Third World Quarterly

ISSN: 0143-6597 (Print) 1360-2241 (Online) Journal homepage: http://www.tandfonline.com/loi/ctwq20

A look inside an emerging nuclear supplier. Advocacy coalitions and change in Argentine foreign nuclear policy

Bernabé H. Malacalza

THIRD WORLD QUARTERLY, 2017
https://doi.org/10.1080/01436597.2017.1350100

A look inside an emerging nuclear supplier. Advocacy coalitions and change in Argentine foreign nuclear policy

Bernabé H. Malacalza[a,b]

[a]Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET), Bernal, Buenos Aires, Argentina; [b]Departamento de Economía y Administración, Universidad Nacional de Quilmes (UNQ), Bernal, Buenos Aires, Argentina

ABSTRACT

What light can foreign policy analysis (FPA) shed on how and when the balance of power between domestic coalitions in foreign nuclear policymaking changes and how these different balances directly affect policy outcomes? Drawing on interviews with scientists, technologists and career diplomats, this comprehensive examination of Argentine nuclear exports policy as public policy aims to depict when and how policies varied between 1976 and 2004, due to shifts in the balance amongst advocacy coalitions, albeit of incentives and constraints placed by international and institutional nuclear environments. The article provides a better account of how Argentine nuclear foreign policy changed under the influence of four competitive and contrasting advocacy coalitions: the pro-import substitution and protectionist coalition, the pro-technological autonomy and South-South trade coalition, the pro-business and commercial openness coalition and the antinuclear and pro-environment coalition.

ARTICLE HISTORY
Received 26 December 2016
Accepted 29 June 2017

KEYWORDS
Foreign policy analysis
foreign nuclear policy
advocacy coalitions
Argentine nuclear exports policy
emerging nuclear suppliers
science diplomacy

1. Introduction

The influence of the interaction between international and domestic factors in nuclear export policy-making of the emerging nuclear suppliers[1] tends to attract little public or scholarly attention. Perhaps this is because much of the classical discussion about foreign policy in nuclear matters has been dominated by nuclear weapons states. This paper addresses this gap in the literature by examining nuclear exports policy-making in Argentina, a country that has been considered the most active emerging nuclear supplier state in the world.[2]

The few studies that address the question of how Argentina became a reliable and competitive actor in nuclear international commerce stress domestic stability and state policy as being the principal features of this process. This article points out that these insights need to be complemented by approaches that emphasise how the interaction of international and domestic also influences foreign nuclear policy changes. The analytical backbone of this article is the concept of advocacy coalitions, a framework that has not been previously applied in the foreign policy-making analysis of the Third World.[3] The hypothesis is that

CONTACT Bernabé H. Malacalza b.malacalza@conicet.gov.ar; http://orcid.org/0000-0003-4369-0534

changes in the balance of power amongst advocacy coalitions are sources of policy shifts. The nuclear scientific world and career diplomats forge advocacy coalitions in order to induce policy change, but their influences depend on international environment incentives and domestic institutional parameters. Empirically, the investigation is essentially based on archival research at the Instituto Balseiro, primary data gathered in field observations in Bariloche and several research interviews with policy participants in Argentina's exports of research reactors to Peru in 1977, Algeria in 1985, Iran in 1987, Egypt in 1992 and Australia in 2000.

How and when did the balance of power between domestic coalitions in Argentine nuclear exports policy-making change over time and how did these different balances directly affect policy outcomes? This article identifies at least four competitive and contrasting advocacy coalitions: adherents of pro-import substitution and protectionist policy beliefs, proponents of technological autonomy and South–South trade, supporters of pro-business and commercial openness and followers of antinuclear and environmentalist beliefs. Due to the emergence of new international and institutional domestic junctures, the balance of power between coalitions changed in 1984 and 1992.

In order to explain these policy-making variances, this article proceeds as follows. First, it explores and discusses the literature on Argentine nuclear policy. The paper then presents a framework for analysis, underscoring some contributions from foreign policy analysis (FPA) and coalition advocacy formation literature. Next, it explains the dynamics of the coalitions, dividing the research period into three different policy-making processes. Finally, it concludes with an explanation of how the selected cases demonstrate variance in public policy as result of changing balances of power amongst advocacy coalitions within the nuclear policy subsystem.

