture, according to Itamaraty, should be understood as a result of the option made to master nuclear technology for peaceful purposes. It has been an option cultivated in Brazil since the days of Admiral Alvaro Alberto. For economic as well as security reasons, according to the motto 'security and development', Brazil could not accept a non-proliferation regime perceived as a barrier to economic development.

The impression of a master plan built by the military government with the aim to avoid the constraints of the non-proliferation regime was reinforced by Brazil's policy at Mexico City. In contrast to Geneva, where Brazilian attempts to amend the NPT failed, in Mexico City she was able to impose her views. Therefore, a position of non-acceptance of the non-proliferation regime was crystallised in Brazil.

5.2. The Regional Approach towards Nuclear Proliferation

The mystique of nuclear technology as the ultimate modern technology started with the launching of the 'Atoms for Peace'

programme. It was intended as a means to disseminate nuclear technology to respond the growing demand for energy which accompanied expanding economies. But from Eisenhower's optimism of widespread cooperation, sharing a useful and peaceful technology for human progress, to Kennedy's nightmare of a world full of nuclear armed states, elapsed only a few years. Barely a decade passed and the fear of the horizontal proliferation of weapons of mass destruction led to the formation of a Soviet-American-British coalition to control the spread of nuclear weapons and sensitive technologies.

Although the complications involved in making this coalition work³⁷⁶, the two superpowers were able to achieve two rather identical preliminary drafts on a treaty to curb horizontal proliferation³⁷⁷. The American and the Soviet preliminary drafts contained similar purposes that were to halt new nations, apart from the five, gaining access to fissile explosive technology. In the Brazilian view, the drafts did not follow the five guiding principles previously set down by the General Assembly of the United Nations for a non-proliferation treaty³⁷⁸.

As Hedley Bull, among others, pointed out, 'club' is too strong a word to define how the two main nuclear powers acted in a concert to freeze the distribution of world resources and power³⁷⁹.

376 The great difficulties in achieving a Non-Proliferation Treaty are described in great details in Shaker, op. cit.

377 See Glenn T. Seaborg with Benjamin S. Loeb, op. cit., pp. 153-98.

378 The five guiding principles were formulated in General Assembly Resolution 2028(XX), approved by 93 votes against nil with five abstentions. See Shaker, op. cit., pp. 35-66. The Brazilian diplomacy repeatedly used the argument that the American-Soviet draft and the final treaty contradicted the five guiding principles. See Araújo Castro, "O Problema da Proliferação Nuclear", in *Araújo Castro*, pp. 53-60. Since then this became a constant Brazilian argument in defending its posture at bilateral and multilateral level. A more recent use of the same argument is "Statement by the Head of the Brazilian Delegation Ambassador C. A. de Souza e Silva, at the Conference on Disarmament", Geneva, mimeo. 26 July 1984.

379 See Bull (1975).

Nevertheless, by successful bilateral negotiations, over the heads of the rest of the world community, they were able to build up the pillars of a non-proliferation regime based on the control of horizontal proliferation. Both preliminary drafts contained, however, only promises of good intent concerning a reduction of their sophisticated arsenals. According to Brasilia, the way the negotiations were conducted undoubtedly contributed to the perception of the NPT as a condominium of great powers³⁸⁰. Or, at least, a result of concerted action by nations that wanted to maintain unjust global distribution of resources³⁸¹.

When the control of horizontal proliferation of weapons of mass destruction became a priority on the international security agenda, a non-proliferation regime first targeted the group of industrialised nations which did not possess nuclear weapons³⁸². Japan, the Federal Republic of Germany, Canada and Italy among others had the skills, industrial basis as well as military capability to implement, if chosen, a military nuclear programme. Thus, a treaty to curb horizontal proliferation, understood as a major source of regional and global instability, concentrated on tackling their political motivation to invest in military nuclear technology.

Providing security was a means to dissuade otherwise perfectly capable nations to seek their own means of defence. The impulse for self-help, meaning looking for the best technology available for a credible defence, was halted by a combination of

380 This was a point repeatedly made by Araújo Castro. For him the joint American-Soviet presentation of the draft in Geneva and at the United Nations was not properly a negotiation but an imposition. See Araújo Castro, art.cit.

381 In 1968 a conference of the non-nuclear states was held in Geneva. As a reaction against what was perceived as an attempt to monopolise nuclear technology through the NPT, many nations professed their fear that they would be left outside modern science and technology if they accepted the treaty. For the Brazilian projects presented at the Conference see "Brasil Fez Projetos Para Uso do Atomo" *Jornal do Brasil*, 21 September 1968.

382 See Lewis A. Dunn "Four Decades of Nuclear Nonproliferation: Some Lessons from Wins, Losses and Draws", *Washington Quarterly*, v. 13 n. 3, Summer 1990, pp. 5-18.

security alliances and persuasion. As a result, a non-proliferation regime was a trade-off. The renunciation of the right to develop nuclear weapons would be swapped for a commitment to guarantee the security of the non-nuclear armed states. It was understood that the deal would permit, and possibly even stimulate, the flow of peaceful nuclear technology under certain conditions accorded by the international community. The UN International Atomic Energy Agency was founded with this aim in mind³⁸³.

Apart from France and China – non-members of the NPT which since evolved to behave as if they were full members – the industrialised nations gradually laid down their criticism, and accepted the NPT. Spain was the last industrialised nation to accede in 1987. Able to develop a peaceful nuclear programme, and with their security provided by defence alliances, the most reticent industrialised nations, such as Japan, Sweden, Spain and the Federal Republic of Germany, were persuaded to abide to with a non-proliferation regime.

What originally appeared to be the main task of a non-proliferation regime – to dissuade technically capable nations from investing in military nuclear technology – was successfully achieved. Nevertheless, another group of nations which originally lacked scientific, technological and industrial skills was not equally convinced that such a trade-off suited their best interests. Initially too weak in industrial resources to be considered as potential proliferators, this group of nations was determined to go-ahead and implement a nuclear programme, even though it was probably above their financial resources as well as scientific and technological capacity. They gradually came to be seen as the most serious threat against a regime that, although imperfect, was able

383 See Bernhard G. Bechoefer, "Negotiating the Statute of the International Energy Agency", *International Organization*, v. 13, Winter 1959, pp. 38-59.

to persuade the industrialised nations, in the East as well as the West, from developing nuclear weaponry³⁸⁴. Apart from the Indian 'peaceful nuclear explosion' of 1974, no other nation has openly admitted contradicting the regime with either the explosion of a 'peaceful' or a 'non-peaceful' nuclear device.

With a combination of sheer motivation – even 'eating grass if necessary' as in the Pakistani Ali Bhutto's expression – investment in basic research facilities and an absorption of foreign technology, this heterogeneous group of nations constituted the main opposition against the nuclear regime. Constantly criticising its discriminatory nature, they intended to escape the alleged barriers erected to the diffusion of a modern technology. With a new set of control established after President Carter initiatives on non-proliferation, aimed to tighten the export rules of sensitive technologies, the regime became gradually more detailed and complex to manage³⁸⁵. For these nations, the tightening of the export rules was used as an example of its 'colonial' nature. Henceforth, horizontal non-proliferation was linked by them to the North-South debate. Or at least, this is what appeared to be the intention of the most vociferous members of the South, when the North-South divide was a strident issue in the global agenda³⁸⁶.

The first oil crisis of the early 1970s accelerated the development of nuclear technology for peaceful purposes. Thus, only few years after the NPT was opened for signature, some unexpected factors stimulated the appearance of a new set of

384 See William Epstein "Nuclear Proliferation in the Third World", *Journal of International Affairs*, v. 29, Fall 1975, pp. 185-202.

385 From late 1974 Washington led a first attempt to create a Nuclear Supplier's Group. In Carter's foreign policy priorities, non-proliferation was on the top of the agenda. See Anthony G. McGrew "Nuclear Revisionism: The U.S. and the Nuclear Non-Proliferation Act of 1978" *Millennium*, v. 7 n. 3, Winter 1978-79, pp. 237-50.

386 See Ashok Kapur, *International Nuclear Proliferation: Multilateral Diplomacy and Regional Aspects*, New York, Praeger, 1979.

issues in the debate on horizontal proliferation. The first factor was the Indian explosion, a result of a combination of research facilities which were kept outside the IAEA safeguard system, with a clever use of imported American and Canadian technology³⁸⁷. Second, there were the commercial deals to export whole packages of nuclear know-how and equipment from Europe to developing nations. For the first time ever, they included sensitive nuclear technology. Brazil concluded such a deal with the Federal Republic of Germany, while Pakistan and South Korea negotiated similar conditions with France. Together, these factors were perceived by the managers of the regime as a great danger. Nuclear technology was becoming accessible to too many, newcomers in the game of 'responsible politics'.

'As a consequence of these fears, Washington led a concerted attempt to halt the diffusion of the sensitive technologies. By a combination of persuasion and pressure she succeeded in halting the export of the alleged dangerous technologies. This new joint effort, led with determination by President Carter, evolved towards a non-proliferation regime with more rules and regulations.

As a result, this tightening of the regime was perceived by the group of nations aspiring to control nuclear technology as an additional confirmation of its discriminatory nature. They reacted angrily against Carter's non-proliferation policies, denouncing them as inspired above all by the American desire to protect its commercial interests in an increasingly competitive market. Because US companies were losing their near monopoly of commercial nuclear reactors, the argument went, newcomers, such as the Federal Republic of Germany and France, were

387 The Indian explosion was the main factor responsible for an early unsuccessful attempt, during the Ford-Kissinger period, to mobilise the nations which exported nuclear technology to tightening the rules. See Benjamin Schiff, *International Nuclear Technology Control: Dilemmas of Dissemination and Control*, Totowa, NJ, Rowan & Allanheld, 1984.

threatening this monopoly and had to be stopped³⁸⁸. By and large, many Europeans shared this view of Carter's actions³⁸⁹. In a period when the export of commercial nuclear reactors was becoming a burgeoning business, the tightening of rules and regulations was highlighted as yet another example of the selfish behaviour of the industrialised nations in their wish to preserve their global supremacy.

The Federal Republic of Germany was the only nation which resisted Washington's pressures, maintaining the deal signed with Brazil in 1975, including the export of the so-called sensitive technology³⁹⁰. Bonn initially reacted angrily to Carter's attempt to interfere into the deal. Even if Bonn was gradually persuaded to accept some of Carter's arguments, she was able to maintain the deal with Brazil³⁹¹, Paris, however, cancelled her deal to export reprocessing facilities to South Korea and Pakistan.

Brasilia, however, was not persuaded by Carter's non-proliferation policy. The German deal was fiercely defended as a right to acquire nuclear technology, including access to the complete nuclear fuel cycle. Indeed, there was no article in the NPT preventing the export of sensitive technologies, if properly safeguarded by an accord with the IAEA.

Washington, however, did not agree with this view. Controlling the danger of horizontal nuclear proliferation through commercial deals such as the German-Brazilian deal, should include halting the diffusion of certain technologies such as enriching

388 A useful analysis of the commercial competition in the nuclear market is by Paul L. Joskow, "The International Nuclear Industry Today: The End of the American Monopoly", *Foreign Affairs* 54, July 1976, pp. 788-803.

389 See for example Pierre Lellouche, "Breaking the Rules Without Quite Stopping the Bomb: European View", *International Organisation*, n. 35, Winter 1981, pp. 39-58, and Kaiser, art. cit.

390 See Kaiser, art. cit.

391 See J. Johnson-Freese, "Interpretations of the Nonproliferation Treaty: The U.S. and West Germany", *Journal of International Affairs*, v. 37 n. 2, Winter 1984, pp. 283-94.

and reprocessing uranium. The possibility of diverting materials such as enriched uranium or plutonium from IAEA inspection, or to use the skills learnt to develop a secret military programme, became the main concern in monitoring the capabilities of the threshold nations.

The search for the real intention behind peaceful nuclear programmes became a priority³⁹². However, discovering hidden intentions behind the investment in peaceful nuclear technology – that is opening the way to divert towards military purposes – has been a complex enterprise. It requires a deep understanding of historical, political, economic and psychological factors, as well as institutional processes, of a great number of nations. The most usual way of approaching the motivation to spend hard currency and precious scientific and technical skills in conquering nuclear technology has been by framing them into a regional context of politico-military competition. Nevertheless, approaching different regional contexts, as well as unique political and diplomatic traditions, through a similar framework has led the literature to simplify too much³⁹³.

Undoubtedly, some threshold nations are trapped in conflictual regional environments. In these cases, their attempts to master nuclear technology, by open or secret means, is likely to be primarily motivated by military needs. Open or secretly, their motivation to control weapons of mass destruction became part of the politico-military competition in regions of conflict. But what was defined as the main distinction between the two categories of threshold nations – the developed and the underdeveloped – were intentions and motivations, not capabilities.

392 See Onkar Marwah and Ann Schulz (eds), *Nuclear Proliferation and the Near-Nuclear Countries*, Cambridge, Ballinger, 1975.

393 As an example of this simplification see Ernest W. Lefever, *Nuclear Arms in the Third World*, Washington, D.C., The Brookings Institution, 1979.

Several developed nations already embarked on extensive nuclear programmes. But as 'responsible' polities, they were not perceived as potential proliferators. Partly for being members of the NPT, partly for being members of security arrangements with one of the superpowers, these nations with know-how and skills to invest in a non-peaceful nuclear programme, were not considered a threat to the stability of the global order. In sum, they appear to lack political motivation for horizontal proliferation.

The same criteria did not apply to other nations which did not share the same interest in the preservation of the global or their regional order. Members and non-members of the NPT alike, they were perceived as being trapped in conflicts of such proportion to risk their own national survival or at least their integrity as national states³⁹⁴. Nonetheless an approach based on regional competition as the main motive for proliferation must be treated with caution. Although it is a fair picture of particular regional contexts, it lacks validity as a universal explanation.

In the South American case, the alleged competition between Argentina and Brazil was described as being the main cause for concern in the proliferation of Latin America³⁹⁵. But in Brasilia as well as in Buenos Aires, investing in peaceful nuclear technology was considered a sovereign decision. Any attempt to interfere by foreigners was rejected in the name of the national interest and defence of sovereignty. Therefore the following description of the Brazilian-Federal Republic of Germany deal, in the context of the evolution of the Brazilian domestic nuclear policy, intended to show how the pressures suffered against it, helped to solidify

394 Israel and South Africa are the most used examples of nations which are likely to possess nuclear weapons as an ultimate means for self-defence.

395 See Lefever, *op. cit.*, and William H. Courtney, "Brazil and Argentina: Strategies for American Diplomacy", in Joseph Yager (ed) *Non-Proliferation and US Foreign Policy*, Washington, D.C., The Brookings Institution, 1980.

the view of the non-proliferation regime as an assault on Brazil's sovereignty.

5.3. The Brazilian-German Nuclear Deal

The most extensive of the commercial packages which were one of the principal factors for hardening the non-proliferation regime was the Brazilian-German deal concluded in 1975. It included the transfer of sensitive technologies – uranium enrichment and reprocessing facilities³⁹⁶. For the first time in a commercial transaction of nuclear technology, the transfer of the complete nuclear fuel cycle was envisaged³⁹⁷. As a result, it was presented by both sides not only as a commercial deal, but as a broader technological transfer programme, including the absorption of foreign technology at an unprecedented scale.

It involved the export of a certain number of complete nuclear reactors of the pressurised water reactor (PWR) model, using enriched uranium, similar to the one imported from Westinghouse Electric, already being built at Angra dos Reis, in the state of Rio de Janeiro³⁹⁸. Then, these reactors would be gradually built in Brazil under the coordination of NUCLEBRAS – a binational company formed by the accord. As a long-term result of the package, Brazil would possess the know-how and the industrial base to eventually become self-sufficient to build PWR nuclear reactors. Training manpower and building up an industrial infrastructure required

396 An official explanation and justification of the deal in terms of the necessity to complement energy supply was made in a government publication: *O Programa Nuclear Brasileiro*, Brasília, March 1977. An early and strong criticism made by an industrialist with interests in the area is by Kurt Rudolf Mirow, *Loucura Nuclear*, Rio de Janeiro, Editora Civilização Brasileira, 1979.

397 The deal was signed on 27 June 1975, and named "Agreement Concerning Cooperation in the Field of the Peaceful Use of Nuclear Energy". It included the complete nuclear fuel cycle, from the searching for uranium in the Brazilian territory up to the transfer of reprocessing facilities. The complete text of the accord, as well as the safeguards with the IAEA are included in *O Programa Nuclear Brasileiro*, op. cit., pp. 29-51.

398 See "Planalto Explica Todas as Vantagens do Acordo Nuclear", *O Estado de S. Paulo*, 28 June 1975.

the absorption of complex technology Brazil was preparing to enter the developed world. At the end of the joint Brazilian-German administration of the programme, an autonomous scientific, technological and industrial base in the nuclear fuel cycle – from prospecting uranium to reprocessing the used fuel – would be achieved³⁹⁹.

Despite the triumph in concluding what was seen as the most ambitious technological package ever sought, many controversial points were raised. They have been pointed out in Brazil ever since the deal was announced by the Brazilian Foreign Minister⁴⁰⁰. Masterminded by the National Security Council (Secretaria-Geral do Conselho de Segurança Nacional) negotiated in absolute secret by Itamaraty, and defended as vital to Brazilian national security, it did not escape controversy and criticism, at home and abroad⁴⁰¹.

The perennial criticism made by leading members of the scientific community of the use of enriched uranium as fuel, reappeared with greater vigour⁴⁰². According to the scientists, maintaining the choice of importing PWR models of reactors, similar to the first imported from Westinghouse Electric, was a way of perpetuating dependency on foreign technology. Contrary to what was announced by the government, the deal was primarily an import of a technological 'black box'.

399 The defence of the deal in these terms – the independence and the maturity brought about by the domination of an advanced technology – was the main reasoning behind Brazil's Foreign Minister Azeredo da Silveira in a debate which occurred at the Brazilian Senate in September 1975. See "Silveira: Acordo Inova Relações", *Jornal do Brasil*, 19 September 1975.

400 One of the most important and vociferous critics of the deal was the nuclear physicist José Goldemberg. He wrote extensively on its political as well as technical aspects, becoming since then one of the most respected experts on the Brazilian nuclear policy. See José Goldemberg, "Análise do Acordo Nuclear Brasil-Alemanha", *O Estado de S. Paulo*, 22 August 1975.

401 A criticism of the deal as being a result of an authoritarian regime with a technocratic and secretive mentality is made by Carlos A. Girotti, *O Estado Nuclear no Brasil*, São Paulo, Editora Brasiliense, 1984.

402 Apart from Goldemberg, Marcelo Damy was also a main critic of the deal. See an interview with him in "Acordo Nuclear Marginaliza os Físicos Brasileiros", *Jornal do Brasil*, 17 July 1977.

The government's answer was based on the argument that it was importing a whole package, including the technology to enrich uranium, therefore ending the need to rely on foreign supply⁴⁰³. It included a plant to enrich uranium, but as a member of URENCO, Bonn was unable to gain support from its partners – the Netherlands and the United Kingdom – to export the well proved technology of ultra-centrifugation⁴⁰⁴. As a consequence, the technology to enrich uranium included was an experimental method, known as 'jet-nozzle', which had never before being employed on a commercial scale. The reaction of the Brazilian scientific community was sceptical on the prospects for commercial success of this experimental method⁴⁰⁵.

The second important criticism of the scientific community was that they were marginalised from the decision-making process. Planned by the military-led National Security Council, with firm backing of President Ernesto Geisel and negotiated by diplomats, it lacked the advice of the best nuclear physicists. Thus, the deal included megalomaniac aspects, many controversial technical details and a financial cost unbearable for a developing

403 One month after the announcement of the deal, a meeting of the Brazilian Society of Physicists (Sociedade Brasileira de Física) condemned the deal, specially the authoritarian nature of the decisions. A retrospect of the position of the scientists in the debate which occurred after the deal was completed is in *A SBPC e a Energia Nuclear* Special Supplement of the journal *Ciencia e Cultura*, V. 33, 1981. In several speeches and interviews Foreign Minister Silveira defended the deal. The Government publication, *O Programa Nuclear Brasileiro*, was also aimed to answer the criticism made by the academic community.

404 The Netherlands was concerned about the possibility of Brazil using the sensitive facilities to produce fissile materials for military use. As a consequence, it strained the relationship between Brasília and the Hague for some years. See "Holanda Quer Garantias de que Brasil Não Fará Bomba", *O Globo*, 10 March 1978.

405 The enrichment of uranium by the jet-nozzle process became a great controversy. In October 1979, the German scientist E. W. Becker, from the Karlsruhe Nuclear Research Centre, the inventor of the method, defended it in a debate in the Brazilian Senate. Many Brazilian scientists, however, maintained their scepticism of the industrial application of the jet-nozzle process. It was never used commercially in Federal Germany. For an analysis of the controversy see José Goldemberg, "Enriquecimento de Urânio no Senado", *O Estado de S. Paulo*, 11 November 1979.

country⁴⁰⁶. Besides, it did not give sufficient priority to training. To create a capacity to absorb the German know-how and build up an autonomous industrial basis required a much greater investment in education and training.

Similar to other decisions taken during the period of military rule, an ambitious and expensive project was secretly negotiated, without open debate or the participation of the scientific community⁴⁰⁷. Its main negotiator was a diplomat with expertise on technological issues, Paulo Nogueira Batista, who eventually became the first President of the binational NUCLEBRAS. National security was used here to justify the secrecy of the negotiations.