2. Argentina and foreign nuclear policy

The question of how a country from the global South has transformed into a competitive emerging nuclear supplier, despite all the challenges and difficulties it faced, has yet to be adequately answered. Argentina, as perhaps the most active of several emerging nuclear supplier countries in the world, has had an aggressive nuclear export policy towards South America, Africa and the Middle East since the mid-1970s. Over the course of three decades, the country gained a prominent position, managing to compete with the most advanced industrialised nations, in the realm of the design and development of research reactors, proving itself capable of building different prototypes in Peru, Algeria and Egypt. Moreover, in the late 1990s, the country's growing competitiveness in the nuclear field reached dizzying new heights. Surpassing the Northern nuclear giants, Argentina even managed to sell a research reactor to Australia.

The conventional answer to this question at hand is that Argentina's nuclear policy had been stable and robust for at least three decades. Although most scholarship concerning Argentine nuclear policy has not studied nuclear exports policy as a specific subfield, it has widely categorised the country's nuclear policy as a steady State policy, stressing that only minor changes have taken place in domestic nuclear policy-making, even when taking into account the transition period from military rule to democratic government.[4]

However, there is little consensus in this literature as to whether a particular factor has influenced such policy stability. There are at least three sets of interpretations as to how Argentina increased its influence in the field of nuclear exports during this time. The first

explanation underscores the reputation, stability and insulation of a sectorial agency – the National Commission of Atomic Energy (CNEA)[5] – with significant bureaucratic autonomy.[6] This may particularly be true for the period between 1952 and 1983, when CNEA only had three presidents, as opposed to the country's 18.[7] The second perspective emphasises the role of a self-reliant nationalist ideology (or sectorial culture) in shaping nuclear policy. According to Adler or Hymans, 'pragmatic anti-dependency guerrillas' or 'non-oppositional nationalists' were the key players of Argentina's nuclear policy.[8] Taking a different approach, Hurtado highlights the effects of a techno-political and sectorial culture.[9] Finally, a third interpretation explains policy continuity as an outcome of a vigorous and cohesive scientific community. According to them, it was during the era of the military regimes that Argentine and Brazilian scientists and technicians started to develop mutual empathy rather than rivalry or enmity, a phenomenon that might have fed into the creation of an epistemic community.[10]

In response to conventional interpretations, this article sheds light on three aspects of Argentine foreign nuclear policy. First, I argue that between 1984 and 2004 there were changes in the balance amongst advocacy coalitions in nuclear exports policy. In this sense, the CNEA was no longer as relevant as it had been at the point of the first nuclear export to Peru, while the INVAP's influence was rising considerably, particularly because of the growing importance of its science diplomacy in research reactors. In response to the second interpretation, I claim that nationalist ideology clearly is not sufficient and that is always subsidiary to other explanations concerning policy-making. Interactions between international and domestic influences became causally consequential to advocacy coalitions in their selection of interests and policy beliefs. In contrast with the third set, this article points out that scientist's policy beliefs were not monolithic but rather tended to split into two specific poles: protectionism and commercial openness.

In sum, the literature concerning domestic factors has stressed stability and State policy as the principal features of growing Argentine competitiveness in nuclear international trade. These scholars are not wrong; however, they cannot account for the specific dynamics of Argentine nuclear export policy. These insights need to be complemented by approaches that emphasise how the interaction of international and domestic factors influences foreign policy shifts and take the role of institutional frameworks, groups and advocacy coalitions seriously. In the case in hand, the argument I develop in the next section focuses on variations in the balance of power between the advocacy coalitions of scientists and career diplomats in Argentine nuclear exports policy-making between 1976 and 2004.

3. Emerging nuclear suppliers and nuclear exports: a framework for analysis

The specific question as to how the interaction between international and domestic factors shape nuclear exports policy change in emerging suppliers of the Third World is an understudied topic in the realm of foreign nuclear policy studies. The literature concerning international nuclear politics has been dominated by nuclear proliferation studies, while few works have looked at nuclear technical assistance.[11] In parallel, investigations on nuclear exports policy have also been neglected. While there are a number of excellent single-country studies of exporting states, almost all concentrate on Western suppliers,[12] or seek to understand the nature of nuclear exports regimes and procedures.[13] An exception is Potter's seminal work on emerging nuclear suppliers, but even it does not rely on primary sources

and interviews.[14] Furthermore, these scholars do not illuminate opaque and complex historical policy-making processes, or explicitly propose an explanation as to why states vary in their responses to international nuclear trade.

Traditionally, International Relations (IR) literature in the Third World has tended to focus almost exclusively on 'systemic sources' of the behaviour of semi-peripheral countries, disregarding the effect of domestic political factors. From that conventional perspective, it might be expected that all semi-peripheral countries would behave alike, since their decisions are outcomes of the same structural factors. In this regard, Lima is quite correct to say that 'it becomes extremely difficult, using this paradigm, to account for variations in behaviour within the semi-periphery'.[15]

This paper is part of a growing literature on foreign policy change in terms of empirical studies.[16] It aims to contribute to an emerging area of research in FPA in the Third World that has not been given sufficient attention in the past. Since the 1950s and 1960s, the behaviourist reaction to classic paradigms' methods in IR have led to the development of this new subfield, especially in the US.[17] Although exceptions have existed in the Latin American literature since the early 1980s,[18] I agree with Vertzberger[19] that FPA in Third World countries requires in-depth knowledge on small group dynamics and factional politics in order to capture the diversity and compare them.

This research does not attempt in any way to fill this vacuum, but it does propose to analyse changes in balance amongst coalitions that influence nuclear exports policy-making. The landmark work of Putnam stresses the crucial point that decision-makers are concerned simultaneously with domestic and international pressures, and that there are differences across issues or across time. It also recognises that 'domestic groups pursue their interests by pressuring the government to adopt favourable policies, and politicians seek power by constructing coalitions among those groups'.[20] The idea that winning coalitions profoundly influences foreign policy is also at the heart of Risse-Kappen's work, which claims that the 'domestic structures encompass the organisational apparatus of political and societal institutions, their routines, the decision-making rules and procedures'.[21] In non-proliferation studies, Etel Solingen,[22] who addresses the role of domestic coalitions in influencing policy change, adopted a similar approach.

The concept of advocacy coalitions – the analytical backbone of this article – has not been previously applied in the foreign policy-making analysis of the Third World. The idea refers to a group of people and/or organisations who share core policy beliefs and particular interests, interacting regularly over periods of a decade or more in order to influence policy formulation and implementation within a given policy area. While dominant coalitions control the government, they are constantly challenged by a number of minority coalitions. Because the balance of power amongst coalitions is dynamic, the structure of policy-making and decisions will change over time.[23]

This article identifies at least four competitive and contrasting policy core beliefs in Argentine nuclear exports policy-making. First, adherents of pro-import substitution and protectionist policy beliefs, who were against signing the Non-Proliferation of Nuclear Weapons Treaty (NPT), and in favour of controlling foreign investment and technological transfer, emphasising national protection of sensitive information related to technology research. Second, proponents of pro-technological autonomy and South–South trade, who were focused on their task of promoting exports of nuclear research reactors to Southern countries, reflecting safety and security requirements whilst maintaining the highest possible

level of transparency, but without thereby increasing the dependency on nuclear powers policies. Third, supporters of pro-business and unrestricted commercial openness that encouraged participation in international regimes and nuclear businesses with nuclear powers, embodied in the signing of the NPT and in the admission into the Nuclear Suppliers Group (NSG). Finally, followers of antinuclear and environmentalist faction that promoted alternative energy as opposed to nuclear energy, and/or the tightening of safety standards on nuclear waste disposal.

However, apart from policy beliefs, the behaviour of the actors in question tended to pursue interest-based strategies. As Parsons suggests "it may be that the belief systems – or ideologies – of coalitions change because of a desire to maintain and advance core interests rather than because of a rational learning process".[24] Therefore, I agree with Nohrstedt that policy change is more likely if a group either perceives external pressures as threats to basic interests or as an opportunity to advance basic interests.[25]

The hypothesis of this article is that changes in the balance of power amongst advocacy coalitions are sources of policy shifts. Domestic actors forge advocacy coalitions in order to induce policy change in the hope of a future political return. However, their capacity to orchestrate policy change depends on incentives in the international environment, as well as the domestic structural parameters associated with the political distribution of power amongst advocacy coalitions and institutional features (nuclear-related export controls regime) of the policy-making process.