Apart from dissenting members of the scientific community, and some opposition politicians, the deal was received with triumph by many sectors of the society. Stressing the transfer of technology at such a great scale, the government was able to exploit it as an example of Brazil's political and economic maturity⁴⁰⁸. Entering the closed club of the nuclear nations, the government affirmed, was another step towards being accepted as a developed nation. Mastering an up-to-date technology, at the same level as the rich nations, was another victory of the 'Brazilian economic model' brought about by the 1964's military coup. Combining the production of energy, a scarce resource, with advanced technology was a way to enhance Brazil's national security. A nationalist discourse mobilised by the government

406 See José Goldemberg, "Desvenda-se o Mistério do Acordo Nuclear", *O Estado de S. Paulo*, 22 April 1979.

407 For a defence of the deal by its main negotiator see the speech by Paulo Nogueira Batista at a Special Senate Commission (CPI), created in 1978, to investigate in details the deal. "Nuclebras diz que Governo quer átomo para fim pacífico", *Jornal do Brasil*, 18 October 1978; "A Defesa de Paulo Nogueira Batista", *O Globo*, 7 September 1979. See also Paulo Nogueira Batista, "O Programa Nuclear Brasileiro e o Acordo Brasil-República Federal da Alemanha de Cooperação Nuclear", *Segurança & Desenvolvimento*, n. 167, 1975, pp. 41-54.

408 See "Para Itamarati, Contrato Marca Maioridade do País", *O Estado de S. Paulo*, 25 March 1979.

achieved its intention of uniting politicians, diplomats, scientists and the military.

Eventually, even groups which initially opposed the deal evolved to support it against Washington's interference. A nationalistic climate, capitalised on by the government, was forged to defend the national interest against foreign intervention. Washington initial mild criticism, and subsequent strong opposition to the deal, galvanised domestic support for the deal⁴⁰⁹. Carter's simultaneous attempt to persuade Bonn to cancel the selling of sensitive technologies, and to persuade Brasilia not to buy them, was presented as an unwanted interference in Brazilian domestic affairs⁴¹⁰. Uniting political adversaries in the defence of sovereignty, meaning the right to pursue an autonomous nuclear development, it diverted attentions for a while of the domestic critics⁴¹¹.

Washington's unsuccessful pressure on Bonn, as well as on Brasilia, was caused by her uncertainty of the consequences brought about by the possession of facilities to enrich and reprocess uranium. Otherwise, her successful pressure on France to halt the export of reprocessing facilities to Pakistan and South Korea was answered sympathetically from Paris and Seoul, less so from Islamabad. Undoubtedly, the possession of facilities to enrich uranium or to reprocess the spent fuel could raise the proliferation risks. Diverting fissile material to the production of explosives was a possibility if so intended.

In Brazil's case, domestic as well as foreign critics pointed out that this risk existed because of the nature of the political system

409 See Wesson, op. cit., and Amy Finkelstein, "Brazil, the US and Nuclear Proliferation: American Foreign Policy at the Crossroads", *The Fletcher Forum*, n. 2 Summer 1983, pp. 277-311.

410 See "Governo Contesta Denúncias Sobre o Acordo Nuclear", *Jornal do Brasil*, 11 October 1978; "Goldemberg Elogia Resposta do Governo a 'Der Spiegel'", *O Globo*, 12 October 1978.

411 See "Silveira Define Posição a Vance" and "Físico Destaca Acerto do Governo", both in *Jornal do Brasil*, 3 February 1977.

ruled by the military⁴¹². The deal with the FRG was effectively used as an instrument to galvanise nationalist sentiments latent in the Brazilian polity. On the other hand, for the defenders of the deal its subjection to a strict trilateral safeguard system – Brazil, the FRG and the IAEA – was proof enough of Brasilia's peaceful intentions. Even if not a member of the NPT, accepting such safeguards she was behaving like one⁴¹³.

As a result of the pressures exerted by the other two members of URENCO, especially the Netherlands, and by the United States, Brazil signed a very strict safeguards system. This system was considered as a model for similar deals in the future, and became the core of the government's defence against accusations of the possible diversion of fissile materials. In signing it, covering all the installations connected with the deal, Brasilia was abiding to the principles of the non-proliferation regime⁴¹⁴.

Nevertheless, they were not considered sufficient guarantees by Washington. She sought to convince Bonn that the deal was opening a dangerous precedent in the export of sensitive technology. Possessing nuclear know-how, Brazil would become a nation which only required political motivation to divert its fissile material for military purposes. Apparently Washington did not consider Brazil as a 'responsible' nation, for which political stability was required⁴¹⁵. As a result Brasilia was able to raise domestic

412 See Norman Gall, "Atoms for Brazil, Dangers for All", *Foreign Policy*, 23 Summer 1976, pp. 155-201.

413 See Carlos A. Dunshee de Abranches, "Significado do Ajuste Sobre Salvaguardas", *Jornal do Brasil*, 4 February 1976; "Professor Acha Má Fé Imaginar que Brasil Possa Romper a Paz", *Jornal do Brasil*, 7 February 1977.

414 In 1978, under the pressures exerted by The Hague, Brazil agreed to sign another safeguard system, covering the export of enriched uranium for the two first reactors being built under the accord with West Germany, Angra II and Angra III. See William Waack, "Agora, Será Assinado um Novo Acordo com a AIEA", *O Estado de S. Paulo*, 14 January 1978.

415 One of the first articles in the American press denouncing the risks involved in the German-Brazilian deal was written by the influential journalist James Reston in the *New York Times*. It was translated

support in the name of national interest and the prevention of foreign interference in her domestic affairs.

Despite this support, civilians as well as military officers began to voice more stridently their scepticism towards some aspects of the deal. With the relaxation of pressure from Washington, apparently convinced that the deal would never work as expected, the fragile nationalist coalition collapsed. Thus, the most relevant issue in a nuclear programme based on the technology of enriched uranium, namely dominating autonomously the complete fuel cycle, re-appeared. The reluctance of the scientific community to accept the jet-nozzle experimental method was aggravated by the first leaks of certain hitherto unknown aspects of the deal⁴¹⁶. The exaggerated dimension of the programme, and its financial and administrative problems began to be recognised. Gradually, the scientific community was able to gather more precise information.

One aspect discovered was that the government exaggerated its projection of future energy consumption in the Southeast industrial centres – the main motivation for the deal according to the government⁴¹⁷. The future prospects pictured by the Geisel administration for the nation's hydroelectric power – Brazil's primary energy source – was made using false assumptions⁴¹⁸. To justify the investment in nuclear power, the government created a bleak picture of future energy supply. The surge in oil prices – Brazil imported more than 80% of her needs – and the life-expectancy

to Portuguese as James Reston, "EUA, Entre Segurança e Interesse Econômico", *O Estado de S. Paulo*, 5 June 1975. However, the article which made the greater impact on the American State Department officials and academic community was by Norman Gall, art.cit., published in *Foreign Policy*.

416 A Special Senate Commission (CPI) was held to analyse the deal. It brought out several hitherto unknown aspects of the deal, principally its spiralling costs. See "Cotrim Revela Custo Real da Energia Nuclear", *O Estado de S. Paulo*, 8 April 1979.

417 See Luis Pinguelli Rosa, "Evolução da Política Nuclear Brasileira", *Encontros com a Civilização Brasileira*, n. 7, January 1979, pp. 29-40.

418 See Luis Pinguelli Rosa, "A Polêmica e os Pontos Fracos do Acordo Nuclear", *Jornal do Brasil*, 3 January 1982, and Mirow, op. cit., pp. 175-187.

of her hydro-electric generation programme were the principal motivation given for investing in nuclear power.

The necessity to keep a stable energy supply to continue the pace of industrialisation was one of the priorities of the Geisel administration. Using this argument, it was able to mobilise the nationalist sentiment which had been historically very sensitive to energy issues. The argument employed by the government to defend the deal against foreign pressures had some similarities with the campaign of the early 1950s for the creation of a state-owned national oil company⁴¹⁹. Brazilian public opinion has always been responsive to arguments based on a nationalist defence of its national resources. Uranium was now the material to be protected, and some even talked openly about Brazil being a member of the 'OPEC of the year 2000' – a producer and exporter of enriched uranium.

Apart from this triumphant official rhetoric and the criticism of sectors of the academic community, another strand of criticism appeared. It was developed by military officers close to the government. Their basic argument against the deal centred on two aspects: the scope of the safeguard system, considered to be too harsh and even unpatriotic to accept, and the scepticism over the experimental jet-nozzle method to enrich uranium.

This argument was first openly expressed within the government circle by a naval officer – Othon Luis Pinheiro da Silva – in a conference at the Naval War College in 1979⁴²⁰. Continuing the navy's tradition of investing in research into advanced technologies, Pinheiro was backed by the Navy Minister to pursue a study on the feasibility of creating a research group to

419 See Cohn, *op. cit.*

420 Interview with Rear-Admiral Othon Luiz Pinheiro da Silva, São Paulo, 30 January 1990. Rear-Admiral Pinheiro da Silva gave a lecture on the history of the navy nuclear programme at the Centro Brasileiro de Estudos Estratégicos in November 1987. The transcriptions are in *Cadernos de Estudos Estratégicos*, n. 12, April 1988, pp. 96-102.

dominate, independently from the German deal and international safeguards, the technology to enrich uranium⁴²¹. With the support from the government, a small research group was formed around IPEN, the only nuclear research institute outside the NUCLEBRAS jurisdiction, meaning outside the IAEA safeguards system. This was the origin of what became known as the ‘parallel’ or the ‘autonomous’ nuclear programme.

5.4. The Autonomous or Parallel Nuclear Programme

The term parallel, which is how the programme led by the navy was publicly named, meant that it is in tandem with, but independent from, the official Brazilian nuclear programme, using technology imported from West Germany. Autonomous, however, is how their leaders prefer to call it. It meant for to be free from the constraints of international safeguards. The trilateral safeguards system signed with West Germany and the IAEA were understood as imposing too severe constraints, an undesirable interference on Brazil’s sovereignty.

The main purpose of the navy programme, namely acquiring an independent capacity to master the complete nuclear fuel cycle, was continuing the tradition established by another navy officer, Admiral Alvaro Alberto. The concentration of the attention of the autonomous nuclear programme on the fuel cycle – on the ultra-centrifuge method, utilised successfully by URENCO – represented a renewal of Alberto’s early attempts to acquire this equipment abroad. As a consequence of its industrial progress, it was now

421 Pinheiro’s research in the nuclear field started earlier. As a Navy officer, he was deployed to the United States in 1975 for a study on nuclear naval propulsion. Returning to Brazil, he studied in 1978 the nuclear fuel cycle, and realised that the experimental method to enrich uranium which was part of the Brazilian-German deal would never work properly. In the lecture given at the Naval War College, according to him, he criticised the method for the first time within the armed forces. Pinheiro’s role in the conception and planning of the autonomous navy-led nuclear programme was fully explored in the interview which he gave me.

possible to produce domestically, with personnel and equipment made in Brazil, what Alberto intended to import.

It was not a coincidence that such a programme was developed by the navy. Apart from a historical tradition of investing in advanced research – a tradition by and large which was deepened during the sixties when all three services established advanced research centres – the project to enrich uranium had a direct interest for the navy. Its long-term ambition was to master the technology of small nuclear reactors for naval propulsion.

The project of building nuclear submarines, planned by the navy for a long time and initiated with sending Pinheiro abroad, was vindicated by the conflict in the South Atlantic in 1982. Britain's employment of her nuclear submarine fleet undoubtedly played a great role in stimulating the navy's ambition to incorporate nuclear-powered submarines into her fleet. Thus the project to enrich uranium at 20%, apparently unable to serve as fissile material for a bomb, but able to perform as fuel for small reactors for naval propulsion, became the navy's long-term goal. The research conducted by the Navy's Special Projects Commission (Comissão de Projetos Especiais da Marinha – COPESP) in São Paulo was directed mainly to this purpose. Located within the campus of the University of São Paulo, and working together with IPEN, naval officers were able to secure continuity within the programme, which was kept secret from the 'official' nuclear programme.

From a modest research project which started working in February 1982, a larger project group was implemented after 1982, when Rex Nazareth Alves assumed the leadership of CNEN⁴²². Working close to COPESP, the new president of CNEN

422 See Pinheiro, op. cit., p.99. Rex Nazareth Alves defended his position as head of CNEN in a speech in the Brazilian Congress in May 1987. It was reproduced as "Programa Nuclear Brasileiro" in the *Revista Brasileira de Política Internacional*, n. 117-118, 1988, pp. 75-94.

was able to mobilise resources, giving secret official backing to the autonomous programme. In December 1982, a successful experiment in isotopic enrichment was conducted for the first time with equipment built entirely in Brazil. In September 1984, it was successfully completed an enrichment experiment with ultra-centrifuges.

When a civilian President came to power on March 1985, after twenty one years of military rule, he inherited an official nuclear programme in complete disarray and a successful secret autonomous programme led by the Armed Forces. Apart from the navy led research on uranium enrichment, conducted by COPESP, the air force and the army were also contributing to the autonomous programme. The core of the air force's efforts were concentrated at the Advanced Studies Institute (Instituto de Estudos Avançados – IEAV) in the Aerspatial Technological Centre (Centro Tecnológico Aeroespacial – CTA) in São José dos Campos. In this huge air force complex, an elite group of military and civilian scientists were conducting research into advanced nuclear physics. Their most important research was on the laser method to enrich uranium⁴²³.

The army had its own traditions in advanced research. The necessity to establish educational centres to form engineers and technicians in the nuclear field began in 1957, when the first graduation centre in Nuclear Engineer within the Army Technical School (Escola Técnica do Exército) was established. Recently, the Army Technological Centre (Centro Tecnológico do Exército – CTEX) in Guaratiba, set up a nuclear research centre to concentrate on research into a Plutonium based reactor. The civilian government did not admit the existence of any of these

423 On the air force research in the nuclear field see Arthur da Cunha Menezes in *Cadernos de Estudos Estratégicos*, n. 12, pp. 112-117

secret nuclear installations, led by CNEN and the armed forces, until 1986⁴²⁴.

With the new civilian administration of President José Sarney, and the deepening of the financial crisis, it became inevitable that an extensive re-evaluation of the official nuclear programme would have to take place⁴²⁵. A phasing out of the original deal with Bonn had already started during President João Figueiredo administration (1979-85). The building of new reactors, apart from the first two – Angra II and III – already in progress was delayed and other decisions postponed.

But it was only in 1988, with a broad administrative reform, that the government united the autonomous programme with the official programme. As part of a large reform, CNEN was once more subordinated to the Presidency, leaving the Ministry of Mines and Energy, to which it has been subordinated since the reforms set up during the Costa e Silva administration.

Following the official admission of the existence of the autonomous nuclear programme by the government in 1986, a debate occurred which centred on its true motivations. Secret and extensive military-led nuclear research, circumventing the international safeguard system, was perceived as being a possible signal of a hidden agenda. Furthermore, in September 1987, President Sarney announced that an experiment in enriching uranium at research level had been successfully conducted at IPEN

424 On the army nuclear research see Colonel Alvaro Augusto Alves Pinto in *Cadernos de Estudos Estratégicos*, n. 12, pp. 103-111. In 1981, the Brazilian Society of Physicists denounced that the Air Force was investing in nuclear technology at the IEA in São José dos Campos. Since then, it periodically appeared in the press as well as in academic meetings, denunciation of military nuclear research. Figueiredo's Government, however, did not admit publicly that there was any military-led nuclear research being conducted on installations outside the safeguards system signed with the IAEA. See "Pesquisa Nuclear Com Fim Militar Tem US\$ 2 Bilhões", *Jornal do Brasil*, 12 July 1982; "No Caminho Para a Bomba Atômica", *Isto É*, 21 December 1983.

425 See Paulo Sergio Wrobel, "A Política Nuclear da Nova República", *Brasil, Perspectivas Internacionais*, n. 4, November-December 1985, pp. 5-9.

as part of the navy-led programme. The announcement confirmed that this programme was being successfully implemented. For those searching to find hidden motives, the signals were there: the perennial Itamaraty denial of any hidden non-peaceful purpose in the Brazilian nuclear programme; its refusal to sign the NPT and waive the conditions to fully implement the Tlatelolco Treaty; its obstinate defence of the right to peaceful nuclear explosions. Could these be taken as pieces in a well-orchestrated policy to allow the development of a military option? If not, what were the truly intentions of the navy, the air force and the army in conducting their secret advanced nuclear research? Was there any Indian-type of 'peaceful explosion' being secretly prepared?

First, there is the ambiguity in the domestic debate on nuclear issues in Brazil. On one hand the official admission of the existence of an autonomous nuclear programme did not satisfy the critics. They were convinced that the nature of the decision-making process which implemented a military-led nuclear programme prevented knowledge of its real intentions. On the other hand when President Sarney announced that Brazil had succeeded in enriching uranium, the news was proudly received by supporters and critics alike as it was seen as a demonstration of the degree of Brazil's scientific achievements. In financial terms, compared with the huge amount unnecessarily spent on the deal with Germany – in an experimental and costly method – the success of the COPESP project appeared extraordinary. Hence the successful achievement in uranium enrichment was used as a means to galvanise support for the maintenance of the autonomous programme.

During Figueiredo's administration, the nuclear deal with Germany began to be phased out⁴²⁶. The financial crisis which

426 In the beginning of January 1983, the Government postponed the building of new reactors, as planned under the deal with the FRG, and axed in 40% in real terms the budget of NUCLEBRAS for the year 1983. See "A Moratória Nuclear", *Isto É*, 19 January 1983.

Brazil has entered since 1982 contributed to the redefinition of this ambitious deal. Moreover, the distortions made by the Geisel administration on the supply and demand of energy were re-evaluated, and the necessity for a huge short-term investment in nuclear power postponed, according to new projections made⁴²⁷.

Despite the ill-planned aspects of the deal with Germany, and the exaggerated gloom made of the prospects in energy supply, its main motivation was not the achievement of fissile material for non-peaceful purposes. The import of sensitive technologies was sought as a means to conquer the technology of uranium enrichment in order to attain independence in the complete nuclear fuel cycle. If its actual objective was to produce fissile materials for military purposes, the means were not well chosen. A nuclear programme with ultimate non-peaceful purposes should be built on a different basis. It demanded a more carefully planned programme, centralised under a single authority under the central government, using only secret installations. With the modest technical skills domestically available at the time, the rational choice would be to invest in the production of a Plutonium device.

Furthermore, there was the strict safeguard system signed with West Germany and the IAEA. All the installations connected with the deal were under periodic visits by IAEA inspectors. The hypothesis that the deal signed with Bonn was intended primarily for military purposes does not make technical sense. The technological pattern chosen to enrich uranium was not commercially proven and it would have been impossible to divert fissile materials away from the IAEA inspectors. Thus if there was hidden intentions they must have been located within the autonomous programme. It was masterminded by the armed

427 See Camilo Penna, "Energia: Retrato do Brasil", *Problemas Brasileiros*, March-April 1988, pp. 14-29.

forces and insulated from international verification. Its principal declared aim was to enrich uranium independently.

Exactly because of this public admission it was assumed that its main aim was simply to secure complete independence in the complete nuclear fuel cycle, the age-old dream of a nuclear programme in Brazil since the time of Admiral Alvaro Alberto. Nothing more, nothing less. The facilities created were aimed to develop the technology to enrich uranium, initially at research level and then at commercial level. Obtaining such technology to utilise in the few PWR commercial reactors in construction and, in the long run, for the propulsion of a nuclear-powered submarine was admitted. There was no secret that the navy had started investing in the programme with these ultimate goals in mind.

Contracts were made with German companies to transfer the know-how to construct conventional submarines in Brazil. Two submarines were planned to be built in the FRG, with the participation of Brazilian scientists, engineers and technicians. Then, the know-how would be transferred to the Navy Arsenal in Rio de Janeiro, where two more units are planned to be constructed. Dominating the technology to build submarines would allow the navy to make the adjustments believed necessary to achieve a nuclear-powered submarine built entirely in Brazil. In sum, this represented the long-term plan of the navy⁴²⁸. It depends, as always in arms procurement, on budgetary constraints. There is no evidence yet available to indicate that a civilian administration would reverse this planning. It depends on the resources available. Therefore, the achievement of a home-produced nuclear-powered submarine can only be expected to be achieved well into the next century.

As the navy's open admission indicated, the actual motivation for the military investment programme into nuclear technology

428 See Eneas Macedo Filho, "Brasil Terá Submarino Atômico Ate 91", *Jornal do Brasil*, 16 January 1984.

in the last fifteen years in Brazil, was not primarily to acquire fissile materials for military use. Nonetheless, the continuous refusal to sign the NPT, to waive the conditions set by article 28 of the Tlatelolco Treaty and abide by the rules of the non-proliferation regime appears to indicate that 'keeping open the nuclear path' was meant as much in peaceful terms as in non-peaceful terms.

The explanation of these attitudes lay in the nationalistic motivation. The obsession with acquiring an independent technological base as a means towards economic and social development led the government to unite the nation against the non-proliferation regime. The justification given for the establishment of the autonomous programme in the first place – the scope of the safeguards system and the doubts about the German jet-nozzle technology – has therefore to be understood under the same logic which determined the policy not to sign the NPT.

Underneath this logic there was a nationalist ideal. It perceived the international environment as competitive, a perennial clash between the haves and the have nots. As a nation aspiring to greater global influence and prestige, Brazil could not, as a matter of principle, accept being denied access to nuclear know-how and technology. Accepting such constraints was seen as tantamount to acquiescing to the perception of Brazil as a third-rate power. In this context, the maintenance of a nationally supported policy against the non-proliferation regime was a matter of principle.

It is also relevant to analyse Argentina's reaction, seen as Brazil's traditional competitor for regional hegemony. The regional rivalry argument is regularly cited to explain the drive towards proliferation. Brazil's actions, it was said, would inevitably be met by similar actions from Buenos Aires⁴²⁹. As a consequence,

429 See Grabendorff, art. cit, pp. 295-96.

this approach requires an understanding of Brazil's motivations and ambitions in the nuclear field alongside Argentina's own motivations and ambitions. Nevertheless, what appears to have happened cannot be defined as a 'nuclear race'.

The Brazilian-FRG deal was not opposed by Buenos Aires and some years later they began to join forces in the nuclear field. By being able to forge an alliance against the non-proliferation regime, collaborating instead of competing, they demonstrated that the logic of regional rivalry could be mitigated under certain regional conditions. Global constraints, not regional competition, were perceived as being the real hindrance to regional development and national security.

5.5. The Regional Competition Approach in South America: Argentina and Brazil

The Brazilian nuclear deal with Germany was described by some people as a result from regional competition. This explanation is very popular in the literature on the subject⁴³⁰. According to this view it was a deliberate plan to catch up with the most advanced programme in South America, that of Argentina. Despite the fact that both nations started setting up nuclear research programmes at about the same time, in the early fifties, Argentina advanced more rapidly. Stability and continuity in the administration of her nuclear programme were said to be the main factors behind her superiority in the nuclear field.

In 1974, Buenos Aires inaugurated the first commercial nuclear reactor in Latin America⁴³¹. The complex package which

430 See Gall, art.cit.; Edward Wonder, "Nuclear Commerce and Nuclear Proliferation: Germany and Brazil, 1975", *Orbis*, 21 Summer 1977, pp. 277-306, and David J. Myers, "Brazil: Reluctant Pursuit of the Nuclear Option", *Orbis*, v. 27 n. 4, Winter 1984, pp. 881-912.

431 A useful account of Argentina's nuclear programme is Daniel Poneman, "Nuclear Proliferation Prospects for Argentina", *Orbis*, Winter 1984, pp. 853-880.

Brasilia signed with Bonn in 1975 was perceived as the most appropriate solution to challenge Argentina's lead. This is not the first time that the argument that Brazilian domestic or foreign policy was a result of a regional competition for political and economic supremacy with Argentina has been employed. Using this regional framework as the main explanation for a 'nuclear race' in South America was an application of this logic. It appeared to be a reasonable logic, because Argentina and Brazil historically had a difficult relationship.

The problem with this approach as a basis to explain economic, political and diplomatic actions is that it is a mono-causal type of explanation. It does not explain their actions in the broader context of the inter-American security environment nor take into consideration the revisionist view of the global order. It sees each and every action taken by both nations only in terms of their immediate rivalry. Therefore it is based on a very simplistic action-reaction approach. There is some truth in the assertion that competition for regional supremacy helps explain certain actions. But a more complex understanding of their actions during the search for national and regional security is fundamental for a more convincing explanation of their nuclear programmes.

The inspiration for nuclear development in Argentina and Brazil was stimulated by the 'Atoms for Peace' programme. Both received from Washington research equipment and training, and both shared the same impulse for autonomous technological development and were attracted by the mystique associated with nuclear technology. Nevertheless, they evolved making different choices in relation to the most suitable type of reactor technology. Argentina decided to develop power reactors based on natural uranium and heavy water, like Canada and India, and so invested accordingly. She invested in training and gradually built up her own research and industrial facilities. She bought nuclear reactors

abroad, one in Canada, two others from the Federal Republic of Germany, but on a much smaller scale than the envisaged Brazilian-German deal.

Since the decision to develop technology based on natural uranium and heavy water was taken, she has consistently followed this pattern, without the twists and turns made by her neighbour, even within a more unstable political system. The Argentine National Commission for Atomic Energy (CNEA) since its foundation in 1955 until the end of the military rule in 1983, had only four presidents. This fact attested to the stability and continuity of policy, essential in a complex programme such as the nuclear⁴³².

Although the reference to Argentina as a model to be followed by Brazil, especially from more nationalist sectors, it is difficult to see an action-reaction behaviour here. Argentina's example was considered by Brazil to be successful, and one to be emulated, but to understand this as a 'nuclear race' is an exaggeration. What actually happened was a gradual convergence of postures, in the sense that both aimed to achieve similar goals, that is, the right to implement and sustain a national nuclear programme.

Argentina's cautious posture towards the idea of Latin America as a NWFZ was accepted and copied by Brasilia, and the vociferous Itamaraty diplomacy against the NPT was backed by Buenos Aires. However, the idea that competition existed between them to be the first nuclear power in South America, did not correspond to what actually happened. This view is not completely unsound, however, if understood within the context of their

432 A comparison between Brazil and Argentina's evolution in the nuclear field, praising Argentina's option and criticising Brazil's indecision is made by José Goldemberg, *Energia Nuclear no Brasil, As Origens das Decisões*, São Paulo, Hucitec, 1978, and Emanuel Adler, *The Power of Ideology, The Quest for Technological Autonomy in Argentina and Brazil*, Berkeley and Los Angeles, University of California Press, 1987.

complex historical relationship. As part of this picture, where both envisaged a simultaneous pattern of development and national security priorities, the actions and policies of one was likely to have influenced to a certain extent the behaviour of the other. Nonetheless, this behaviour was not the cause for implementing in the first place nuclear programmes.

Argentine-Brazilian relations are too complex to be fully described here⁴³³. Something resembling a balance of power existed between them. During much of the nineteenth century, they were open enemies, clashing to consolidate their respective national territories. Thus, Buenos Aires's actions became the main source of preoccupation in the formulation of Brazil's foreign policy and vice versa. In the first half of the twentieth century, as a consequence of the more advanced development of her Southern neighbour, Brazil sought to counterbalance Argentina's power with an alliance with Washington. Apart from a few attempts to develop more friendly relations after 1945, especially in 1961, during the period of President Jânio Quadros in Brazil and Arturo Frondizi in Argentina, their relationship varied from awkward partnership to open hostilities. It varied principally according to the nature of the regimes – civilian or military-led – in both nations.

A period which appeared to be leading towards open hostilities happened when both nations were under military rule. As a result of Brazil's post-1964 commercial expansion in South America, coinciding with a period of Argentine economic stagnation, Buenos Aires perceived that Brazil was a danger to its economic

433 A good resume is Helio Jaguaribe, "Brasil-Argentina: Breve Análise das Relações de Conflito e Cooperação" in *O Novo Cenário Internacional*, Rio de Janeiro, Editora Guanabara, 1987, pp. 164-92; an Argentine view is Carlos A. Moneta "Las Relaciones Argentino-Brasileñas, Factores Ideológicos, Económicos y Geopolíticos Relevantes", *Geopolítica*, n. 19, September 1980, pp. 5-11. A good synthesis of the history of Argentina's policy towards Brazil is Joseph Tulchin, "Una Perspectiva Histórica de la Política Argentina Frente al Brasil", *Estudios Internacionales*, n. 52, October-December 1980, pp. 460-80. See also Celso Lafer and Felix Pena, *Argentina e Brasil no Sistema de Relações Internacionais*, São Paulo, Editora Duas Cidades, 1978.

interests in South America. Moreover, the discourse employed by the military administrations in Brasilia helped to accentuate Buenos Aires's insecurity⁴³⁴.

The most acute crisis came with the construction of a huge binational Brazilian-Paraguayan hydro-electric plant – Itaipu – on the Parana river on the border of the three countries⁴³⁵. Brazil and Paraguay signed an accord with this aim in 1973. Argentina did not accept the Brazilian plan for Itaipu, based on the argument that it could hamper her own plans for a bilateral hydro-electric plant along the river in her territory. After long and complex negotiations, Buenos Aires finally agreed with the terms for the construction of Itaipu, paving the way for a sensible improvement in their relationship. In 1979 an accord was signed between Brazil, Argentina and Paraguay, resolving the problems over the natural resources of the Rio de la Plata Basin.

But more relevant here was how Buenos Aires reacted to the Brazilian-German nuclear deal. Despite the fact that the deal was signed in a period of open disagreement over the exploitation of natural resources in the Plata Basin and continuous denunciation of Brazilian economic expansion, it was not criticised by Buenos Aires. Even in the most nationalist sectors of the Argentine armed forces, which were conscious of possible hidden motives behind the deal, turned out to support a joint Buenos Aires-Brazilian

434 See Juan Enrique Gugliameli, "El 'Destino Manifesto' Brasileño en el Atlántico Sur", *Estratégia*, n. 36, September-October 1976.

435 See Lima (1986), pp. 348-408. The results of a debate on the Bacia do Prata issue, including contributions from Brazil, Argentina, Uruguay and Paraguay is in "Os Problemas da Bacia do Prata", *O Estado de S. Paulo*, 3 December 1978. In April 1969, it was signed in Brasilia the Tratado da Bacia do Prata, Between Argentina, Brazil, Uruguay, Paraguay and Bolivia, aiming to deepen the economic collaboration in the region. But the negotiations on Itaipu and Corpus were only concluded in October 1979 with a trilateral Argentine, Brazilian and Paraguayan accord. See Christian G. Caubert, "Diplomacia, Geopolítica e Direito na Bacia do Prata", *Política e Estratégia*, v. 2 n. 2, April-June 1984, pp. 337-346.

development in the nuclear field⁴³⁶. Moderate civilian and military officers alike defended the deal as a Brazilian right to accede to nuclear technology. They avoided to mention other possible hidden interests and stressed Brazil's sovereignty in the decision⁴³⁷. The official position from Argentina was supportive.

The confrontational spirit of the 1970s, when military rulers in both nations re-affirmed old mutual grievances, displayed the single most important aspect in the history of their relationship; that the degree of mutual friendship, cooperation or conflict ultimately depended on the nature of their domestic regimes. During most of the 1970s, after a military coup took place in Argentina in 1976, the influence exerted by doctrines of geopolitics in policy-making appeared to be back in fashion. Both schools of geopolitical thought developed theories of territorial security and regional supremacy, which recognised their mutual importance (as neighbours⁴³⁸).

A conception of politics and history based on geography centred its attention on defending the national territory against powerful neighbours. Argentina has undoubtedly been the most powerful

436 The leader of the military nationalist current was General Juan Enrique Gugliamelli, gathered around the journal *Estratégia*. A collection of Gugliamelli articles on the German-Brazilian deal may be found in Juan E. Gugliamelli, *Argentina, Brasil y la Bomba Atómica*, Buenos Aires, Editorial Nueva Vision, 1978. See also "The Brazilian-German Nuclear Deal: A View from Argentina", *Survival*, July-August 1976, pp. 162-165. In the latter he advanced the view in favour of confidence-building measures in the nuclear field between Argentina and Brazil. He also suggested that Brazil could be thinking of achieving a nuclear weapons capacity.

437 The best representative of this position was the nuclear physicist Jorge A. Sabato. See "Acordo Nuclear, Uma Visão Argentina", *Jornal do Brasil*, 3 March 1977, and "El Plan Nuclear Brasileño y la Bomba Atómica", *Estudios Internacionales*, n. 41, January-March 1978, pp. 73-82. See also Jorge A. Sabato and Jairman Ramesh, "Programas de Energía Nuclear en el Mundo en Desarrollo: su Fundamento e Impacto", *Estudios Internacionales*, n. 49, January-March 1980, pp. 70-85.

438 An interesting article in this direction is Christian G. Caubert, "Por Uma (Nova?) Epistemologia da Geopolítica", *Política e Estratégia*, v. 2 n. 4, October-December 1984, pp. 628-647. On a general view on geopolitics in Brazil and Argentina see Howard T. Pittman, "Geopolitics and Foreign Policy in Argentina, Brazil and Chile" in Elizabeth G. Ferris and Jennie K. Lincoln (eds), *Latin American Foreign Policies: Global and Regional Dimensions*, Boulder, Westview Press, 1981, and John Child, "Pensamento Geopolítico Latino-Americano", *A Defesa Nacional*, July-August 1980, pp. 55-79.

of Brazil's ten neighbours. For Argentina, even with an unresolved rivalry with Chile, motivated by territorial claims in the Patagonia and over the Beagle islands in the Southern tip of the continent, Brazil has been historically perceived as being, if only by her sheer geographical size, the main cause for her insecurity.

The main factor which aggravated Buenos Aires's insecurity during the 1970s was Brazil's economic expansion. Argentina feared being economically bypassed by her neighbour. With the traditional buffer states of Uruguay, Paraguay and Bolivia tending to gravitate economically towards the Brazilian orbit, Buenos Aires perceived that it was rapidly losing her capacity to be an equivalent power in South America. Thus, much of her anxiety about Brazilian expansion was caused by this fear. In this context, Buenos Aires could legitimately feel threatened by the Brazilian-German nuclear deal.

Nevertheless, as a keen defender of the right to keep open the nuclear path and the production of peaceful nuclear explosives, Buenos Aires knew precisely what was at stake in the deal. She knew that it was not the best available solution if a military purpose was the ultimate intention of the deal. Her civilian and military elites were well aware that she had been the regional leader in the nuclear field. Contrary to Brazil, in Argentina nuclear technology was never publicly contested, and appeared to enjoy a firm national consensus behind it⁴³⁹. Apart from the famous historical fiasco of the first Peron government in 1946, the joint civilian and military association in the nuclear field was supported irrespective of political allegiances.

439 On these aspects of Argentina's nuclear programme see Sergio Ceron, "A Política Nuclear no Âmbito da Estratégia Global Argentina", *Política e Estratégia*, v. 2 n. 4, October-December 1984, pp. 505-11, and Mario H. Orsolini, "O Plano Nuclear Argentino: Um Modelo de Ação Estratégica", *Política e Estratégia*, v. 2 n. 4, October-December 1984, pp. 518-26.

Her ultimate support for the Brazilian deal, and its right to pursue an independent peaceful nuclear programme, was a proof that she put the pressures of the non-proliferation regime above the fear of Brasilia's ambitions⁴⁴⁰. The non-proliferation regime has been the main target in Argentina's nuclear diplomacy. Similar to Brazil, she did not recognise the NPT as a just treaty⁴⁴¹.

This gesture helped to pave the way for greater diplomatic co-operation. Both nations began to co-ordinate and exchange ideas on the best way to resist the pressures constantly exerted by the nuclear states to join the regime. They began to co-operate in a kind of anti-NPT axis. Nevertheless the degree of economic and political co-operation or even a more ambitious economic integration, depended on resolving deeply ingrained conflicts over natural resources and, ultimately on the nature of their respective domestic regimes.

Since the settlement of the Itaipu dispute in 1979, their bilateral relationship improved very rapidly. Military Presidents, João Figueiredo in Brazil and Eduardo Viola in Argentina, resumed a dialogue on ways to deepen their economic and political cooperation. But undoubtedly, the main impulse for the changing quality of the relationship was the presence of two civilian administrations, in a context of deep economic crisis and diplomatic isolation. The complexity of their financial situation, aggravated by the 'black September' of 1982, coupled with Buenos Aires's diplomatic isolation after the South Atlantic War, contributed to a more effective economic and political dialogue. Perhaps the most serious financial crisis ever faced by both nations, including a blockade of their access to new foreign credits, helped to end their perennial hostility. It stimulated the search for

440 See Rodrigo Díaz Albonico, "El Sistema de Seguridad Interamericano y sus Nuevos Desarrollos a través del Tratado de Tlatelolco", *Estudios Internacionales*, n. 51, July-September 1980, pp. 345-81.

441 Julio C. Carasales, *El Desarme de los Desarmados: Argentina y el Tratado de No Proliferación de Armas Nucleares*, Buenos Aires, Editora Pleamar, 1987.

an ambitious programme of economic integration and politico-diplomatic cooperation.

The ideas praising economic integration and political collaboration within Latin America were not a 1970's novelty. Behind the most recent talks, there was a complex history and a solid group of supporters. The main defenders of these ideals were a part of the political and intellectual elite, which could be labelled as left of centre nationalists. This current of thought also produced an explanation for the historical hostilities between the two nations based on malign foreign influences. First Britain and then the United States stimulated an artificial rivalry between the two most powerful nations of South America, following a policy of divide and rule.

Helio Jaguaribe, the most famous Brazilian supporter of this approach, has since the 1950s developed a defence of strategic axis between Buenos Aires and Brasilia, to oppose American domination of the region. It included the possession of an autonomous deterrent capacity, based on nuclear weapons⁴⁴².

It is not difficult to see a line of continuity in Jaguaribe's approach to the revival of the ideas on economic and the political integration in the 1980s. Now the idea on political cooperation involved a strategic approach as well. Seeking to harmonize their defence policies, and to end the enemy mentality, was perhaps even more difficult than economic integration. Although it was possible to organise, for the first time, annual meetings between their armed forces, to discuss confidence-building measures and possibilities of defence cooperation, the mistrust persisted. It was not an easy task to clear up years of indoctrination and defence preparation. Nevertheless, the very fact that military officers of

442 See Helio Jaguaribe, *O Nacionalismo na Atualidade Brasileira*, Rio de Janeiro, ISEB, 1958, pp. 22.1-96.

both nations were able to sit together openly, and discuss both points of agreement and difference marked a new era⁴⁴³.

Meanwhile, a gradual and complex process of collaboration to achieve a politico-diplomatic framework for economic as well as technological cooperation was being developed. In no other field had cooperation been more debated, and effectively advanced, than in the nuclear field⁴⁴⁴. For two nations which were described as adversaries in a race to be the first to develop nuclear weapons in Latin America, it appeared to be a surprising move. In the nuclear field, with the tradition of military involvement, open collaboration was a novelty which transcended the usual rhetoric of economic integration and political cooperation. It was a novelty full of symbolic importance. It required a common vision of the global order as being unjust and organised against their best interests. Modern technology, for Buenos Aires and Brasilia, as the most powerful symbol of an advanced economy, was seen as being unjustly dominated by a few advanced nations. Therefore regional collaboration, not regional competition, became the only means to escape the barriers erected by the non-proliferation regime. Joining forces in the nuclear field became a powerful symbol of this rejection.

443 Three meetings already had taken place between their armed forces. They were called 'Simpósios de Estudos Estratégicos Argentino-Brasileiros'. The first took place in Buenos Aires in April 1987, the second in São Paulo in April 1988 and the third again in Buenos Aires in March 1989. See Monica Hirst and Maria Regina Soares de Lima, "Crisis y Toma de Decisión en la Política Exterior Brasileña: El Programa de Integración Argentina-Brasil y las Negociaciones Sobre la Informática con Estados Unidos" in Roberto Russel (ed), *Política Exterior y Toma de Decisiones en América Latina*, Buenos Aires, RIAL/Grupo Editor Latinoamericano, 1990, pp. 61-110.

444 See Jorge Grandi, "La Integración, la Cooperación Argentino-Brasileña y la Disuasión Nuclear Desarmada", *Síntesis*, 2/1987, pp. 409-21, and "La Politique Nucleaire du Bresil et d'Argentine", *Problemes d'Amerique Latine*, 1 Trimestre 1987, pp. 107-32; Monica Hirst and Hector Eduardo Boceo, "Cooperação Nuclear e Integração Brasil-Argentina", *Contexto Internacional*, n. 9, January-June 1989, pp. 63-78.

5.6. Brazil-Argentina Nuclear Agreements: An anti-NPT Axis?

The political and strategic circumstances which made possible the forms of diplomatic and technical collaboration in the nuclear field between Brazil and Argentina were, paradoxically, established during the period of military rule. Both countries ended this period, Argentina in 1983 and Brazil in 1985, in deep financial crisis and, in the case of Argentina, diplomatic isolation. These factors help to explain the take-off of the process of political cooperation and economic integration⁴⁴⁵.

A marked improvement in their relationship after resolving the Itaipu case resulted in the beginning of technical and diplomatic collaboration in the nuclear field. In 1980, a mutual visit at Presidential level helped to consolidate this new climate of friendship. Among other measures aiming to boost the bilateral relationship, Brazil was invited to supply parts for a reactor planned as the Atucha II nuclear power station. NUCLEN, one of the companies created by the deal with Germany, was responsible for the supply. This invitation was regarded with euphoria in Brazil. Apart from being a much welcomed boost to the Brazilian nuclear programme, because the crisis of the Brazilian-German deal was threatening the survival of the company, it opened the way for the beginning of a mutual acceptance of products and services hitherto regarded as being too sophisticated for their industries to provide. As a part of this deal, Buenos Aires agreed to export tubes of zircalloy for the Brazilian reactor Angra II.

After this first gesture of mutual trust, the deepening of the programme of technological cooperation had to wait the improvement of relations initiated by the two civilian

445 A historical description is Moniz Bandeira, *O Eixo Argentina-Brasil. O Processo de Integração na América Latina*, Brasília, Editora Universidade de Brasília, 1987.

administrations⁴⁴⁶. Since the mid-1970s, Brazil was seeking to affirm a greater presence in Latin America, assuming postures leading to closer regional collaboration⁴⁴⁷. Her policy to support a regional peace plan for Central America, for instance, contrary to Washington designs, was understood in Latin America as a consolidation of the new cooperative climate. In Argentina, the new civilian government sought to distance itself from some actions taken under the military rule, and offered a more cooperative posture in Latin American affairs.

As a consequence, both countries evolved towards a greater emphasis on regional economic integration and political collaboration. For Argentina it was also a great relief, because her strained relationship with much of the Western world after the South Atlantic war left her isolated. For Brazil, it was a consolidation of the policy developed since the 1970s, a way of widening markets and escaping from commercial and financial reliance on Washington. It had the additional advantage of ending her isolation among her traditionally suspicious Spanish-speaking neighbours⁴⁴⁸.

As part of a new foreign policy agenda, leading towards a South American alliance based on an Argentina-Brazil axis, nuclear issues assumed great relevance. First because they had great visibility as a foreign policy issue for both nations. Their similar posture against the nuclear non-proliferation regime was perceived as being a concerted challenge and helped to establish a co-ordinated policy at multilateral level. Second, coordinating a

446 See Sônia de Camargo, "Brasil-Argentina: A Integração em Questão", *Contexto Internacional*, n. 9, January-June 1989, pp. 45-62, and Gerson Moura, "Brasil-Argentina: Com a Democracia o Fim das Hostilidades", *Ciência Hoje*, v. 8 n. 46, September 1988, pp. 30-39.

447 See Gerson Moura and Maria Regina Soares de Lima, "A Trajetória do Pragmatismo – Uma Análise da Política Externa Brasileira", *Dados*, v. 25 n. 3, 1982, pp. 349-63.

448 See Sonia de Camargo and José Maria Vasquez Ocampo, *Autoritarismo e Democracia na Argentina e Brasil. Uma Pecada de Política Exterior – 1973-1984*, São Paulo, Editora Convívio, 1988.

common policy against a clear-cut enemy, namely the NPT, was a way to solidify the alliance. Raising domestic support in a matter which traditionally attracted the backing of nationalist elites was a sound policy for unstable civilian administrations. Painful economic adjustments and political instability, which characterised both civilian administrations, was not a suitable environment for controversial foreign policy decisions. As a consequence, the improvement of the regional climate was presented as an active policy against international isolation.