Argentine foreign nuclear policy-making has been characterised by the existence of varying, partial, temporary and non-definitive balances of power between domestic advocacy coalitions. Dominant coalitions were key to capitalising on critical junctures of the international nuclear system and opportunity windows of the domestic nuclear arena to induce policy changes that had the possibility of facilitating business, investment and trade despite domestic opposition. In this regard, this paper embraces the concept of science diplomacy, arguing that roles of nuclear scientists can go beyond the giving of information or being consulted about scientific policy. On occasion, they are capable of mobilising themselves to become temporary international political actors or science diplomats, with the aim of changing foreign policy.[26]

As far as methodology is concerned, via the use of case studies this article addresses the international and domestic environments in which advocacy coalitions influence policy change. It gathers information about exports control regimes, actors and coalitions drawing on informal, anonymous and confidential interviews with policy participants in nuclear exports undertaken in Bariloche and Buenos Aires, 12 May–21 August 2016. The research period includes the following exports of research reactors: the RP-10 (10mw) to the Peruvian Institute of Nuclear Energy (IPEN) in 1977; the NUR (1mw) to the Algerian Commisariat aux Energies Nouvelles (CEN) in 1985; the ETRR-2 (22mw) to the Atomic Energy Authority (AEA) of Egypt in 1992; and the OPAL (20mw) to the Australian Nuclear Science and Technology Organisation (ANSTO) in 2000. The fifth case is the contract for the redesign of the Iranian TRR (5mw) research reactor, which was signed in 1987, suspended in 1991 and formally cancelled in 1993.

4. Advocacy coalitions in the Argentine nuclear export policy, 1976–2004

The article divides these science diplomats into two groups. The first subgroup consisted of the *cneistas*, namely nuclear physics and engineers, navy officials, directors and international

Table 1. Advocacy coalitions and Argentine nuclear export policy-making, 1976–2004.

Balances of power	Dominant advocacy coalition	Minority advocacy coalitions
Process 1		
Imbalance in favour of CNEA	Pro-import substitution and protectionist coalition	
1976–1984	[Grand coalition: *cneistas* and emerging *invapianos*]	
(Peru)		
Process 2		
Transition period	Pro-technological autonomy and South–South commerce coalition	(1) Pro-import substitution and protectionist coalition [Remaining *cneistas*]
1984–1992		
(Algeria, Egypt and Iran)	[*diganistas* and *invapianos*]	(2) Emergent anti-nuclear and environmentalist coalition
Process 3		
Imbalance in favour of INVAP	Pro-business and commercial openness coalition	(1) Anti-nuclear and environmentalist coalition
1992–2004	[*diganistas* and *invapianos*]	(2) Remaining *cneistas*
(Australia)		

Source: Own elaboration.

representatives based at the CNEA's system. The second subgroup includes the *invapianos*, nuclear managers and technology sellers from the state-owned company Investigaciones Aplicadas, INVAP S.E.[27] A third group comprises the *diganistas* or career diplomats based at the General Direction of Nuclear Affairs (DIGAN) within the Ministry of Foreign Affairs. A fourth group is composed of an 'anti-nuclear' and environmentalist coalition lead by NGO's activists from Greenpeace Argentina.

As can be seen in Table 1, one can identify three policy-making chapters in Argentine nuclear export policy within the contexts of three different international and institutional nuclear environments. The concepts of 'grand coalition' appears to be useful to describe the 1976–1984 version of the policy subsystem (Process 1), which was composed of one robust and homogeneous pro-nationalist, import substitution and protectionist coalition consisting of *cneistas* and a new small group of *invapianos*. The critical juncture, in which the democratisation process contributed to more transparent nuclear policies, gave rise to a new governing coalition of *diganistas* and *invapianos*. Disputes during this transitional period spawned the formation of two minority coalitions: the *cneistas* and the incipient 'anti-nuclear' and environmentalists (Process 2). After contracts with Iran were cancelled in 1992, under a new international nuclear environment, the *invapianos* took the opportunity to increase their influence in policy-making. After that point, they embraced a pro-business and commercial openness coalition and played a primary role during the OPAL project in Australia; however, a minority coalition of anti-nuclear and environmentalist groups tried to challenge the INVAP's initiative by putting pressure on nuclear waste management issues (Process 3).