They began to co-ordinate their diplomacy in a more effective way. Apart from similar postures at multilateral level over nuclear issues, they developed concrete joint initiatives. In 1988, they successfully applied to send a joint delegation to an international conference on fast-breeder reactors, convened by the IAEA⁴⁴⁹. Combining their technical expertise, they were able to convince the panel of experts that they deserved a place on the selected group of advanced nations, capable of exchanging relevant information on this technology. The Agency in Vienna received their joint application as a surprise, and gave its support for the idea.

But the heart of the new diplomatic posture lied in achieving a set of confidence-building measures in the nuclear field. As a way to answer indirectly the foreign pressures to join the NPT, President Alfonsín offered Brasilia a bilateral system of mutual inspections of nuclear installations in both nations⁴⁵⁰. It was an initiative taken to affirm, domestically and internationally, that he was in full control of Argentina's nuclear programme. Admiral Castro Madero, the head of CNEA during the last years of the military

449 See "Brasil e Argentina Fazem Acordo Para Construir um Reator 'Fast-Breeder'", *Gazeta Mercantil*, 2 September 1988, and "Brasil e Argentina Participação de Encontro sobre 'Fast-Breeder'", *Gazeta Mercantil*, 27 March 1989.

450 It was proposed by Alfonsín in November 1985. See "Derrota nas Malvinas Aproximou os Dois Países na Area Nuclear", *Folha de S. Paulo*, 8 April 1988.

regime, announced in late 1983, just before Alfonsín took office, that Argentina had achieved the technology to enrich uranium. The timing of his announcement was taken as the presentation by the out-going military administration, of a *fait accompli*. Thus, Alfonsín inherited a successful nuclear programme, but one which was firmly in the hands of the armed forces. His appointment of a close political associate as the new head of CNEA, and the offer of confidence-building measures to Brasilia were part of a same logic to de-militarise its successful nuclear programme.

This offer, comprising a broad level of inspections, was politely received by Brasilia but not accepted. It involved, in Brasilia's view, serious problems of industrial espionage and entailed a degree of change she was not yet prepared to undertake. In her understanding, it signified too much change, from deep mistrust to a complete trust and openness. Brasilia favoured instead a more gradual approach, which undoubtedly reflected the level of control still exerted by sectors of the armed forces on her nuclear policy. Meanwhile Itamaraty did not abandon other relevant confidence-building measures⁴⁵¹.

The greater impact of this new confident mood between them in the nuclear field was caused by Alfonsín invitation to President Sarney to visit the ultra-secret Pilcanlyeu enrichment plant near Bariloche. This was a secret and recently built enrichment facility, outside the IAEA safeguard system, built entirely with Argentine technology. The invitation came as a surprise, because it was the first time ever that Buenos Aires had admitted that the plant existed. The official justification of its existence, in a nation which opted to build their nuclear reactors using natural uranium and heavy water, was that a certain amount of lightly enriched uranium was technically necessary for a better functioning of the

451 See "Brasil e Argentina Criam Frente Comum Para o Átomo", *Jornal do Brasil*, 16 July 1987.

type of nuclear reactor chosen by CNEA. As an additional motive, Argentina sold research reactors, using enriched uranium, to Peru and Algeria, and offered to sell them enriched uranium. For these reasons, it was said, enriching uranium was related to commercial benefits⁴⁵². Given the political circumstances in which Argentina found itself at the time, the announcement that an official Brazilian delegation, led by President Sarney, was going to visit the plant, was a major diplomatic breakthrough.

In fact the visit was a culmination of a diplomatic process which started with the 'Declaração do Iguacu' in December 1985. In this declaration, both countries pledged emphatically that their nuclear programmes would be used only for peaceful purposes and would remain under civilian control. It was intended to be a symbolic assurance to both, the domestic and the international community. It was followed by concrete measures to forgo effective technological collaboration in the nuclear field.

Several groups were formed with the aim to co-ordinate areas of immediate economic and technological collaboration and a programme to exchange information was created. A deepening of joint diplomatic initiatives at multilateral level to defend their right to advanced technologies was also planned.

In this context, Alfonsín's invitation for the Brazilian President to visit a most secret facility, and its expected positive repercussions, was a clever diplomatic move. It helped to solidify the idea that an axis based on peaceful nuclear collaboration was being formed between them. It was also intended to answer the constant external diplomatic pressures made to join the non-proliferation regime. Trust and collaboration, through a South-South joint effort to find solutions to their common technological problems, was presented

452 See "Visita Será a Usina Secreta", *Jornal do Brasil*, 15 July 1987; "Brasil e Argentina Criam Frente Comum Para o Átomo", *Jornal do Brasil*, 16 July 1987; "Brasil e Argentina Já Trocam seus Segredos Nucleares", *Jornal do Brasil*, 17 July 1987.

as a means to resist together the foreign pressures. The fact that both nations had refused to join the NPT, and were suffering the consequences, forged the view that to collaborate bilaterally was a way to resist these continuing pressures, adding to each other resources. The assurances given by both Presidents on the peaceful nature of their respective nuclear programmes and the confidence-building measures established sought to convince the international community of their determination.

Since Alfonsín's invitation to Sarney to visit Pilcanlyeu, the confidence-building measures have advanced. Sarney returned the compliment by inviting Alfonsín to assist the inauguration of the navy-led Aramar Centre in the state of São Paulo. Aramar, a centre directed by COPESP, was projected to house the installations to enrich uranium on an industrial scale, and to develop a small reactor for naval propulsion⁴⁵³. As a secret project, the climax of the successful autonomous nuclear programme led by the navy, Alfonsín's presence at the inauguration had a symbolism similar to Sarney's visit to Bariloche. As another step in the confidence-building process, Alfonsín's presence was intended to show Brasília's willingness to deepen their collaboration⁴⁵⁴.

Other confidence-building measures were already being taken. With Sarney's announcement in 1987 that Brazil had acquired the capacity to dominate the complete nuclear fuel cycle, Brazil had apparently drawn level with Buenos Aires in terms of access to sensitive technologies. It was considered a victory for the autonomous programme. With the inauguration of Aramar, there was a clear signal that, despite budgetary constraints, and

453 See the official publication *Centro Experimental Aramar*, São Paulo, Ministério da Marinha-COPESP, 1988.

454 "O Brasil Evita Corrida Nuclear", *O Estado de S. Paulo*, 7 April 1988. Alfonsín and Sarney delivered a joint declaration called 'Declaração do Iperó'. It stressed the peaceful use of their nuclear programmes and was a permanent basis for bilateral cooperation in the nuclear field. See the full text of the declaration in *O Estado de S. Paulo*, 8 April 1988.

the scaling down of the pace of nuclear development, Brazil would continue to invest in enriching uranium, at both the research and the commercial levels. The continuation of this programme, even at the expense of much needed investment in new ships as claimed by the navy – a significant part of the navy's budget was allocated to GOPESP – was a signal of its determination to pursue the nuclear programme. Hence, it was important that a civilian President was assured of the effective control of the programme and its peaceful application.

Buenos Aires's reaction to Brasilia's announcement of the conquering the complete nuclear fuel cycle was to encourage it⁴⁵⁵. Alfonsín's answer was particularly warm, because Brasilia sent a personal communication from President Sarney, informing the Casa Rosada before it was made public in Brazil⁴⁵⁶. It was also a clever diplomatic move, aiming to foster the confidence-building process.

However, these clever and successful diplomatic moves between Brasilia and Buenos Aires are not sufficient conditions to signal a new era of friendship in Brazilian-Argentine relations. Common postures towards the non-proliferation regime were a fertile ground to build upon a more durable and consistent alliance, but there is still a long way to go in establishing a common defence posture, which would not falter as a result of changing regional or global circumstances.

Summing up, the novelty of their nuclear collaboration was caused mainly by a common perception of the nature of the non-proliferation regime. Regional and global circumstances

455 See "Conquista Nuclear Brasileira Alegria os Argentinos", *Jornal do Brasil*, 6 September 1987; "Alfonsín Respondeu a Sarney com Entusiasmo", *Jornal do Brasil*, 7 September 1987.

456 See "Sarney Envia Assessor para Avisar Presidente Argentino", *Folha de S. Paulo*, 5 September 1987. The text of the letters sent by Sarney in September 2, and Alfonsín's answer in September 4 may be found in *Folha de S. Paulo*, 6 September 1987.

contributed to the development of a programme of economic integration and political collaboration. Nonetheless, economic and political integration, the alleged final goal of the whole process is a very complex task. Its hitherto unsuccessful record in Latin America does not contribute to great expectations. Nonetheless, in the nuclear field, which could be considered as a significant point of discord in a competitive regional environment, the actions taken did contribute to greater friendship and collaboration. As highly visible, the nuclear issue could be perceived as a symbol of a competitive relationship, as in the approach based over the 'nuclear race'. In contrast, their collaboration prepared the ground for the acceleration of a coordinated policy to counter the perceived barriers erected by the non-proliferation regime.



CONCLUSION

The main purpose of the thesis has been to describe and explain Brazil's posture towards the nuclear non-proliferation regime. The thesis argues that to understand the Brazilian policy towards the Non-Proliferation Treaty, the notion of a Nuclear Weapon-Free Zone and the rules and regulations of nuclear commerce, it is necessary to comprehend the evolution of her ambition to master nuclear technology. This ambition, which dated from the 1950's, became part of the piecemeal building of a broader notion of national security, encompassing a military, a political and an economic dimension.

As a revisionist nation, aspiring to a greater international role, Brazil developed and implemented a rationale to sustain its ambition to master up-to-date technology. Conquering modern technology was seen as a necessary condition to economic development and prosperity. As a result, Brazil developed the policy of opposing the nuclear non-proliferation regime, because it was perceived as a barrier to the ambition to gain access to nuclear technology for peaceful purposes and other military applications.

Brazil did not sign the NPT and she is part of a group of nations which has been vociferous critics of the nuclear non-proliferation regime. The mainstream of the literature on nuclear non-proliferation has described this group's non-acceptance of the regime as being motivated basically by a wish to master nuclear technology for non-peaceful purposes. Their capabilities

as well as their intentions in the complex nuclear field have been continuously assessed in order to prove that their true motivation in going nuclear lay not in economic but in military reasons. For this literature, the ambition of this group of nations to go nuclear is a proved fact, because they are, according to the major argument developed, trapped into conflictive regional environments which forced them to increase their national security by any means available.

The thesis suggests that in South America this supposed nuclear arms race did not take place as in the other main examples largely utilised by the literature, like South Asia or the Middle East. The view that South America lacked the same conflictive pattern of relations as the other main cases utilised was not employed in the thesis with the intention to negate the difficult pattern of historical relations between the two main regional actors, Brazil and Argentina. It was an argument employed with the aim of expressing reservations about an approach which seeks a general level of explanation for the phenomenon of nuclear weapons proliferation.

Moreover, the debate about the main consequences of nuclear weapons proliferation to global stability, as well as the cases analysed in the study undergone on the notion of a Nuclear Weapon-Free Zone, made the picture more complex. They revealed that there are several complicating factors in the notion that a region free of nuclear weapons is, by definition, a contribution to the increase of national, regional and global security.

Latin America has been, since the reshaping of the international order drawn up by the United States and the Soviet Union during the post-war years, a region located at the American sphere of influence. The inter-American collective security system which was gradually and loosely built up by Washington was used

to control the military ambitions and capabilities of the Latin American nations. Integrating the hemisphere in a loose collective defence system which served well her interests, the United States was able to exert a certain amount of control over the domestic and the foreign policies of the Latin American nations. Furthermore as almost the sole supplier of armaments to the region, Washington was able until the mid-sixties to control the level of defence spending and the quality and quantity of the armament imported by the region.

This collective defence system has suffered a long and profound process of decline. In terms of doctrine, quantity and quality of armaments employed by the Latin American defence forces, and in relation to overall defence policy, it is impossible now to discern a common security concept between the Northern and the Southern parts of the Western hemisphere. The erosion of the collective defence system was a long process, caused by a number of reasons, which the recent end of the cold war only made more visible.

One main factor that caused the erosion of the inter-American military system was the necessity felt by the armed forces of Latin America to provide for their own defence. Perceptions about the fragility of their defence system, present for a long time, were accentuated by a number of events which occurred during the 1980s. The first major event was the war in the South Atlantic. In Brazil, the war contributed to strengthen those who were pressing in favour of continuing to invest to achieve a more autonomous defence basis, a process which had started in the late 1960s. Brazil possesses now a reasonably sophisticated arms industry, being almost self-sufficient in armaments. But it still lacks advanced technology.

The approach utilised in the thesis was not chronological. Even arguing that one has to understand historically the motivations to go nuclear, the thesis did not treat the subject chronologically. It approached the subject topically, seeking to integrate the many different facets of the nuclear issue. The nuclear issue has a blurred peaceful and non-peaceful dimension, a military and also a political and an economical component. The attempt made throughout the thesis was to treat these different aspects of the nuclear issue under a common approach, hence the utility of a broader concept of national security.

The main argument underlying the thesis is that it is too simplistic to approach the nuclear non-proliferation issue only as a strict military issue. The motivations of many nations to go nuclear are very complex. There is undoubtedly a fundamental military aspect in this motivation, but it should not be isolated from economic and political aspects. The literature which does this tends to simplify too much the logic which drives nations not located at the centre of the international system to pursue nuclear technology. It is correct to say that there is a strong military component in the search to gain access to complex technologies. It is understandable, and historically observable, that nations at the periphery of the global system tended to emulate the military achievements of the nations located at the centre of the global system. The nuclear non-proliferation regime was set up to halt this process.

But the complexity of the nuclear issue is basically caused by the nature of a dual technology. Nuclear technology is a technology for dual use, civilian and military. In Brazil's case, the main motivation behind the aspiration to dominate the technology was a concept of national security encompassing a military, a political and an economic dimension. The thesis argues that developing nuclear technology to acquire nuclear weapons was not the

main motivation behind Brazil's complex and unstable nuclear programme. The main motivation behind Brazil's attempt to gain access to the complete nuclear fuel cycle was peaceful, despite the existence of a military dimension. This military dimension was present in Brazil's case by the influence of the military on the nuclear issue, by the domination of the decision-making process by military officers during two decades, as well as by the presence of groups within the armed services in favour of developing nuclear weapons.

The existence of military-led governments in Brazil and Argentina since the 1960s have undoubtedly contributed to the perception that both were seeking to master nuclear technology for non-peaceful purposes. Authoritarian regimes were implemented in much of South America from the 1960s onwards, initially perceived as being puppet regimes in favour of American interests, but which gradually developed, as in the case of Brazil, complex interests of their own. Brazil's opposition to the nuclear non-proliferation regime was an example of this evolution, because the roots of the Brazilian perception of the international environment as highly competitive and the non-proliferation regime as a barrier were solidly planted in Brazil's civilian and military elites. The attempt to master advanced technologies, a basic idea of Brazil's national security notion, was seen as a fundamental step for upward international mobility.

Due to the advancement of their nuclear programmes, Argentina and Brazil were pointed out by the literature on non-proliferation as the Latin American cases of a global logic. Because they possessed the two most advanced nuclear programmes, and were both critics of the non-proliferation regime, Argentina and Brazil were singled out as the regional examples of the global drive towards the proliferation of nuclear weapons. The thesis argues that, despite their competitive

historical relationship, this is not sufficient evidence to prove that there occurred a 'nuclear race' in South America. Since the 1950s both Argentina and Brazil developed in parallel their respective nuclear programmes, with different degrees of success, alongside a number of other nations.

From around 1979, the improvement in their bilateral relations led towards a novel process of economic and political collaboration and the establishment of confidence-building measures in the nuclear field. These became part of an evolving process of political, economic, diplomatic and technological cooperation. The bilateral cooperation in the nuclear field occurred because both had similar perceptions about the non-proliferation regime as being an unjust and discriminatory regime. Their grievances against the regime opened the possibility of forming an independent nuclear axis, based on cooperation instead of competition.

5.7. The Recent Evolution of Brazil's Nuclear Issues

Since the coming into power of the first civilian President directly elected in March 1990, the nuclear issue acquired an even greater visibility in Brazil than during the previous civilian government of President José Sarney. President Fernando Collor apparently intended to change some aspects of Brazil's domestic and foreign policy. As a highly visible issue, the nuclear issue was a good case in hand to exercise his ambition to change Brazil's eroded international image. Indeed, the military were able to maintain a high degree of influence throughout the Sarney administration, including in the nuclear programme. Therefore, the re-organisation of Brazil's domestic nuclear programme and the announcement of change in diplomatic postures became important measures taken by the new government.

Two events which occurred in September 1990 contributed to place the nuclear issue at the core of Brazil's political agenda. Both

were highly visible exercises in public relations, part of President Collor attempt to forge an impression of efficiency and to draw up a better international image.

The first event was a symbolic gesture of closing down a site located at the Cachimbo region in the state of Pará, in the heart of the Amazon⁴⁵⁷. A huge and deep well, allegedly built by the air force to undergo nuclear underground tests, was closed down by the President himself. The second was President Collor's announcement at the General Assembly of the United Nations that Brazil was accepting the prohibition to use peaceful nuclear explosives⁴⁵⁸.

Both events were very significant in the recent history of Brazil's domestic and foreign nuclear policies. The first was an admission that there were groups amongst Brazil's armed services which were planning a peaceful nuclear explosion. It seems that the site chosen in the Cachimbo region, part of a huge area for military training and armament tests, was built between 1980 and 1981 or between 1984 and 1986, according to different versions. It was built secretly, under the control of the air force, apparently to be used as a future site for a nuclear underground test. According to the story put forward by President Collor, the well was part of a so-called 'Projeto Solimões', which aimed to develop the capacity to detonate in the near future a peaceful nuclear explosion⁴⁵⁹. In contrast with the nuclear project set up by the navy – the bulk of the parallel programme – a group working secretly at the air force's Instituto de Estudos Avancados, had plans to include the use of this secretly built well to undergone in the future nuclear underground tests.

With the information currently available, it is impossible to evaluate the real intention of this small group within the air

457 See "Ação Tapa-Buraco", *Veja*, 26 September 1990, and "Buraco Lacrado", *Istoé Senhor*, 26 September 1990.

458 See "Collor Condenará uso de Explosões Atômicas", *Jornal de Brasil*, 24 September 1990.

459 See "Buraco Custou mais do que US\$ 5 milhões", *Folha de São Paulo*, 19 September 1990.

force, which appears to have prepared this test⁴⁶⁰. As a result of the secrecy which still involves the issue, it is difficult to interpret the seriousness as well as the dimension of the so-called 'Projeto Solimões'. Serious doubts remain as to whether if the building of the well was part of a well-planned policy to detonate a nuclear device.

Several contrasting explanations were developed to explain the existence of the well, and the technical evidence currently available is not sufficient to prove its actual utility. Since the existence of the site was firstly denounced by the newspaper *Folha de São Paulo* in 1986, the debate which followed it was not conclusive. The government of President Sarney did not recognise then the existence of such site⁴⁶¹.

When the existence of the site was acknowledged by President Collor, it was followed by mutual recriminations between air force authorities and ex-members of the National Security Council. Neither the air force authorities nor ex-members of the National Security Council assumed responsibility for its construction. In any case, President Collor gesture of admitting its existence and closing it down was timely and made to coincide with his trip to the United Nations General Assembly.

Together with his Secretary for Science and Technology, José Goldemberg, and his Secretary for the Environment, José Lutzenberg, two well-known critics of Brazil's nuclear programme, President Collor used the opportunity to reassure the domestic and the foreign public that Brazil's nuclear programme was now under firm civilian control. He also linked the nuclear issue with the environment issue. As the site was located in the Amazons,

460 See "Governo Isenta Aeronáutica do Caso Cachimbo", *Folha de São Paulo*, 19 September 1990.

461 See a summary of the findings in Luiz Pinguelli Rosa, "A Verdade sobre Cachimbo e a Bomba Nuclear", *Folha de São Paulo*, 25 October 1990.

the centre of the international debate over the environment, its closure brought the additional advantage of showing a new public concern with the Amazon. To sum up, it was part of President Collor's strategy to improve Brazil's international image. Linking the nuclear issue with the environment issue was sought as a means to reassure the international community of the good intentions of his administration.

Despite all these factors, more important than the closure of the Cachimbo site, was the manner of its announcement at the General Assembly of the United Nations. In renouncing the right to conduct a 'peaceful nuclear explosion', Brazil reversed a policy which had become a matter of principle. As the thesis showed, the debate on the right to conduct peaceful nuclear explosions was fiercely disputed during the negotiations leading to both the NPT and the Treaty of Tlatelolco. Renouncing the right to conduct them now was an admission that Brasilia's determination became unsustainable. Defending the right to conduct peaceful nuclear explosions turned out to be a policy which was causing more harm than good to Brazil's ambition to master modern technology. All the technical evidence available had definitively proved that the supposed economic benefits of peaceful nuclear explosives were not to be taken seriously. A position that did make sense in the 1960's, when both superpowers were taking seriously the possibility of applying such explosions to economic benefits, did not make sense after they both abandoned this option later on.

The right to conduct peaceful nuclear explosions became a question of principle to Brazil, because it became a symbol of Brazil's rejection of the nuclear non-proliferation regime. Acquiring the access to the complete nuclear fuel cycle and 'keeping open the nuclear path' were the main reasons for the policy of not joining the regime. Brazil did not want any constraint in its search for modern

technology, and the right to conduct peaceful nuclear explosions became the perfect symbol of independence in the nuclear field.

In President Collor's speech at the UN General Assembly, the renunciation of this right appears to be not in contradiction with Brazil's defence of its right to acquire modern technology, including nuclear technology⁴⁶². The renunciation was the result of the realization that her policy for twenty years had become out of tune with the new realities of the non-proliferation regime. Symbolised by the NPT, which had its most recent review conference in 1990, the regime appears to be resisting the opposition of some nations and becoming gradually more broadly accepted⁴⁶³. In reaffirming that Brazil's nuclear programme seeks only peaceful purposes, in a repetition of Itamaraty's conventional diplomacy of the last twenty years, President Collor did not innovate. But in accepting that Brazil was also openly abandoning the defence of the right to conduct peaceful nuclear explosions he was expressing an important change in policy.

This change in policy was a reaction to both domestic and international circumstances. It represented an admission that the policy of defending the right to conduct peaceful nuclear explosions had become politically counter-productive. It was also causing mounting costs in Brazil's economic and political relations with the industrialised world. Nonetheless there was neither a change of policy in relation to the ambition to master nuclear technology autonomously nor did this represent an overall acceptance of the regime, symbolised by the NPT. This is so because nuclear technology as a symbol of modern technology was not abandoned.

462 See "Collor Defenderá na ONU Acesso a Novas Tecnologias", *Jornal do Brasil*, 23 September 1990.

463 Two contrasting views of the 1990's review conference of the NPT are: Leonard S. Spector and Jacqueline R. Smith, "Deadlock Damages Nonproliferation" and William Epstein, "Conference a Qualified Success", both in *Bulletin of the Atomic Scientists*, v. 46 n. 10, December 1990, pp. 39-47.

Despite the precarious economic situation of both Argentina and Brazil, there are still no clear signals that they are planning to abandon altogether decades of investment which both undergone in the nuclear field. Financial difficulties may be retarding commitments and extending time-tables, but there is no evidence yet available to indicate that the administrations of either President Collor or President Carlos Menen are seriously considering reversing the previous commitment.

What Collor's speech in the UN General Assembly and subsequent events did show was that Brazil appears to be erasing the last signals that the nuclear programme is a military-dominated programme. To emphasise the civilian control of the nuclear programme and the continuation of confidence-building measures between them, Brazil and Argentina both agreed to open their nuclear facilities to international supervision.

From a series of events which occurred lately, the most relevant is the accord signed in March 1991 between Brasilia, Buenos Aires and the IAEA in Vienna, by which both nations accepted to open all their nuclear installations to the inspection of the Agency⁴⁶⁴. This represented again another important change of an old posture, which did make sense when it was first implemented but had lost its reason d'être. These recent actions pointed to the deepening of the bilateral confidence-building process between the two South American neighbours and re-affirmed their commitment to the peaceful uses of the atom. Broadening the scope of the confidence building measures only make sense, however, if understood under the recent moves which took place in their bilateral relations, in inter-American relations and also in the international system.

464 See Joe Goldman "Argentina, Brazil open to inspections", *The Bulletin of the Atomic Scientists*, v. 47 n. 4, May 1991, pp. 8-10.

Indeed, the re-alignment of foreign relations in South America seems now to be a serious process. The new climate of cooperation which started in the late 1970's is likely to be heading towards a South American version of a common market in 1994. This process should be understood as representing the local version of the great political shifts which are occurring in the international system.

Events which were at the core of the inter-American agenda during much of the 1980s, such as Washington's unilateral policy towards the conflicts in Central America, the concerted response of the Latin American nations towards Washington's unilateral policy, the war in the South Atlantic and the debt crisis contributed, *inter alia*, to deepen the perception about the crisis of inter-American security relations.

With the end of the cold war, and the loosening of the communist menace in Latin America, despite the persistence of Castro's Cuba, a major shift occurred in the pattern of inter-American security relations. Trends which were repressed for a long time finally surfaced, as a result of the new global political climate.

The political, economic and diplomatic cooperation in South America, including the Brazilian-Argentine collaboration in the nuclear field, was a product of two distinct but complementary factors. First there was the crisis of the inter-American security relations. Second there were the policies of the two civilian administrations in Argentina and Brazil, which apparently saw in the cooperation process the only route to escape from international isolation.

The former had as a turning point the South Atlantic War. The shock felt by the military establishments of Brazil and Argentina by Britain's exposure of Argentina's defence fragility contributed to increase their sense of insecurity. The historical reliance on

Washington's help to provide an effective defence, which was already passing through a long crisis, collapsed. In addition, in demonstrating that Washington's foremost commitment was in the North and not in the South Atlantic area the war helped to reinforce a new tendency towards cooperation between the armed forces of Argentina and Brazil.

In this context of re-evaluating deeply rooted defence postures and strategic commitments, the mastering of a complex and modern technology, such as nuclear technology, re-affirmed its relevance. Both nations' historical commitment to 'keep open the nuclear path' and their resistance to join the non-proliferation regime, despite the changes which occurred domestically, demonstrated that, once more, mastering nuclear technology was associated with independence, economic development and political maturity.

Argentina's investment to dominate the complete nuclear fuel cycle, as well as the Brazilian parallel programme, preceded the South Atlantic War. But the war justified to military and civilian elites alike the continuation of both programmes.

The second aspect, the transition from military to civilian regimes, opened the possibility of deepening the cooperation process. The first civilian leaders in both nations, President Raul Alfonsín as well as President José Sarney contemplated the possibility of joining the NPT. Buenos Aires sought it as a way to end her diplomatic isolation, and Brasilia as a demonstration of good will towards her main partner, Washington. But the idea was soon abandoned, because domestically the argument put forward against the NPT and in favour of maintaining the investment on the complete nuclear fuel cycle had a broad constituency. It survived the transition from military to civilian administrations, because the perception of the NPT as a barrier was not connected

with the aim to achieve nuclear weapons but with the ambition to dominate a modern technology.

Future Prospects

The beginning of a real process of economic and political cooperation by the two civilian administrations facilitated the establishment of regional confidence-building measures in the nuclear field. It is difficult to predict the evolution, and even the viability, of the South America process of political and economic integration. Much will depend on resolving a deep ingrained financial crisis in both nations, of which the foreign debts are only the most visible aspect. As a consequence the continuity and the pace of the nuclear programme is a great unknown in both nations. In Brazil, budgetary constraints, as well as the endemic administrative instability, appears to be leading towards the termination altogether of the deal with Germany. Besides, a deep suspicion of nuclear energy is becoming in Brazil, contrary to Argentina, more and more a public issue.

Therefore, in this process of searching for a more profound bilateral collaboration with Argentina, the hypothesis of a competition to master nuclear technology for non-peaceful purposes must be definitively abandoned. Brazil-Argentina collaboration in the nuclear field and the continuation of confidence-building measures points to the importance still attributed to nuclear technology for peaceful purposes.

Even if nuclear power as a viable and reliable option to energy supply has to be proven against other viable sources of energy supply, its mystique has not yet vanished. The nationalist wish of 'keeping open the nuclear path' is certainly still part of a project for economic development in both nations. It is a position sustained along a large spectrum of political forces, and has a symbolic appeal for many sectors of the civilian as well as the military elite.

It seems that the reversing of the previous policies in relation to the right to conduct peaceful nuclear explosions, plus the acceptance of IAEA safeguards, are steps towards the nuclear non-proliferation regime, but it is still uncertain when Brazil will join the NPT.

On the other hand, the prospect of both Brazil and Argentina joining the Treaty of Tlatelolco as part of their bilateral confidence-building measures appears to be much more viable in the short run. It appears that President Collor has already taken the decision to waive the conditions set by article 28 of the treaty and then making Brazil a full member of the Treaty of Tlatelolco. Both joining the OPANAL offers the possibility of deepening the regional cooperation process. Because Tlatelolco is a regional treaty, joining it would be a means to intensify regional collaboration and to boost the prestige of a regional body. It would simultaneously help to gain the approval of the international community, with a formal pledge of their peaceful intentions. Both Brazil and Argentina would appear as contributing towards a more manageable nuclear non-proliferation regime.

Nonetheless the ambition to master nuclear technology as a symbol of modern technology, at least in Brazil, does not appear to be losing its appeal. It seems that while it lasts the self-image of Brazil as a nation with capabilities and ambitions to be a first rank power in the international order, it will persist the aim to master up-to-date technologies, because this is the logic of power at the international system. Therefore, to acquire complex and advanced technologies by any means whatsoever will remain a fundamental part in Brazil's notion of national security.



BIBLIOGRAPHY

Books, Articles and Unpublished Material

ACHESON, Dean. 1970. *Present at the Creation: My Years at the State Department*. London: Hamish Hamilton.

ADENIRAN, Trude. 1981. "Nuclear Proliferation in Black Africa: The Coming Crisis of Choice". *Third World Quarterly*, v. 3 n. 4 October, pp. 673-83.

ADLER, Emanuel. 1987. *The Power of Ideology. The Quest for Technological Autonomy in Argentina and Brazil*. Berkeley and Los Angeles: University of California Press.

AHMED, Samir H. 1963. "The Role of Neutrals in the Geneva Negotiations". *Disarmament and Arms Control*, v. 1 n. 1 Summer, pp. 20-32.

ALBA, Victor. 1962. "The Stages of Militarism in Latin America" in JOHNSON, John J. (ed) *The Role of the Military in Underdeveloped Countries*. Princeton: Princeton University Press.

ALBONICO, Rodrigo Diaz. 1980. "El Sistema de Seguridad Interamericano y sus Nuevos Desarrollos a través del Tratado

de Tlatelolco". *Estudios Internacionales*, n. 51 July-September, pp. 345-81.

ALLISON, Graham. 1971. *Essence of Decision: Understanding the Cuban Missile Crisis*. Boston: Little Brown & Company.

ALLYN, Bruce J., BLIGHT, James G. and WELCH, David A. 1989/90. "Essence of Revision: Moscow, Havana, and the Cuban Missile Crisis". *International Security*, v. 14 n. 3 Winter, pp. 136-72.

ALVES, Rex Nazareth. 1988. "Programa Nuclear Brasileiro". *Revista Brasileira de Política Internacional*, n. 117-118, pp. 75-94.

AMBROSE, Stephen E. and BARBER, James Alden (eds). 1972. *The Military in American Society*. New York: The Free Press.

AMMON, Harry. 1981. "The Monroe Doctrine: Domestic Politics or National Decision?". *Diplomatic History*, v. 5 n. 1 Winter, pp. 53-70.

ARARIPE, Alencar. 1967. "Declaração do Coronel Alencar Araripe ao 'Grupo dos Oito Países' em Genebra sobre o Tema 'Explosões Nucleares para Fins Pacíficos'" in *Revista Brasileira de Política Internacional*, March-June, pp. 114-18.

ARAÚJO CASTRO, J.A. de. 1982. *Araújo Castro*. Rodrigo Amado (ed) Brasília: Editora Universidade de Brasília.

ARMANET, Pilar. 1987(a). "El Tratado de Tlatelolco y el Tratado de Rarotonga: Dos Iniciativas con Similares Objetivos" in *Vigésimo Aniversario del Tratado de Tlatelolco*. Mexico City: OPANAL.

ARMANET, Pilar. 1987(b). "La Zona Desnuclearizada Latinoamericana en la Perspectiva de la Cooperación Regional". *Estudios Internacionales*, n. 77 January-March, pp. 19-38.

ARRIAGADA HERRERA, Genaro, n/d. *El Pensamiento Político de los Militares*. Santiago de Chile: CISEC.

and GARRETON, Manuel Antonio. 1978. "América Latina en la Hora de las Doctrinas de Seguridad Nacional" in PÉREZ, María Angélica (ed) *Las Fuerzas Armadas en la Sociedad Civil*. Santiago de Chile: CISEC.

AYOOB, Mohammed. 1991. "The Security Problematic of the Third World". *World Politics*, v. 43 n. 2 January, pp. 257-83.

AZAMBUJA, Marcos Castrioto de. 1989. "Desarmamento – Posições Brasileiras" in FONSECA JUNIOR, Gelson and CARNEIRO LEÃO, Valdemar (eds) *Temas de Política Externa Brasileira*. Brasília: Fundação Alexandre de Gusmão/Editora Ática.

AZAR, Edward E. and MOON, Chung-In (ed). 1988. *National Security in the Third World. The Management of Internal and External Threats*. Aldershot: Edward Elgar.

BADER, William B. 1968. *The United States and the Spread of Nuclear Weapons*. New York: Pegasus.

BAINES, John. 1972. "U.S. Military Assistance to Latin America". *Journal of Inter American Studies and World Affairs*, v. 14 n. 4 November, pp. 469-87.

BALDWIN, David. 1979. "Power Analysis and World Politics: New Trends versus Old Tendencies". *World Politics*, v. 31 January, pp. 161-94.

BALL, Nicolle. 1981. *The Military in the Development Process: A Guide to Issues*. Claremont: Regina Books.

BALL, Nicolle. 1988. *Security and Economy in the Third World*. London: Adamantine Press.

BANDEIRA, Moniz. 1987. *O Eixo Argentina-Brasil. O Processo de Integração na América Latina*. Brasília: Editora Universidade de Brasília.

BARBER, William F. and RONNING, Neale C. 1966. *International Security and Military Power, Counterinsurgency and Civic Action in Latin America*. Columbus: Ohio State University Press.

BARNABY, Frank. 1990. *The Invisible Bomb, The Nuclear Arms Race in the Middle East*. London: I.B. Tauris & Co.

BATISTA, Paulo Nogueira. 1975. "O Programa Nuclear Brasileiro e o Acordo Brasil-República Federal da Alemanha de Cooperação Nuclear". *Segurança & Desenvolvimento*, n. 167, pp. 41-54.

BECHOEFER, Bernard G. 1959. "Negotiating the Statute of the International Energy Agency". *International Organization*, v. 13 Winter, pp. 38-59.

BECKER, Avi. 1985. *Disarmament without Order: The Politics of Disarmament at the United Nations*. Westport: Greenwood.

BERGHAIN, Volker R. 1981. *Militarism, The History of an International Debate 1861-1979*. London: Berg Publishers.

BETHELL, Leslie and ROXBOROUGH, Ian. 1988. "Latin America between the Second World War and the Cold War: Some Reflections on the 1945-8 Conjuncture". *Journal of Latin American Studies*, v. 20 n. 1, pp. 167-89.

BIASI, Renato de. 1979. *A Energia Nuclear no Brasil*. Rio de Janeiro: Biblioteca do Exército Editora.

BOARDMAN, Robert and KEELEY, James. "Nuclear Export Policies and the Non-Proliferation Regime" in Boardman, R. and Keeley, J- (eds) *Nuclear Exports and World Politics. Policy and Regime*. New York: St. Martin Press.

BOOTH, Ken. 1979. *Strategy and Ethnocentrism*. London: Croom Helm.

BOSH, Miguel Marin. 1977. "Mexico y el Desarme". *Foro International*, v. 18 n. 1 July-September, pp. 139-54.

BRACKEN, Paul. 1983. *The Command and Control of Nuclear Forces*. New Haven: Yale University Press.

BRAILLARD, Philipe and DJALILI, Mohamed-Reza (eds). 1986. *The Third World & International Relations*. London: Frances Pinter.

BRENNER, Michael J. 1981. *Nuclear Power and Non-Proliferation. The Remaking of U.S. Policy*. Cambridge: Cambridge University Press.

BREWER, John. 1989. *The Sinews of Power*. London: Unwin Hyman.

BRIGAGÃO, Clóvis. 1984. "O Mercado da Segurança". *Política e Estratégia*, v. 2 n. 2 April-June, pp. 347-52.

and Domício Proença Júnior. 1988. "A Projeção Externa do Brasil: A Questão da Segurança". *Contexto Internacional*, n. 7 January-June, pp. 85-110.

BULL, Hedley. 1975. "Rethinking Non-Proliferation". *International Affairs*, v. 5 n. 2 April, pp. 175-89.

BULL, Hedley. 1961. *The Control of the Arms Race*. London: Weindenfeld & Nicolson for the Institute for Strategic Studies.

BUNDY, McGeorge. 1988. *Danger and Survive: Choices about the Bomb in the First Fifty Years*. New York: Random House.

BUPP, Irvin C. and DERIAN, Jean-Claude. 1981. *The Failed Promise of Nuclear Power. The Story of Light Water*. New York: Basic Books.

BURNS, E. Bradford. 1964. "A Bibliography Essay on the Baron of Rio Branco and his Ministry". *Revista Interamericana de Bibliografia*, v. 14 n. 4 October-December, pp. 406-14.

BURNS, E. Bradford. 1966. *The Unwritten Alliance. Rio Branco and Brazilian American Relations*. New York: Columbia University Press.

BURNS, E. Bradford. 1967. "Tradition and Variation in Brazilian Foreign Policy". *Journal of Inter-American Studies*, v. 9 April, pp. 195-212.

BURNS, E. Bradford. 1977. "As Relações Internacionais do Brasil Durante a Primeira República" in FAUSTO, Boris (ed) *História Geral da Civilização Brasileira. O Brasil Republicano*, T.3 v. 2, São Paulo: Difel.

BURR, Robert N. 1955. "The Balance of Power in Nineteenth Century South America: An Exploratory Essay". *Hispanic American Historical Review*, February, pp. 37-60.

BURR, Robert N. 1965. *By Reason or Force: Chile and the Balancing of Power in South America. 1830-1905*. Berkeley and Los Angeles: University of California Press.

BUZAN, Barry. 1983. *Peoples, States and Fear: The National Security Problem in International Relations*. Brighton: Wheatsheaf.

BUZAN, Barry 1984. "People, Power and Security: Contending Concepts in the Study of International Relations". *Journal of Peace Research*, v. 21 n. 2, pp. 109-25.

BUZAN, Barry 1987. *An Introduction to Strategic Studies*. London: Macmillan for the International Institute of Strategic Studies.

BUZAN, Barry 1991. "Is International Security Possible?" in BOOTH, Ken (ed) *New Thinking about Strategy and International Security*. London: Harper Collins Academic.

CALDERON, Felix. 1982. "Nuclear-Weapon-Free Zone: The Latin American Experiment" in CARLTON, D. and SCHAERF, C. (eds) *The Arms Race in the 1980s*. London: Macmillan.

CAMARGO, Sônia de. 1989. "Brasil-Argentina: A Integração em Questão". *Contexto Internacional*, n. 9 January-June, pp. 45-62.

and OCAMPO, José María Vázquez. 1988. *Autoritarismo e Democracia na Argentina e Brasil. Uma Década de Política Exterior – 1973-1984*. São Paulo: Editora Convivio.

CAMARGO, Aspásia and GOES, Walder de (eds). 1981. *Meio Século de Combate: Diálogo com Cordeiro de Farias*. Rio de Janeiro: Nova Fronteira.

CAMILERI, J.A. 1977. "The Myth of the Peaceful Atom". *Millennium*, v. 6 Autumn, pp. 111-25.

CARSALES, Julio C. 1987. *El Desarme de los Desarmados: Argentina y el Tratado de Tlatelolco*. Buenos Aires: Editora Pleamar.

CARVALHO, José Murilo de. 1974. "As Forças Armadas na Primeira República: O Poder Desestabilizador". Belo Horizonte: *Cadernos do Instituto de Ciência Política*, n. 1, UFMG.

CARVALHO, José Murilo de. 1976. *A Política Científica e Tecnológica do Brasil*. Unpublished research, Rio de Janeiro, IUPERJ, mimeo.

CARVALHO, José Murilo de. 1982. "Armed Forces and Politics in Brazil, 1930-1945". *Hispanic American Historical Review*, v. 62 n. 2, pp. 193-223.

CARVALHO, José Murilo de. 1983. "Forças Armadas e Política, 1930-1945" in *A Revolução de 30. Seminário Internacional*. Brasília: Editora Universidade de Brasília.

CASTELO BRANCO, Umberto de A. 1967. "Trecho de Discurso do Presidente Castelo Branco Pronunciado em 14 de março de 1967". *Revista Brasileira de Política Internacional*, March-June.

CASTILLO R., Maria Eliana. 1985. *Control de Armamentos: El Caso Latinoamericano*. Contribuciones n. 31, Santiago de Chile: FLACSO, mimeo.

CASTRO, Jeanne Berrance de. 1974. "A Guarda Nacional" in BUARQUE DE HOLANDA, Sergio (ed) *História Geral da Civilização Brasileira, o Brasil Monárquico*, T.2 v. 4. São Paulo: Difel.

CATRINA, Cristian. 1988. *Arms Transfers and Dependence*. New York: Taylor & Francis and UNIDIR.

CAUBERT, Christian G. 1984(a). "Diplomacia, Geopolítica e Direito na Bacia do Prata". *Política e Estratégia*, v. 2 n. 2 April-June, pp. 337-46.

CAUBERT, Christian G. 1984(b). "Por Uma (Nova?) Epistemologia da Geopolítica". *Política e Estratégia*, v. 2 n. 4 October-December, pp. 628-47.

CERON, Sergio. 1984. "A Política Nuclear no Âmbito da Estratégia Global Argentina". *Política e Estratégia*, v. 2 n. 4 October-December, pp. 505-11.

CHEIBUB, Zairo Borges. 1984. *Diplomacia, Diplomatas e Política Externa: Aspectos da Institucionalização do Itamaraty*. Unpublished Master's dissertation, Rio de Janeiro, IUPERJ.

CHILD, John. 1975. "The Inter-American Military System: Historical Development, Current Status, and Implications for U.S. Policy" in Farer, Tom J. (ed) *The Future of the Inter-American System*. New York: Praeger.

CHILD, John. 1979. "From 'Color' to 'Rainbow': U.S. Strategic Planning for Latin America, 1919-1945". *Journal of Inter-American Studies and World Affairs*, v. 21 n. 2 May, pp. 233-60.

CHILD, John. 1980. "Pensamento Geopolítico Latino-Americano". *A Defesa Nacional*, July-August, pp. 55-79.

CHILD, John. 1982. *Unequal Alliance: The Inter-American Military System, 1938-1978*. Boulder: Westview Press.

COCHRANE, James D. 1972. "U.S. Policy toward Recognition of Governments and Promotion of Democracy in Latin America Since 1963". *Journal of Latin American Studies*, v. 4 n. 2 November, pp. 275-91.