4.1. Peru: the CNEA's power and the import-substitution and protectionist coalition

The period 1976–1984 represents the dominance of a grand coalition in policy-making. Historically, Argentine foreign nuclear policy had been under the umbrella of the Navy.[28] Captain Roberto Mario Ornstein, who had been served as a liaison between the Navy and the Ministry of Foreign Affairs since the 1960s, having been a part of the Tlateloco delegation, was appointed as the CNEA's first manager of IR in 1979. Since the first export to Peru, the

invapianos had emerged as new advisers in nuclear exports policy-making, having a subordinated status vis-à-vis the *cneistas*. They supported import substitution policies, but as a consequence of belonging to a system, rather than as the result of being proactive.

This grand coalition embraced the ideas of sovereignty and national development, as had been proposed by the Argentine physicist Jorge Alberto Sabato. Adler called this the pragmatic anti-dependency guerrilla, who maintained that controlling of foreign investment and technology transfer, emphasising that industrial development could reduce dependency.[29] In their view, nuclear exports policy entailed the national protection of sensitive information relating to technology research and development, and consequently the need to avoid international inspections and controls mechanisms from the NPT regime.

How did this grand coalition emerge? In 1973–1974, the international environment was characterised by oil crises and the renaissance of nuclear options, which catapulted the nuclear power issue on to the political agenda. In 1978, four years after the Indian nuclear explosion, the US President Jimmy Carter sent the Nuclear Non-Proliferation Act to Congress, declaring that nuclear explosive devices posed a perilous threat to US security interests. The end of US nuclear trade with countries that had not ratified the NPT was an immediate effect of this policy.

By that time, Argentina had recently won a contract to export a research reactor to Peru. This was to be the country's first significant high technology export and the 'CNEA scientists viewed it as a huge step toward first world status'.[30] Carter's cut-off of enriched uranium suddenly put this project in jeopardy. Argentina was confronted by the need to implement an import substitution policy with the goal of ensuring indigenous uranium enrichment for the reactor. It was for this reason that the CNEA's scientist Conrado Varotto proposed the creation of the technological company INVAP with the secret mission of constructing a plant for the enrichment of uranium in Pilcaniyeu.[31]

As was indicated by some interviewees, INVAP's interest as the CNEA's subcontractor was not to construct a nuclear bomb, but to help demonstrate that Argentina had its own capacity to export reactors and to produce the uranium enrichment technology at the 20% required.[32] The company was also motivated by the need to complement and solve the CNEA's bureaucratic problems, such as its weak implementation capacity in international projects.[33] This case would later demonstrate how slow the CNEA could be as a project manager, taking 11 years to complete the Peru reactor. Nevertheless, according to another interviewee, the contract was also motivated by the fact that both the Argentine and the Peruvian commissions shared the same policy beliefs, and also the same interest in securing approval for their illegitimate military regimes, in so doing demonstrating their 'successful path' to consolidate 'national development' to other Latin American countries.[34] Although the *cneistas* were the proponents of these core beliefs, the *invapianos* – in their interest to grow as an infant technology company – would also embrace this policy as implementers of the CNEA's international projects.

4.2. Algeria, Egypt and Iran: INVAP's increasing influence and the technological autonomy and South-South commerce coalition

Nuclear exports policy-making changed quite strikingly from 1984–1985. Before that date, the new democratically elected government had criticised INVAP's role during the dictatorship. Only one month after the 1983 elections, the public announcement of CNEA's then

president Carlos Castro Madero that INVAP had attained the capacity to enrich uranium had been also viewed as an imminent threat to the democratic government.