COCHRANE, James D. 1976. "Tendencia del Gasto Militar del Tamaño de las Fuerzas Armadas en América Latina (1961-1970)". *Fuero Internacional*, January-March, pp. 380-400.

COELHO, Edmundo Campos. 1976. *Em Busca da Identidade: O Exército e a Política na Sociedade Brasileira*. Rio de Janeiro: Forense-Universitária.

COELHO, Edmundo Campos. 1985. "A Instituição Militar no Brasil". *Boletim Informativo e Bibliográfico em Ciências Sociais*, n. 19, pp. 5-20.

COHEN, A and Frankel, B. 1987. "Israel Nuclear Ambiguity". *Bulletin of the Atomic Scientists*, v. 43 n. 2 March, pp. 15-19.

CONN, Gabel. 1968. *Petróleo e Nacionalismo*. São Paulo: Difel.

COMBLIN, Joseph. 1978. *A Ideologia da Segurança Nacional*. Rio de Janeiro: Editora Civilização Brasileira.

COMBS, Jerald A. 1983. *American Diplomatic History. Two Centuries of Changing Interpretations*. Berkeley and Los Angeles: University of California Press.

COMMAGER, Henry Steele (ed). 1973. *Documents of American History*, 9th edition, New York: Prentice Hall.

CONN, Stepson and FAIRCHILD, Byron. 1960. *The Framework of Hemisphere Defense*. Washington, D.C.: Office of the Chief of Military History, Department of the Army.

CONNEL-SMITH, Gordon. 1966. *The Inter-American System*. London: Oxford University Press.

CORDEIRO DE FARIA, Oswaldo. 1986. "Razões que Levaram o Governo a Pensar na Organização da Escola Superior de Guerra". *Revista da Escola Superior de Guerra*, v. 3 n. 7, pp. 9-23.

COSTA, Hécio M. 1967. "Trabalho do Major Hécio Modesto da Costa sobre 'Explosões Nucleares para fins Pacificos'" in *Revista Brasileira de Política Internacional*, March-June, pp. 119-24.

COSTA, Licurgo. 1960. *Uma Nova Política Para as Américas: Doutrina Kubitschek e OPA*. São Paulo: Martins Editora.

COSTA, Thomaz Guedes da. 1982. "A Indústria de Material Bélico no Brasil". *A Defesa Nacional*, n. 703, September-October, pp. 111-31.

COURTNEY, William H. 1980. "Brazil and Argentina: Strategies for American Diplomacy" in Yager, Joseph (ed) *Non-Proliferation and US Foreign Policy*. Washington D.C: The Brookings Institution.

COUTINHO, Lourival. 1955. *O General Goes Depõe*. Rio de Janeiro: Coelho Branco.

DAGNINO, Renato Peixoto. 1989. *A Indústria de Armamentos Brasileira: Uma Tentativa de Avaliação*. Unpublished PhD dissertation, UNICAMP.

DAHL, Robert. 1985. *Controlling Nuclear Weapons. Democracy versus Guardianship*. Syracuse: Syracuse University Press.

DANTAS, Santiago. 1962. *Política Externa Independente*. Rio de Janeiro: Editora Civilização Brasileira.

Dicionário Histórico-Biográfico Brasileiro, 1930-1983. 1984. Edited by Israel Beloch and Alzira Alves de Abreu, Rio de Janeiro, FGV/ Ed. Forense.

DOMINGUEZ, Jorge. 1976. "The Civic Soldier in Cuba" in Lowenthal, Abraham F. (ed) *Armies and Politics in Latin America*. New York: Holmes & Meier.

DUNN, Lewis A. 1990. "Four Decades of Nuclear Nonproliferation: Some Lessons from Wins, Losses and Draws". *Washington Quarterly*, v. 13 n. 3 Summer, pp. 5-18.

EINAUDI, L., HEYMAN Jr, H., RONFELT, D. and SERESERES, C. 1978. "Transferencia de Armas a Latinoamérica: Hacia una Política de Respeto Mutuo" in *Estados Unidos. Perspectiva Latinoamericana*, August-December.

EPSTEIN, William. 1975. "Nuclear Proliferation in the Third World". *Journal of International Affairs*, v. 29 Fall, pp. 185-202.

EPSTEIN, William. 1976. *The Last Chance. Nuclear Proliferation and Arms Control*. New York: The Free Press.

EPSTEIN, William. 1977. *A Nuclear-Weapon-Free Zone in Africa?* Muscatine: The Stanley Foundation, Occasional Paper n. 14.

EPSTEIN, William. 1990. "Conference a Qualified Success". *Bulletin of the Atomic Scientists*, v. 46 n. 10 December, pp. 44-47.

ERICKSON, John and MOMMSEN, Hans. 1973. "Militarism" in Kerning, C. D. (ed) *Marxism, Communism and Western Society*, v. 5 New York: Herber and Herber.

ESCUDE, Carlos. 1988. "Argentine Territorial Nationalism". *Journal of Latin American Studies*, v. 20 n. 1, pp. 139-65.

ESPIELL, Hector Gros. 1981. "Desarme Nuclear, Perspectivas Regionales". *Revista de Estudios Internacionales*, v. 2 n. 4 October-December, pp. 927-49.

ESPIELL, Hector Gros. 1987. "El Conflicto Bélico de 1982 en el Atlántico Sur y el Tratado de Tlatelolco" in *Vigésimo Aniversario del Tratado de Tlatelolco*. Mexico City: OPANAL.

Estados Unidos. Perspectiva Latinoamericana. 1978. Special number "La Dependencia Militar Latinoamericana", August-December.

Estudios Internacionales. 1982. Special edition "América Latina después de las Malvinas", n. 60, October-December.

EVRON, Yair. 1974. "Israel and the Atom: The Uses and Misuses of Ambiguity 1957-1967". *Orbis*, v. 17 n. 4 Winter, pp. 1326-43.

FALK, Richard. 1977. "Nuclear Weapons Proliferation as a World Order Problem". *International Security*, v. 1 n. 3 Winter, pp. 79-93.

FELDMAN, Shai. 1982. *Israel Nuclear Deterrence*. New York: Columbia University Press.

FELDMAN, David Lewis 1985. "The United States' Role in the Malvinas Crisis, 1982: Misguidance and Misperception in Argentina's Decision to go to War". *Journal of Interamerican Studies and World Affairs*, v. 27 n. 2 Summer, pp. 1-23.

FELICIO DA SILVA, Marco Antonio. 1984. "Necessidade de Nuclearização das Forças Armadas Brasileiras". *A Defesa Nacional*, n. 712 March-April, pp. 109-29.

FENWICK, Charles. 1962. "The Issue at Punta del Este: Non-intervention v. Collective Security". *American Journal of International Law*, v. 56 n. 2 April, pp. 469-74.

FERREIRA, Oliveiros S. 1984(a). "O Brasil na Era Nuclear". *Política e Estratégia*, v. 2 n. 1 January-March, pp. 83-94.

FERREIRA, Oliveiros S. 1984(b). "Política Externa e Defesa: O Caso Brasileiro". *Política e Estratégia*, v. 2 n. 2 April-June, pp. 311-36.

FERREIRA, Oliveiros S. 1984(c). "A 'Geopolítica do Brasil' Revisitada". *Política e Estratégia*, v. 2 n. 4 October-December, pp. 578-600.

FINER, Samuel E. 1988. *The Man on Horseback: The Role of the Military in Politics*. Boulder: Westview Press, third edition.

FINKELSTEIN, Amy. 1983. "Brazil, the US and Nuclear Proliferation: American Foreign Policy at the Crossroads". *The Fletcher Forum*, n. 2 Summer, pp. 277-311.

FISCHER, Georges. 1971. *The Non-Proliferation of Nuclear Weapons*. London: Europa Publications.

FISHER, David. 1989. "The 1995 NPT Extension Conference: Problems and Prospects". London: paper prepared for the BISA/ISA convention, mimeo.

FITCH, John S. 1976. *The Military Coup d'Etat as a Political Process: Ecuador, 1948-1966*. Baltimore: Johns Hopkins University Press.

FITCH, John S 1978. "Consecuencias Políticas de la Ayuda Militar Estadounidense a América Latina" in *Estados Unidos. Perspectiva Latinoamericana*, October-December.

FONSECA JR, Gelson. 1989. "Studies on International Relations in Brazil: Recent Times" in Dyer, H.C. and MANGASARIAN, L. (eds) *The Study of International Relations, The State of the Art*. London, Macmillan in association with Millennium.

FRANCIS, Michael J. 1964. "Military Aid to Latin America in the U.S. Congress". *Journal of Inter-American Studies*, v. 6 n. 3 July, pp. 389-404

FRANKO-JONES, Patrice. 1987-88. "Public-Private Partnership: Lessons from the Brazilian Armaments Industry". *Journal of Interamerican Studies and World Affairs*, v. 29 n. 4 Winter, pp. 41-68.

FREEDMAN, Lawrence. 1986. "The First Two Generations of Nuclear Strategists" in Paret, P. (ed) *Makers of Modern Strategy*. Oxford: Clarendon Press.

FREEDMAN, Lawrence. 1991. "Whither Nuclear Strategy?" in Booth, Ken (ed) *New Thinking about Strategy and International Security*. London: Harper Collins Academic.

FREESTONE, David and Davidson, Scott. 1987. "Nuclear Weapon-Free Zones" in Istvan Pogany (ed) *Nuclear Weapons and International Law*. Aldershot: Avebury Press.

FUJITA, Edmundo, 1989. *The Prevention of Geographical Proliferation of Nuclear Weapons: Nuclear-Weapon-Free-Zones*

and Zones of Peace in the Southern Hemisphere. Geneva: UNIDIR, Research Paper n. 4, April.

FULLGRAF, Frederico. 1988. *A Bomba Pacífica. O Brasil e a Corrida Nuclear.* São Paulo: Editora Brasiliense.

FYFE, Nigel and BEEBY, Christopher. 1987. "El Tratado de Rarotonga. Tratado Sobre La Zona Desnuclearizada Del Pacifico Sur" in *Vigésimo Aniversario Del Tratado De Tlateloco.* Mexico City: OPANAL.

GADDIS, John Lewis. 1982. *Strategies of Containment.* New York: Oxford University Press.

GALL, Norman. 1976. "Atoms for Brazil, Dangers for All". *Foreign Policy*, n. 23 Summer, pp. 155-201.

GALOIS, Pierre. 1961. *The Balance of Terror: Strategy for the Nuclear Age.* Boston: Houghton Mifflin. (original French edition 1960).

GARTHOFF, Raymond L. 1988. "Cuban Missile Crisis: The Soviet Story". *Foreign Policy*, n. 72 Fall, pp. 61-80.

GARTHOFF, Raymond L. 1989. *Reflections on the Cuban Missile Crisis.* Washington, D.C.: The Brookings Institution, revised edition.

and BERNSTEIN, Barton J., TRACHTENBERG, Marc and PATERSON, Thomas G. 1990. "Commentaries on 'An Interview with Sergo Mikoyan'". *Diplomatic History*, v. 14 n. 2 Spring 1990, pp. 223-56.

GEORGE, Alexandre L. et all (eds). 1988. *US-Soviet Security Cooperation. Achievements, Failures, Lessons*. New York: Oxford University Press.

GERBER, Larry G. 1982. "The Baruch Plan and the Origins of the Cold War". *Diplomatic History*, v. 6 n. 1 Winter, pp. 69-96.

GILLETE, Robert. 1975. "Nuclear Exports: A U.S. Firm's Troublesome Flirtation with Brazil". *Science*, July, pp. 267-69.

GIRARDET, Raoul. 1960. «Pouvoir Civil and Pouvoir Military Dans La France Contemporaine». *Revue Française de Science Politique*, March, pp. 5-38.

GIROTTI, Carlos A. 1984. *O Estado Nuclear no Brasil*. São Paulo: Editora Brasiliense.

GLICK, Edward B. 1965. "The Feasibility of Arms Control and Disarmament in Latin America". *Orbis*, v. 9 n. 3 Fall, pp. 743-59.

GOES MONTEIRO, Pedro de. 1931. *A Revolução de 30 e a Finalidade Política do Exército*. Rio de Janeiro: Anderson Editores.

GOLDBLAT, Joseph and Millan, Victor. 1987. "El Tratado de Tlatelolco y el Tratado de Rarotonga: Una Comparación Comentada" in *Vigésimo Aniversario del Tratado de Tlatelolco*. Mexico City: OPANAL.

GOLDBLAT, Joseph and LOMAS, Peter. 1989. "Nuclear Non-Proliferation: The Problem States", London: paper prepared for the BISA/ISA convention, mimeo.

GOLDEMBERG, José. 1978. *Energia Nuclear no Brasil. As Origens das Decisões*. São Paulo: Hucitec.

GOLDENBERG, Boris. 1965. *The Cuban Revolution and Latin America*. New York: Frederick A. Praeger.

GOLDMAN, Joe. 1991. "Argentina, Brazil Open to Inspections". *Bulletin of the Atomic Scientists*, v. 47 n. 4 May, pp. 8-10.

GOLDSCHMIDT, Bertrand. 1977(a) "A Historical Survey of Nonproliferation Policies". *International Security*, v. 2 n. 1 Summer, pp. 69-87.

GOLDSCHMIDT, Bertrand. 1977(b). «Le Contrôle de L'énergie Atomique et la Non-Prolifération». *Politique Etrangère*, n. 3-4, pp. 413-30.

and KRATZER, Myron. 1982. "Peaceful Nuclear Relations: A Study of the Creation and the Erosion of Confidence" in Smart, Ian (ed) *World Nuclear Energy*. Baltimore: Johns Hopkins University Press.

GORMAN, Stephen M. 1979. "Security, Influence and Nuclear Weapons: The Case of Argentina and Brazil". *Parameters*, v. 9 March.

GRABENDORFF, Wolf. 1988. "O Brasil e a Não-Proliferação Nuclear". *Política e Estratégia*, v. 6 n. 2 April-June, pp. 272-311.

GRAEBNER, Norman A. (ed). 1986. *The National Security, Its Theory and Practice. 1945-1960*. New York: Oxford University Press.

GRANDI, Jorge. 1987(a). "La Integración, la Cooperación Argentino-Brasileña y la Disuasión Nuclear Desarmada". *Síntesis* 2, pp. 409-21.

GRANDI, Jorge. 1987(b). «La Politique Nucléaire du Brésil et d'Argentine». *Problèmes d'Amérique Latine*, 1 Trimestre, pp. 107-32.

GREEN, David. 1971. *The Containment of Latin America*. Chicago: Quadrangle.

GREINER, Bern. 1990. "The Soviet View: An Interview with Sergo Mikoyan". *Diplomatic History*, v. 14 n. 2 Spring, pp. 205-22.

GUGLIAMELI, Juan Enrique. 1976(a). "El 'Destino Manifesto' Brasileño en el Atlántico Sur". *Estrategia*, n. 36 September-October.

GUGLIAMELI, Juan Enrique. 1976(b). "The Brazilian-German Nuclear Deal: A View from Argentina". *Survival*, July-August, pp. 162-65.

GUGLIAMELI, Juan Enrique. 1978. *Argentina, Brasil y la Bomba Atómica*. Buenos Aires: Editorial Nueva Visión.

GURGEL, José Alfredo Amaral. 1976. *Segurança e Democracia*, Rio de Janeiro: José Olympio Editora.

HACKEL, Erwin. 1983. "The Politics of Nuclear Export in West Germany" in BOARDMAN, R. and KEELEY, J. (eds) *Nuclear Exports and World Politics. Policy and Regime*. New York: St. Martin Press.

HAGGARD, Stephen and SIMMONS, Beth A. 1987. "Theories of International Regimes". *International Organization*, V.41 n. 3 Summer, pp. 491-517.

HAHNER, June E. 1969. *Civilian-Military Relations in Brazil, 1889-1898*. Columbia: University of South Carolina Press.

HAIG, Alexander M. Jr. 1985. "Reply to David Lewis Feldman". *Journal of Interamerican Studies and World Affairs*, v. 27 n. 2 Summer, pp. 23-24.

HAINES, Gerald K. 1977. "Under the Eagle's Wing: The Franklin Roosevelt Administration Forges an American Hemisphere". *Diplomatic History*, n. 1 Fall, pp. 373-88.

HAKOVIRTA, Harto. 1983. "The Soviet Union and the Varieties of Neutrality in Western Europe". *World Politics*, v. 35 n. 4 July, pp. 563-85.

HANDEL, Michael. 1982. "Does the Dog Wag the Tail or Vice Versa? Patron-Client Relations". *Jerusalem Journal of International Relations*, v. 6 n. 2, pp. 24-35.

HEULIN, Bertel. 1966. "Nuclear-free Zones, An Attempt to Place Suggested and Established Nuclear-free Zones within the Framework of International Politics" in *Cooperation and Conflict*, vol.1 n. 1, pp. 11-30.

HILTON, Stanley. 1973. "Military Influence on Brazilian Economic Policy, 1930-1945: A Different View". *Hispanic American Historical Review*, v. 53 n. 1 February, pp. 71-94.

HILTON, Stanley. 1979. "Brazilian Diplomacy and the Washington-Rio de Janeiro Axis During the WWII Era". *Hispanic American Historical Review*, n. 45, May, pp. 201-31.

HILTON, Stanley. 1980. "Brazil and the Post-Versailles World: Elite Images and Foreign Policy Strategy, 1919-1929". *Journal of Latin American Studies*, v. 12 November, pp. 341-64.

HILTON, Stanley. 1981. "The U.S., Brazil, and the Cold War, 1945-60: End of the Special Relationship". *Journal of American History* 68, December, pp. 599-624.

HILTON, Stanley. 1984. "The Armed Forces as Industrialists in Modern Brazil: The Drive for Military Autonomy (1889-1954)". *Hispanic American Historical Review*, v. 62 n. 4 November, pp. 629-73.

HIRST, Monica. 1980. "Impasses e Descaminhos da Política de Não Proliferação Nuclear". Unpublished paper presented at the fourth meeting of ANPOCS, Nova Friburgo.

and BOCEO, Hector Eduardo. 1989. "Cooperação Nuclear e Integração Brasil-Argentina". *Contexto Internacional*, n. 9 January-June, pp. 63-78.

and LIMA, Maria Regina Soares de. 1990. "Crisis y Toma de Decisión en la Política Exterior Brasileña: El Programa de Integración Argentina-Brasil y las Negociaciones Sobre la Informática con Estados Unidos" in RUSSEL, R. (ed) *Política Exterior y Toma de Decisiones en América Latina*. Buenos Aires: RIAL/Grupo Editor Latinoamericano.

HOIST, J.J. 1981. "The Challenge from Nuclear Weapons and Nuclear-Weapons-Free Zones". *Bulletin of Peace Proposals*, V.12 n. 3, pp. 239-46.

HOLSTI, Ole R. and Sullivan, John D. 1969. "National-International Linkages: France and China as Nonconforming Alliance Members" in ROSENAU, James (ed) *Linkage Politics*. New York: The Free Press.

HOMER, Jack A. 1963. "Nonalignment and a Test Ban Agreement: The Role of the Nonaligned Nations". *Journal of Conflict Resolution*, v. 7 n. 3, pp. 542-52.

HOVEY, Harold H. 1965. *United States Military Assistance*. New York: Praeger.

HUMPHREYS, R. A. 1957. "The Caudillo Tradition" in Howard, Michael (ed) *Soldiers and Governments: Nine Studies*. London: Eyre & Spottiswoode.

HUMPHREYS, R. A. 1982. *Latin America and the Second World War* 2 vols, London: Athone Press.

HUNTINGTON, Samuel P. 1957. *The Soldier and the State*. Cambridge: Harvard University Press.

HUNTINGTON, Samuel P. 1968. *Political Order in Changing Societies*. New Haven: Yale University Press.

IKLE, Fred. 1960. "Nth Countries and Disarmament". *Bulletin of the Atomic Scientists*, v. 16 n. 10 December, pp. 391-94.

IMMERMAN, Richard H. 1980-81. "Guatemala as Cold War History". *Political Science Quarterly*, v. 95 n. 4 Winter, pp. 629-53.

INGLIS, David R. and SANDLER, Carl L. 1967. "A Special Report on Plowshare. Prospects and Problems: Nonmilitary Uses of Nuclear Explosives". *Bulletin of the Atomic Scientists*, Vol 23 n. 10 December, pp. 46-53.

JABBER, Fuad. 1971. *Israel and Nuclear Weapons, Present Options and Future Strategies*. London: Chatto & Windus for the International Institute for Strategic Studies.

JAGUARIBE, Hélio. 1958. *O Nacionalismo na Atualidade Brasileira*. Rio de Janeiro: ISEB.

JAGUARIBE, Hélio. 1987. "Brasil-Argentina: Breve Análise das Relações de Conflito e Cooperação" in *O Novo Cenário Internacional*. Rio de Janeiro: Editora Guanabara.

JANOWITZ, Morris. 1977. *Military Institutions and Coercion in the Developing Countries*. Chicago: University of Chicago Press, expanded edition.

JOHNSON, Victoria Lucille. 1979. *Brazilian Nuclear Development: Intent and Capabilities*. Unpublished PhD dissertation, Tufts University.

JOHNSON-FREESE, J. 1984. "Interpretations of the Nonproliferation Treaty: The U.S and West Germany". *Journal of International Affairs*, v. 37 n. 2 Winter, pp. 283-94.

JOHNSON, John J. 1964. *The Military and Society in Latin America*. Stanford: Stanford University Press.

JOHNSON, John J. 1971. "Será Que Queremos Uma Força Interamericana de Paz?". *Revista Brasileira de Política Internacional*, n. 53-54, March-June, pp. 90-99.

JONES, Stephanie Griffith. 1979. "The Alliance for Progress: An Attempt at Interpretation". *Development and Change*, July, pp. 423-42.

JOSKOW, Paul L. 1976. "The International Nuclear Industry Today: The End of the American Monopoly". *Foreign Affairs*, v. 54 July, pp. 788-803.

JOXE, Alain and CADENA, Cecilia. 1970. "Armamentismo Dependiente: Caso Latinoamericano". *Estudios Internacionales*, n. 14 July-September, pp. 3-81.

KAHAN, Jerome H. and LONG, Anne K. 1972. "The Cuban Missile Crisis: A Study of Its Strategic Context". *Political Science Quarterly*, December, pp. 564-90.

KAISER, Karl. 1978. "The Great Nuclear Debate: German-American Disagreements". *Foreign Policy*, n. 30 Spring, pp. 83-110.

KAPOUR, Ashok. 1979. *International Nuclear Proliferation: Multilateral Diplomacy and Regional Aspects*. New York: Praeger.

KAPOUR, Ashok. 1983. "Nuclear Energy, Nuclear Proliferation and National Security: Views from the South" in BOARDMAN,

R. and KEELEY, J. (eds) *Nuclear Exports and World Politics. Policy and Regime*. New York: St. Martin Press.

KAPSTEIN, Ethan B. 1990-91. "The Brazilian Defence Industry and the International System". *Political Science Quarterly*, v. 15 n. 4, Winter, pp. 579-96.

KAREM, Mahamoud. 1988. *A Nuclear-Weapon-Free Zone in the Middle East, Problems and Prospects*. Westport: Greenwood Press.

KEAL, Paul E. 1983. "Contemporary Understanding About Spheres of Influence". *Review of International Studies*, v. 9 n. 3, pp. 153-72.

KELLEHER, Catherine M. 1975. *Germany and the Politics of Nuclear Weapons*. New York: Columbia University Press.

KEMP, Geoffrey with MILLER, Steven. 1979. "The Arms Transfer Phenomenon" in PIERRE, Andrew (ed) *Arms Transfers and American Foreign Policy*. New York: New York University Press.

KENNEDY, Graham G. M. 1983. *Nuclear Weapon-Free Zone as an Arms Control Measure*. Unpublished PhD dissertation, Victoria University, Wellington: New Zealand.

KENNEDY, Robert. 1971. *Thirteen Days*. New York: W.W. Norton.

KLEIN, Jean. 1964. *L'entreprise du Desarmement. 1945-1964*. Paris: Editions Cujas.

KLEIN, Jean. 1977. "France, NATO, and European Security". *International Security*, v. 1 n. 3 Winter, pp. 21-41.

KLEIN, Jean. 1979. «Continuité et Overture dans la Politique Française en Matière de Desarmement». *Politique Etrangère*, n. 2, pp. 213-47.

KNAPE, John. 1989. "Anglo-American Rivalry in Post-War Latin America: The Question of Arms Sale". *Ibero-Amerikanishes Archiv*, v. 15 n. 3, pp. 319-50.

KOLODZIEJ, Edward A. 1987. *Making and Marketing Arms, The French Experience and its Implications for the International System*. Princeton: Princeton University Press.

KRASNER, Stephen. 1981. "Transforming International Regimes: What the Third World Wants and Why". *International Studies Quarterly*, v. 25 March, pp. 119-48.

(ed). 1983. *International Regimes*. Ithaca: Cornell University Press.

KRISTOF, Ladis. 1960. "The Origins and Evolution of Geopolitics". *Journal of Conflict Resolution*, v. 4 n. 1 March, pp. 15-51.

LAFEBER, Walter. 1963. *The New Empire. An Interpretation of American Expansion 1860-1898*. Ithaca: Cornell University Press.

LAFER, Celso and PENA, Felix. 1978. *Argentina e Brasil no Sistema de Relações Internacionais*. São Paulo: Editora Duas Cidades.

LALL, Arthur S. 1964(a). "The Nonaligned in Disarmament Negotiations". *Bulletin of the Atomic Scientists*, v. 20 n. 5, May, pp. 17-20.

LALL, Arthur S. 1964(b). *Negotiating Disarmament, The Eighteen Nation Disarmament Conference: The First Two Years, 1962-64*.

Ithaca: Cornell University, Centre for International Studies, Cornell Research Papers in International Studies n. 2.

LALL, Betty Goetz. 1964. "On Disarmament Issues: The Polish Plan". *Bulletin of the Atomic Scientists*, v. 20 n. 6 June, pp. 41-43.

LASSWELL, Harold. 1941. "The Garrison State and the Specialists on Violence". *American Journal of Sociology*, v. 47 January, pp. 455-68.

LEAL, Maria Cristina. 1982 *Caminhos e Descaminhos do Brasil Nuclear: 1945-1958*. Unpublished Master's dissertation, Rio de Janeiro: IUPERJ.

LEFEVER, Ernest W. 1976. "The Military Assistance Training Program". *The Annals of the American Academy of Political and Social Science*, n. 424 March, pp. 85-91.

LEFEVER, Ernest W. 1979. *Nuclear Arms in the Third World*. Washington D.C.: The Brookings Institution.

LEFFLER, Melvyn P. 1984. "The American Conception of National Security and the Beginning of the Cold War". *American Historical Review*, v. 89 April, pp. 346-81.

LEITÃO DA CUNHA, Vasco. 1967. "Entrevista com o Ministro das Relações Exteriores do Brasil, 6 de Julho de 1964" in *Revista Brasileira de Política Internacional*, n. 27 September, pp. 591-98.

LEITE Lopes, José. 1958. "O Problema da Energia Nuclear no Brasil". *Revista do Clube Militar*, n. 153, pp. 19-30.

LEITE Lopes, José. 1969. "A Física Nuclear no Brasil: Os Primeiros Vinte Anos" in *Ciência e Liberdade*. Rio de Janeiro: Editora Paz e Terra.

LEITENBERG, Milton. 1982. "The Stranded USSR Submarine in Sweden and the Question of a Nordic Nuclear-Free Zone". *Cooperation and Conflict*, v. 17 n. 1, pp. 17-28.

LELLOUCHE, Pierre. 1981. "Breaking the Rules without Quite Stopping the Bomb: European View". *International Organization*, v. 35 Winter, pp. 39-58.

LEVESQUE, Jaques. 1977. *L'URSS et la Revolution Cubaine*. Montreal: Presses de la Fondation National de Science Politique et Presses de L'Université de Montreal.

LEVINSON, Jerome and ONIS, Juan de. 1970. *The Alliance That Lost Its Way: A Critical Report on the Alliance for Progress*. Chicago: Quadrangle.

LEWIS, John Wilson and LITAI, Xue. 1988. *China Builds the Bomb*. Stanford: University of Stanford Press.

LIEUWEN, Edwin. 1960. *Arms and Politics in Latin America*. New York: Praeger.

LIEUWEN, Edwin. 1963(a). "Militarism in Latin America, a Threat to the Alliance for Progress". *World Today*, v. 19 n. 5 May, pp. 193-99.

LIEUWEN, Edwin. 1963(b). "Neo-Militarism in Latin America: The Kennedy Administration Inadequate Response". *Inter-American Economic Affairs*, v. 16 n. 4 Spring, pp. 11-20.

LIEUWEN, Edwin. 1964. *Generals vs Presidents. Neomilitarism in Latin America*. London: Pall Mall Press.

LIMA, Maria Regina Soares de. 1986. *The Political Economy of Brazilian Foreign Policy: Nuclear Energy, Trade and Itaipu*. Unpublished PhD dissertation. Vanderbilt University.

and CHEIBUB, Zairo Borges. 1983. *Relações Internacionais e Política Externa Brasileira: Debate Intelectual e Produção Acadêmica*. Rio de Janeiro, MRE/Iuperj, mimeo.

LINDAHL, Ingemar. 1988. *The Soviet Union and the Nordic Nuclear-Weapons-Free Zone Proposal*. London: Macmillan.

LOFTUS, Joseph E. 1968. *Latin American Defense Expenditure. 1938-1965*. Santa Monica: The Rand Corporation.

LOWENTHAL, Abraham F. 1976. "Armies and Politics in Latin America" in LOWENTHAL, Abraham F. (ed) *Armies and Politics in Latin America*. New York: Holmes & Meier.

LUARD, Evan. 1989. *A History of the United Nations, 2 Vols*, London: Macmillan.

LUDDERMAN, Margareth K. 1978. *Nuclear Technology from West Germany: A Case of Disharmony in US-Brazilian Relations*. Washington D.C.: Georgetown University, Latin American Program, Occasional Paper n. 1.

LUDDERMAN, Margareth K. 1983. "Nuclear Power in Latin America". *Journal of Interamerican Studies and World Affairs*, v. 25 n. 3 August, pp. 377-415.

LUXENBERG, Alan H. 1988. "Did Eisenhower Push Castro into the Arms of the Soviets?". *Journal of Interamerican Studies and World Affairs*, v. 30 n. 1 Spring, pp. 37-71.

LYRA TAVARES, Aurélio de. 1958. *Segurança Nacional: Antagonismos e Vulnerabilidades*. Rio de Janeiro. Biblioteca do Exército.

MACDONALD, Callum A. 1980. "The Politics of Intervention, The U.S. and Argentina 1941-1946". *Journal of Latin American Studies*, v. 12 n. 2 November, pp. 365-96.

MACINTOSH, Malcolm. 1985. "The Russian Attitude to Defence and Disarmament". *International Affairs*, n. 3, pp. 384-94.

MAGALHÃES Pinto, José de. 1967. "Pronunciamentos do Ministro de Estado das Relações Exteriores, José de Magalhães Pinto". *Revista Brasileira de Política Internacional*, March-June.

MANDELBAUM, Michael. 1977. "A Nuclear Exporter Cartel". *Bulletin of the Atomic Scientists*, v. 33 n. 1 January, pp. 42-50.

1988. *The Fate of Nations. The Search for National Security in the Nineteenth and Twentieth Century*. Cambridge: Cambridge University Press.

MANOR, Paul. 1980. «Le Tiers-Monde dans la Politique Extérieure du Gouvernement Koubitschek, 1959-1961». *Relations Internationales*, n. 23 Autumn, pp. 289-312.

MARKOFF, John and BARRETA, Silvio R. Duncan "Professional Ideology and Military Activism in Brazil: A Critique of a Thesis of Alfred Stepan". *Comparative Politics*, v. 17 n. 2, January, pp. 175-91.

MARTINS, Carlos Estevam. 1977. "A Evolução da Política Externa: 1964-1974" in *Capitalismo de Estado e Modelo Político Brasileiro*. Rio de Janeiro: Graal Editora.

MARWAH, Onkar and SCHULZ, Anne (eds) 1975. *Nuclear Proliferation and the Near-Nuclear Countries*. Cambridge: Ballinger.

MAUDE, George. 1983. "Conflict and Cooperation: The Nordic Nuclear-Free Zone Today". *Cooperation and Conflict*, v. 18 n. 4, pp. 233-44.

MAY, Ernest. 1975. *The Making of the Monroe Doctrine*. Cambridge: Harvard University Press.

MCALISTER, Lyle N. 1966. "Recent Research and Writing on the Role of the Military in Latin America". *Latin American Research Review*, v. 2 n. 1 Fall, pp. 5-36.

MCCANN, Frank D. 1973. *The Brazilian-American Alliance*. Princeton: Princeton University Press.

MCCANN, Frank D. 1979. "Brazil, the U.S. and WWII: A Commentary". *Diplomatic History*, n. 3, Winter, pp. 59-73.

MCCANN, Frank D. 1981. "The Brazilian Army and the Pursuit of Arms Independence, 1889-1979" in Cooling, Benjamin Franklin (ed.) *War, Business and World Military-Industrial Complexes*. New York: Port Washington.

MCCANN, Frank D. 1983. "The Brazilian General Staff and Brazil's Military Situation, 1900-1945". *Journal of Inter-American Studies and World Affairs* 25, August, pp. 294-324.

MCCANN, Frank D. 1984. "The Formative Period of Twentieth Century Brazilian Army Thought, 1900-1922". *Hispanic American Historical Review*, v. 62 n. 4 November, pp. 737-65.

MCCANN, Frank D. 1985. "Influência Estrangeira no Exército Brasileiro". *A Defesa Nacional*, n. 717 January-February, pp. 83-117.

MCGREW, Anthony G. 1978-79. "Nuclear Revisionism: The U.S. and the Nuclear Non-Proliferation Act of 1978". *Millennium*, v. 7 n. 3 Winter, pp. 237-50.

MCNAMARA, Robert S. 1968. *The Essence of Security: Reflections in Office*. London: Hodder & Stoughton.

MECHANN, John Lloyd. 1961. *The United States and Interamerican Security. 1889-1960*. Austin: University of Texas Press.

MELO FRANCO, Afonso Arinos de. 1965. *Evolução da Crise Brasileira*. São Paulo: Companhia Editora Nacional. 1968. *Planalto*. Rio de Janeiro: José Olympio Editora.

MENEZES, Arthur da Cunha. 1988. *Cadernos de Estudos Estratégicos*, n. 12, pp. 112-17.

MEYER, Stephen M. 1984. *The Dynamics of Nuclear Proliferation*. Chicago: The University of Chicago Press.

MIROW, Kurt Rudolf. 1979. *Loucura Nuclear*. Rio de Janeiro: Editora Civilização Brasileira.

MONETA, Carlos A. 1980. "Las Relaciones Argentino-Brasileñas, Factores Ideológicos, Económicos y Geopolíticos Relevantes". *Geopolítica*, n. 19 September 1980, pp. 5-11.

MORAES, João Quartim de. 1985. "Alfred Stepan e o Mito do Poder Moderador". *Filosofia Política*, n. 2, pp. 163-99.

MOREIRA ALVES, Maria Helena. 1985. *State and Opposition in Military Brazil*. Austin: University of Texas Press.

MOREL, Regina Lucia de Moraes. 1979. *Ciência e Estado: A Política Científica no Brasil*. São Paulo: T.A. Queiroz.

MORELLI PANDO, Jorge. 1987 "El Transporte de Armas Nucleares y las Naves Propulsadas por Energía Atómica" in *Vigésimo Aniversario del Tratado de Tlatelolco*. Mexico City: OPANAL.

MOURA, Gerson. 1982. *Brazilian Foreign Relations. 1939-1950*. Unpublished PhD dissertation, London: University of London.

MOURA, Gerson. 1988. "Brasil-Argentina: Com a Democracia o Fim das Hostilidades". *Ciência Hoje*, v. 8 n. 46 September, pp. 30-39.

and LIMA, Maria Regina Soares de. 1982. "A Trajetória do Pragmatismo - Uma Análise da Política Externa Brasileira". *Dados*, v. 25 n. 3, pp. 349-63.

MUNHOZ, Heraldo. 1987. "Las Causas del Auge y la Declinación del Sistema Interamericano de Seguridad: Una Perspectiva Latinoamericana". *Estudios Internacionales*, n. 77, January-March, pp. 102-13.

MYERS, David J, 1984, "Brazil: Reluctant Pursuit of the Nuclear Option". *Orbis*, v. 27 n. 4 Winter, pp. 881-912.

MYIAMOTO, Shigenoli. 1981. *O Pensamento Geopolítico Brasileiro (1920-1980)*. Unpublished Master's dissertation, University of São Paulo.

MYIAMOTO, Shigenoli. 1984. "Geopolítica e Política Externa". *Ciências Sociais Hoje*, São Paulo, ANPOCS/Cortez Editora.

MYRDAL, Alva. 1982. *The Game of Disarmament, How the United States & Russia Run the Arms Race*. New York: Pantheon Books, Revised and updated edition.

NUNN, Frederick M. 1983. *Yesterday's Soldiers: European Military Professionalism in South America*. Lincoln: University of Nebraska Press.

NYE Jr., Joseph S. 1978. "Non-Proliferation: A Long Term Strategy". *Foreign Affairs*, v. 56 n. 3 April, pp. 601-23.

NYE Jr., Joseph S. 1981. "Maintaining a Nonproliferation Regime". *International Organization*, v. 35 Winter, pp. 15-38.

NYE Jr., Joseph S. "NPT: The Logic of Inequality". *Foreign Policy*, n. 59 Summer, pp. 123-31.

NYE Jr., Joseph S. 1986. "The Diplomacy of Nuclear Non-Proliferation" in HENRIKSON, Alan K. (ed) *Negotiating World Order: The Artisanry and Architecture of Global Diplomacy*. Wilmington: Scholarly Resources Inc..

NYE Jr., Joseph S. 1987. "Nuclear Learning and U.S.-Soviet Security Regimes". *International Organization*, v. 41 n. 3 Summer, pp. 371-402.

O'DONNELL, Guilherme. 1987. *Bureaucratic Authoritarianism. Argentina, 1966-1973, in Comparative Perspective*. Berkeley and Los Angeles: University of California Press.

O'NEILL, Robert and SCHWARTZ, David N. (selection and introduction). 1987. *Hedley Bull on Arms Control*. London: Macmillan for the International Institute of Strategic Studies.

OLIVEIRA, Eliezer Rizzo de. 1976. *As Forças Armadas: Política e Ideologia no Brasil (1964-1969)*. Petrópolis: Editora Vozes.

ORSOLINI, Mario H. 1984. "O Plano Nuclear Argentino: Um Modelo de Ação Estratégica". *Política e Estratégia*, v. 2 n. 4 October-December, pp. 518-26.

OZINGA, James R. 1989. *The Rapacki Plan. The 1957 Proposal to Denuclearize Central Europe, and an Analysis of Its Rejection*. Jefferson: McFarland & Company.

PACH, Chester J. Jr. 1982. "The Containment of Military Aid to Latin America". *Diplomatic History*, v. 6 n. 3 Summer.

PAIVA, Glycon de. 1968. "A Indústria Atômica no Brasil". *Carta Mensal*, April, pp. 17-26.

PAULKER, Guy. 1959. "Southeast Asia as a Problem Area in the Next Decade". *World Politics*, v. 11, April, pp. 325-42.

PENA, Camilo. 1988. "Energia: Retrato do Brasil". *Problemas Brasileiros*, March-April, pp. 14-29.

PEREIRA, Antonio Carlos, 1988. "Aspectos Totalizantes da Doutrina de Segurança Nacional". *Política e Estratégia*, v. 6 n. 2 April-June, pp. 252-71.

PERLMUTTER, Amos and BENNET, Valerie Plave. 1980. *The Political Influence of the Military, a Comparative Reader*. New Haven: Yale University Press.

PETROV, Michel. 1967. "Non-Nuclear Zones: A Pressing Demand". *International Affairs* (Moscow), n. 6 June, pp. 12-16.

PETROV, Michel. 1987. "La Unión Soviética y la Creación de una Zona Desnuclearizada en América Latina" in *Vigésimo Aniversario del Tratado de Tlatelolco*. Mexico City: OPANAL.

PINHEIRO, Leticia. 1989. "Brasil, Portugal e Descolonização Africana". *Contexto Internacional*, n. 9 January-June, pp. 91-112.

PINHEIRO DA SIIVA, Othon Luiz. 1988. *Cadernos de Estudos Estratégicos* n. 12 April, pp. 96-102.

PINTO, Álvaro Augusto Alves. 1988. *Cadernos de Estudos Estratégicos*, n. 12, pp. 103-11.

PITTMAN, Howard T. 1981. "Geopolitics and Foreign Policy in Argentina, Brazil and Chile" in FERRIS, E.G. and LINCOLN, J.K. (eds) *Latin American Foreign Policies: Global and Regional Dimensions*. Boulder: Westview Press.

POLLACK, Jonathan P. 1972. "Chinese Attitudes towards Nuclear Weapons, 1964-9". *China Quarterly*, n. 50, pp. 244-71.

PONEMAN, Daniel. 1982. *Nuclear Power in the Developing World*. London: George Allen & Unwin.

PONEMAN, Daniel. 1984. "Nuclear Proliferation Prospects for Argentina". *Orbis*, Winter, pp. 853-80.

PORCH, Douglas. 1986. "Bugeaud, Gallieni, Lyautey: The Development of French Colonial Warfare" in PARET, Peter (ed) *Makers of Modern Strategy* Oxford: Clarendon Press.

PORTALES, Carlos. 1989. "South American Regional Security and the United States" in VARAS, Augusto (ed) *Hemispheric Security and U.S. Policy in Latin America*. Boulder and London: Westview Press.

POWER, Paul F. 1983. "Preventing Nuclear Conflict in the Middle East: The Free-Zone Strategy". *The Middle East Journal*, v. 37 n. 4 Autumn, pp. 617-35.

PRY, Peter. 1984. *Israel's Nuclear Arsenal* Boulder: Westview Press.

PYE, Lucien. 1962. "Armies in the Process of Political Modernization" in JOHNSON, John J. (ed) *The Role of the Military in Underdeveloped Countries*. Princeton: Princeton University Press.

QUADROS, Jânio. 1961. "Brazil's New Foreign Policy". *Foreign Affairs*, v. 40 n. 1 October, pp. 19-27.

QUESTER, George H. 1969. "Israel and the NPT". *Bulletin of the Atomic Scientists*, v. 25 n. 6 June, pp. 7-9.

QUESTER, George H. 1970. "Sweden and the Nuclear Non-Proliferation Treaty". *Cooperation and Conflict*, v. 5 n. 1, pp. 52-64.

QUESTER, George H. 1983. "Nuclear Weapons and Israel". *The Middle East Journal*, v. 37 n. 4 Autumn, pp. 547-64.

RABE, Stephen G. 1978. "The Elusive Conference: United States Economic Relations with Latin America, 1945-1952". *Diplomatic History*, v. 2 n. 3 Summer, pp. 279-94.

RABE, Stephen G. 1985. "The Johnson (Eisenhower?) Doctrine for Latin America". *Diplomatic History*, 9 Winter, pp. 95-100.

RABE, Stephen G. 1988. *Eisenhower and Latin America*. Chappel Hill: University of North Carolina Press.

RANKIN, Richard C. 1974. "The Expanding Institutional Concerns of the Latin American Military Establishments: A Review Article". *Latin American Research Review*, v. 9, pp. 81-108.

RAPACKI, Adam. 1963. "Nuclear-Free Zones". *International Affairs*, v. 39 n. 1 January, pp. 1-12.

REDICK, John R. 1970. *The Politics of Denuclearization: a Study of the Treaty for the Prohibition of Nuclear Weapons in Latin America*. Unpublished PhD dissertation, University of Virginia.

REDICK, John R. 1975. "Regional Nuclear Arms Control in Latin America". *International Organization*, V. 29 n. 2 Spring, pp. 415-45.

REDICK, John R. 1976. "Nuclear Proliferation in Latin America" in Fontaine, R. and Theberge, J. (eds) *Latin America's New Internationalism: The End of Hemispheric Isolation*. New York: Paeger.

REDICK, John R. 1981. "The Tlatelolco Regime and Non-Proliferation in Latin America". *International Organization*, V. 35 Winter, pp. 103-34.

REDICK, John R. 1982. "Nuclear Trends in Latin America" in *Governance in the Western Hemisphere*. New York: Aspen Institute for Humanistic Studies.

REISS, Mitchell. 1988. *Without the Bomb: The Politics of Nuclear Proliferation*. New York: Columbia University Press.

Revista Brasileira de Política Internacional. March-June 1967 (a special number on the Brazilian nuclear policy).

ROBINSON, Davis R. 1970. "The Treaty of Tlatelolco and the United States". *American Journal of International Law*, v. 64 April, pp. 282-309.

ROBLES, Alfonso García. 1967. *El Tratado de Tlatelolco: Génesis, Alcance y Propósitos de la Proscripción de Armas Nucleares en América Latina*. Mexico City: El Colegio de México.

ROBLES, Alfonso García. 1979. *The Latin American Nuclear-Weapon-Free Zone*. Muscatine: The Stanley Foundation, Occasional Paper.

ROBLES, Alfonso García. 1987(a). "La Proscripción de las Armas Nucleares en la América Latina" in *Vigésimo Aniversario del Tratado de Tlatelolco*. Mexico City: OPANAL.

ROBLES, Alfonso García. 1987(b). "Latin America as a Nuclear Weapon-Free Zone" in David Pitt and Gordon Thompson (eds) *Nuclear-Free Zones*. London: Croom Helm.

RODRIGUES, José Honório. 1961. *Brasil e África: Outro Horizonte*. Rio de Janeiro: Editora Civilização Brasileira.

RODRIGUES, José Honório 1962. "The Foundations of Brazil's Foreign Policy". *International Affairs*, v. 38 n. 3 July, pp. 324-38.

RODRIGUES, José Honório 1966. *Interesse Nacional e Política Externa*. Rio de Janeiro: Editora Civilização Brasileira.

ROSA, Luiz Pinguelli. 1979. "Evolução da Política Nuclear Brasileira". *Encontros com a Civilização Brasileira*, n. 7 January, pp. 29-40.

ROSENBAUM, H. Jon. 1969. "Brazil's Foreign Policy and Cuba". *Inter-American Economic Affairs*, v. 23 n. 3 Winter, pp. 25-45.

and COOPER, Glenn M. 1970. "Brazil and the Nuclear Non-Proliferation Treaty". *International Affairs*, v. 46 n. 1 January, pp. 74-90.

ROUQUIÉ, Alain. 1984. *El Estado Militar en América Latina*. Buenos Aires: Emece.

ROWE, James W. 1969. "Science and Politics in Brazil: Background of the 1967 Debate on Nuclear Energy Policy" in SILVERT, Kalman H. (ed) *The Social Reality of Scientific Myth, Science and Social Change*. New York: American Universities Field Staff.

RUSSEL, Roberto (ed). 1984. *América Latina y la Guerra del Atlántico Sur. Experiencias y Desafíos*. Buenos Aires: Editorial del Belgrano.

SABATO, Jorge A. 1973. "Atomic Energy in Argentina: A Case History". *World Development*, v. 1 n. 8 August, pp. 23-38.

SABATO, Jorge A. 1978. "El Plan Nuclear Brasileño y la Bomba Atómica". *Estudios Internacionales*, n. 41 January-March, pp. 73-82.

and RAMESH, Jairman. 1980. "Programas de Energía Nuclear en el Mundo en Desarrollo: su Fundamento e Impacto". *Estudios Internacionales*, n. 49 January-March, pp. 70-85.

SADLEIR, David. 1987. "Rarotonga: Tras los Passos de Tlatelolco" in *Vigésimo Aniversario del Tratado de Tlatelolco*. Mexico City: OPANAL.

SAFFORD, Frank. 1985. "Politics, Ideology and Society" in Bethell, Leslie (ed) *The Cambridge History of Latin America*, vol.3 Cambridge: Cambridge University Press.

SAMARTSEV, A. 1964. "Nuclear Free Zones are a Pressing Necessity". *International Affairs* (Moscow), n. 5 May, pp. 35-39.

SANDERS, Ben and SIMPSON, John. 1989. "Military Uses Permitted under the NPT: The Effects on the Non-Proliferation System and the Safeguards Regime". London: paper prepared for the BISA/ISA convention, mimeo.

SANTOS, Wanderley Guilherme dos. 1986. *Sessenta e Quatro: Anatomia da Crise*. São Paulo: Edições Vértice.

A SBPC e a Energia Nuclear. 1981. Special supplement of the journal *Ciência e Cultura*, v. 33.

SCHARTZMAN, Simon. 1979. *Formação da Comunidade Científica no Brasil*. São Paulo e Rio de Janeiro: Companhia Editora Nacional/FINEP.

(ed) 1984. *História da Ciência no Brasil – Acervo de Depoimentos*. Rio de Janeiro: CPDOC-FGV and FINEP.

SCHEMAN, L. Ronald (ed). 1989. *Alliance for Progress: A Retrospective*. New York: Praeger.

SCHIFF, Benjamin. 1984. *International Nuclear Technology Control; Dilemmas of Dissemination and Control*. Totowa: Rowan & Allanheld.

SCHLESINGER Jr, Arthur. 1975. “The Alliance for Progress: A Retrospect” in HELLMAN, R.G. and ROSENBAUM, H.J. (eds) *Latin America’s New International Role: The End of Hemispheric Isolation*. New York, Sage Publications.

SCHULZ, John. 1974, “O Exército e o Império” in Sergio Buarque de Holanda (ed) *História Geral da Civilização Brasileira. O Brasil Monárquico*, T.2 v. 4, São Paulo: Difel.

SEABORG, Glenn T. 1981. *Kennedy, Khrushchev, and the Test Ban*. Berkeley: University of California Press.

with LOEB, Benjamin S. 1987. *Stemming the Tide. Arms Control in the Johnson Years*. Lexington: Lexington Books.

SECKINGER, Ron. 1984. *The Brazilian Monarchy and the South American Republics. 1822-1831, Diplomacy and State Building*. Baton Rouge: Louisiana State University Press.

SELCHER, Wayne. 1984. "Recent Strategic Developments in South America's Southern Cone" in Munoz, Heraldo and Tulchin, Joseph (eds) *Latin American Nations in World Politics*. Boulder: Westview Press.

1986. "Current Dynamics and Future Prospects of Brazil's Relations with Latin America: Toward a Pattern of Bilateral Cooperation". *Journal of Internamerican Studies and World Affairs*, v. 28 n. 2 Summer, pp. 67-99.

SERRANO, Monica. 1990. *The Latin American Nuclear-Free Zone Established on the 1967's Treaty of Tlatelolco*. Unpublished PhD dissertation, University of Oxford.

SHAKER, Mohamed I. 1980. *The Nuclear Non-Proliferation Treaty: Origins and Implementation, 1959-1979*. New York: Oceana Publications.

SHOULTZ, Lars. 1987. *National Security and United States Policy toward Latin America*. Princeton: Princeton University Press.

SILBERFELD, Jean-Claude Eduardo. 1987. "Mobilização Industrial". *Política e Estratégia*, v. 5 n. 4 October-December, pp. 584-606.

SILVA SOARES, Guido Fernando. 1974. *Contribuição ao Estudo da Política Nuclear Brasileira*. Unpublished PhD dissertation, São Paulo: Pontifícia Universidade Católica de São Paulo.

SIMPSON, Mark S.C. and Wrobel, Paulo. 1989 "The Study of International Relations in Hispanic America" in Dyer, H.C.

and Mangasarian, L. (eds) *The Study of International Relations, The State of the Art*. London: Macmillan in association with Millennium.

SIMPSON, John and McGrew, Anthony. 1984. *The International Nuclear Non-Proliferation System: Challenges and Choices*. London: Macmillan.

SIPRI. 1975. *The Arms Trade with the Third World*, revised and abridged edition, New York: Holmes & Meier for SIPRI.

SLATER, Jerome. 1967. *The OAS and the United States Foreign Policy*. Columbus: Ohio State University Press.

SMITH, Joseph. 1979. *Illusions of Conflict, Anglo-American Diplomacy toward Latin America 1865-1896*. Pittsburgh: University of Pittsburgh Press.

SMITH, Robert F. 1981. *The United States and the Latin American Sphere of Influence. An Introductory Essay* 2 vols. Huntington: Krieger Publisher.

SMITH, Roger K. 1987. "Explaining the Non-Proliferation Regime: Anomalies for Contemporary International Relations Theory". *International Organization*, v. 41 n. 2 Spring, pp. 253-82.

SOARES, Teixeira. 1972. *História da Formação das Fronteiras do Brasil*. Rio de Janeiro: Conselho Federal de Cultura.

SODRE, Nelson Werneck. 1968. *A História Militar do Brasil*. Rio de Janeiro: Editora Civilização Brasileira, second edition.

SOTO, José M. Aybar de. 1978. *Dependency and Intervention: The Case of Guatemala in 1954*. Boulder: Westview Press.

SOUZA, Amaury de. 1966. *Annotated Bibliography on the Brazilian Political Movement of 1964*. Riverside: University of California, Latin America Research Program, Bibliography Series, Report n. 2.

SOUZA E SILVA, Celso. 1987. "Proliferação Nuclear e o Tratado de Não-Proliferação". *Revista Brasileira de Política Internacional*, n. 117-118, pp. 5-8.

SPECTOR, Leonard S. 1984. *Nuclear Proliferation Today*. New York: Random House.

SPECTOR, Leonard S. 1985. *The New Nuclear Nations*. Cambridge: Ballinger.

SPECTOR, Leonard S. 1987. *Going Nuclear*. Cambridge: Ballinger.

SPECTOR, Leonard S. 1988. *The Undeclared Bomb*. Cambridge: Ballinger.

and Smith, Jacqueline R. 1990. "Deadlock Damages Nonproliferation". *Bulletin of the Atomic Scientists*, v. 46 n. 10 December, pp. 39-43.

SPINA Forjaz, Maria Cecilia. 1989. "Cientistas e Militares no Desenvolvimento do CNPq (1950-1985)". *BIB - Boletim Informativo e Bibliográfico em Ciências Sociais*, n. 28, pp. 71-99.

STEPAN, Alfred. 1971. *The Military in Politics. Changing Patterns in Brazil*. Princeton: Princeton University Press.

STEPAN, Alfred. 1976. "The New Professionalism of Internal Warfare and Military Role Expansion" in LOWENTHAL, Abraham F. (ed) *Armies and Politics in Latin America*. New York: Holmes & Meier.

STEPAN, Alfred. 1978. *The State and Society: Peru in Comparative Perspective*. Princeton: Princeton University Press.

STINSON, Hugh B. and COCHRANE, James D. 1971. "The Movement for Regional Arms Control in Latin America". *Journal of Inter-American Studies and World Affairs*, v. 13, January, pp. 1-17.

STORRS, Keith Larry. 1973. *Brazil's Independent Foreign Policy, 1961-1964: Background. Tenets. Linkage to Domestic Politics, and Aftermath*. Ithaca: Cornell University, Latin American Studies Program, Dissertation Series n. 44.

SUKOVIC, Olga. 1989. "The Concept of Nuclear-Weapon-Free Zones" in David Carlton and Carlo Schaerf (eds) *Perspectives on the Arms Race*. London: Macmillan.

SUTTON, John L. and KEMP, Geoffrey. 1966. *Arms and Developing Countries. 1945-1965*. The Adelphi Papers n. 28. London: International Institute of Strategic Studies.

SZULC, Tad. 1986. *Fidel, A Critical Portrait*. London: Hutchinson.

TAVORA, Juarez. 1958. *Átomos para o Brasil*. Rio de Janeiro: José Olympio Editora.

THOMAS, Caroline. 1987. *In Search of Security. The Third World in International Relations*. Brighton: Wheatsheaf.

THOMAS, Caroline. 1991. "New Directions in Thinking about Security in the Third World" in BOOTH, Ken (ed) *New Thinking about Strategy and International Security*. Oxford: Clarendon Press.

TILLAPPAUGH, J. 1978. "Closed Hemisphere and Open World? The Dispute over Regional Security at the UN Conference, 1945". *Diplomatic History*, v. 2 n. 1, Winter, pp. 25-42.

TOMASSINI, Luciano. 1982. "Hacia un Sistema Latinoamericano de Seguridad Regional". *Estudios Internacionales*, n. 60, October-December, pp. 533-41.

TORNUDD, Klaus. 1987. "Problemas de Tránsito y Transporte en Zonas Libres de Armas Nucleares" in *Vigésimo Aniversario del Tratado de Tlatelolco*. Mexico City: OPANAL

TRACHTEMBERG, Marc. 1985. "The Influence of Nuclear Weapons in the Cuban Missile Crisis". *International Security*, v. 10 n. 1 Summer, pp. 137-63.

El Tratado de Tlatelolco (1967-1987) 1987. Mexico City: OPANAL.

TRINDADE, Antônio Augusto Cançado. 1981. "Posições do Brasil no Plano Multilateral". *Revista Brasileira de Estudos Políticos*, n. 52 January, pp. 147-217.

TRISKA, Jan F. (ed) 1986. *Dominant Powers and Subordinate States, The United States in Latin America and the Soviet Union in Eastern Europe*. Durham: Duke University Press.

TULCHIN, Joseph S. 1980. "Una Perspectiva Histórica de la Política Argentina Frente al Brasil". *Estudios Internacionales*, n. 52, October-December, pp. 460-80.

TULCHIN, Joseph S. 1988. "The United States and Latin America in the 1960s". *Journal of Interamerican Studies and World Affairs*, v. 30 n. 1 Spring, pp. 1-36.

URAN, Ana Maria Bidegan de. 1987. *Nacionalismo, Militarismo e Dominação na América Latina*. Petrópolis: Editora Vozes.

VAGTS, Alfred. 1959. *A History of Militarism*. London: Hollis and Carter.

VALENZUELA, Arturo. 1985. "The Military and Social Science Theory". *Third World Quarterly*, v. 7 n. 1, January, pp. 132-44.

VALLIS, Victor. 1972. "Brazil's Experiment with an Independent Foreign Policy" in Ferguson, Yale H. (ed) *Contemporary Inter-American Relations*. New York: Prentice-Hall.

VANNUCCI, Albert P. 1986. "The Influence of Latin American Governments on the Shaping of United States Foreign Policy: The Case of U.S.-Argentine Relations, 1943-1948". *Journal of Latin American Studies*, v. 18 n. 2 November, pp. 355-82.

VARAS, Augusto. 1987. "De la Competencia a la Cooperación Militar en América Latina". *Estudios Internacionales*, n. 77, January-March, pp. 3-18.

VARAS, Augusto. (ed) 1989. *Hemispheric Security and U.S. Policy in Latin America*. Boulder: Westview Press.

VIANA FILHO, Luís. 1975. *O Governo Castelo Branco*. Rio de Janeiro: José Olympio Editora, second edition.

VICUNA, Francisco Orrego (ed.) 1980. *Los Estudios Internacionales en América Latina. Realizaciones y Desafíos*. Santiago de Chile: Editorial Universitaria.

VIGOR, P.H. 1986. *The Soviet View of Disarmament*. London: Macmillan.

WALTZ, Kenneth N. 1967. *Foreign Policy and Democratic Politics*. Boston: Little Brown.

WALTZ, Kenneth N. 1979. *Theory of International Politics*. Reading, Mass.: Addison-Wesley.

WALTZ, Kenneth N. 1981. *The Spread of Nuclear Weapons: More May be Better*. Adelphi Paper n. 171, London: IISS.

WELCH E. Jr., Claude. 1976. *Civilian Control of the Military: Theory and Cases from Developing Countries*. Albany: State University of New York Press.

WELCH Jr, Richard. 1985. *Response to Revolution: The United States and the Cuban Revolution. 1959-1967*. Chapel Hill: University of North Carolina Press.

WELTMAN, John J. 1980. "Nuclear Devolution and World Order". *World Politics*, n. 2 January, pp. 169-93.

WESSON, Robert. 1981. *The United States and Brazil, Limits of Influence*. New York: Praeger.

WHEELER, Douglas L. 1986. "The Price of Neutrality: Portugal, The Wolfram Question, and World War II". *Luso-Brazilian Review*, v. 23 n. 1, pp. 107-28 and n. 2, pp. 97-112.

WILLIAMS, Frederick & all. 1978. "The Nuclear Non-Proliferation Act of 1978: Reactions from Germany, India and Japan". *International Security*, v. 3 n. 2 Fall.

WILLRICH, Mason. 1969. *Non-Proliferation Treaty: Framework for Nuclear Arms Control*. Charlottesville: The Michie Company.

WITHAKER, Arthur. 1954. *The Western Hemisphere Idea*. Ithaca: Cornell University Press.

WOHLSTETTER, Albert and all. 1977. *Swords from Plowshares. The Military Potential of Civilian Nuclear Energy*. Chicago: University of Chicago Press.

WOLF, Charles. 1965. "The Political Effects of Military Programs: Some Indications from Latin America". *Orbis*, v. 8 n. 4 Winter, pp. 871-93.

WONDER, Edward. 1977(a). *Nuclear Fuel and American Foreign Policy, Multilateralization for Uranium Enrichment*. Boulder: Westview Press.

WONDER, Edward. 1977(b). "Nuclear Commerce and Nuclear Proliferation: Germany and Brazil, 1975". *Orbis*, 21 Summer, pp. 277-306.

WOOD, Bryce. 1961. *The Making of the Good Neighbor Policy*. New York: Columbia University Press.

WONDER, Edward. 1985. *The Dismantling of the Good Neighbor Policy*. Austin: University of Texas Press.

WOOD, David. 1967. *Armed Forces in Central and South America*. Adelphi Paper n. 34. London: International Institute of Strategic Studies.

WROBEL, Paulo S. 1985. "A Política Nuclear da Nova República". *Brasil, Perspectivas Internacionais*, n. 4 November-December, pp. 5-9.

WROBEL, Paulo S. 1986. *A Questão Nuclear nas Relações Brasil-Estados Unidos*. Unpublished Master's dissertation, Rio de Janeiro: IUPERJ.

YAGER, Joseph A. and STEIMBERGER, Eleanor B. 1974. *Energy and U.S. Foreign Policy*. Cambridge: Ballinger.

Public Material

Brasil. Ministério das Relações Exteriores. *Relatório Anual do Itamaraty 1966*. 1967. Brasília.

Brasil. Ministério das Relações Exteriores. *Relatório Anual do Itamaraty 1967*. 1968. Brasília.

Brasil. Ministério das Relações Exteriores. *Relatório do Itamaraty 1968*. 1969. Brasília.

Brasil. Ministério das Relações Exteriores. *Resenha de Política Externa Brasileira* (various issues).

Brasil. Ministério da Marinha – COPESP. *Centro Experimental de Aramar*. São Paulo, 1988.

O Programa Nuclear Brasileiro. 1977. Brasília.

United Nations. “Statement by the Head of the Brazilian Delegation Ambassador C.A. de Souza e Silva, at the Conference on Disarmament”. 26 July 1984. Geneva, mimeo.

United Nations. Committee on Disarmament. *Comprehensive Study on the Question of Nuclear Weapon-Free Zones in all its Aspects*. 1976. New York.

United Nations. *Status of Multilateral Arms Regulations and Disarmament Agreements*. Third edition, 1987. New York.

United Nations. Department of Political and Security Council Affairs, *The United Nations and Disarmament, 1945-1970*. 1971. New York.

United States Information Service. “Palestra do Dr. Glenn T. Seaborg, Presidente da Comissão de Energia Atômica dos Estados Unidos”. 3 July 1967. Rio de Janeiro.

United States Arms Control and Disarmament Agency. *Documents on Disarmament* (various issues). Washington DC.

United States Senate. Committee on Foreign Relations. *Prohibition of Nuclear Weapons in Latin America*. Hearings before the Committee on Foreign Relations, September 22 1981.

United States Senate. Committee on Foreign Relations. *Treaty of Tlatelolco*. Hearings before the Committee on Foreign Relations, 15 August 1978.

United States Arms Control and Disarmament Agency. *World Military Expenditures and Arms Transfer* (various issues). Washington DC.

United States Arms Control and Disarmament Agency. *Arms Control and Disarmament Agreements, Texts and History of Negotiations* 1982 edition. Washington DC.

Newspapers and Weekly Publications

Jornal do Brasil, O Globo, O Estado de São Paulo, Folha de São Paulo, Gazeta Mercantil, Correio da Manhã, Veja, Visão, Isto É, Istoé Senhor, Manchete, The New York Times, The Times, The Guardian, Le Monde, Newsweek, Observer, Swedish Press Summary.

Interviews

Araújo Castro – Brasília, May 1988.

Ambassador Celso de Souza e Silva – London, August and September 1989.

Rear-Admiral Othon Luiz Pinheiro da Silva – São Paulo, January 1990.

Colonel (retired) Geraldo Cavagnari – Campinas, June 1988.

Professor Luiz Pinguelli Rosa – Rio de Janeiro, June 1988.

Printed Interviews

Fundação Getúlio Vargas. Centro de Pesquisa e Documentação de História Contemporânea do Brasil. Interview with Renato Archer. Rio de Janeiro. 1977/1978.

Fundação Getúlio Vargas. Centro de Pesquisa e Documentação de História Contemporânea do Brasil. *História da Ciência no Brasil – Acervo de Depoimentos: Interview with José Goldenberg; Interview with Francisco de Magalhães Gomes. Rio de Janeiro. December 1976.*





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