As a consequence of the CNEA's announcement, the government's relationship with the USA was marked by suspicious and distrusts. From the US standpoint, Argentina's refusal to enter the NPT, in addition to the development of an enrichment plan, revealed a serious intent to confront. In relation to Brazil, that announcement had been also seen as an example of competition and a reaction to their agreement with Germany to import a similar technology. As a consequence, President Raúl Alfonsín was left with very little room for manoeuvre. Thus, the first step was to generate confidence about the nuclear programme via transparency and constructive dialogue with the USA, Brazil and the International Atomic Energy Agency (IAEA).[35]

The new international approach was implemented domestically with the support of a new institutional framework, which was set up with the appointment of Alberto Constantini as the CNEA's first civilian president, as well as with the creation of the DIGAN in 1984: an office within the Ministry of Foreign Affairs headed by career diplomat Adolfo Saracho. The *diganistas* were designed to challenge the CNEA's international influence. As one of the interviewees remembered, this was a 'traumatic' dispute in which the *cneistas* rejected the authority of the DIGAN as the single voice of Argentine international nuclear affairs;[36] especially as the CNEA's international powers had not been fully dismantled. The CNEA's president had retained a position as Head Governor of the Board of Governors of the IAEA, but the *diganistas* had taken control over the permanent representation in Vienna, a traditional *cneistas* stronghold.[37]

This new institutional framework opened the door for a new dominant coalition. Though some *invapianos* were still working as CNEA's subcontractors, the resulting increase in operational autonomy allowed them to strengthen ties with *diganistas*, in an attempt to counterbalance the CNEA's power. For example, by 1984, an agreement between INVAP and the DIGAN allowed young diplomats – particularly new graduates from the Argentine Foreign Service Institute (ISEN) – to do a one-month internship on nuclear policy in Bariloche, something that would be repeated in the future.[38] Both actors' interests and their policy beliefs – mainly political and commercial – were complementary. On the one hand, the *diganistas* made a strong case for the pacific use of nuclear energy and international transparency. On the other hand, the *invapianos* were focused on their task of promoting exports of nuclear research reactors to Southern countries.

This advocacy coalition on technological autonomy and South–South trade had its first opportunity to prove its potential in Algeria and Egypt. President Raúl Alfonsín, Minister of Foreign Affairs Dante Caputo and his Deputy Minister Jorge Federico Sábato personally supported this coalition, which was important to ensure South–South cooperation, transparency and nuclear exports.[39]Algeria was the first opportunity to deepen the personal relationships between scientists and career diplomats. The case of the Egyptian research reactor was a turning point, demonstrating how they could work in close collaboration in order to strengthen the country's participation in an international tender for the first time.[40]

Coordination initiatives between them were also crucial for nuclear businesses with Iran in the late 1980s, when the IAEA requested Argentina to convert the enriched uranium fuel (from 90% to 20%) of an Iranian research reactor, sold to that country years before by the US. In that case, scientists and career diplomats pursued a double-track of action, which combined dialogue to create a relation based on trust with the Iranians with a profitable

commercial agreement.[41] However, another turning point came in early December of 1991, when Carlos Menem's government[42] – under a new international environment and new foreign policy guidelines – suddenly decided to terminate the Iranian contracts.[43] This decision led to a significant change in the nuclear institutional framework. Decree 603/92 enacted more effective and stronger nuclear export controls[44] and the National Commission of Control for Sensitive Exports and War Material (CONCESYMB) was created. The formal goal was to ensure that all exports or imports of that nature were strictly controlled so as to provide security that they would be used exclusively for peaceful means, but also represented the final blow to the CNEA's influence in nuclear exports decision-making, as well as the start of a new balance of power amongst advocacy coalitions.[45]

4.3. Australia: INVAP's dominance and the pro-business and commercial openness coalition

During the 1990s, a swing in the balance of power in favour of INVAP and embracing an unrestricted commercial openness export policy signalled more policy-making. Participation in international regimes and nuclear businesses went hand in hand. Menem's administration crafted a new profile anchored on a strategy to become a trustworthy partner for the US and the developed Western world, epitomised in the signing of the NPT and in Argentina's admission into the NSG.[46] Such steps included the promotion of exports to developed countries, capitalising on INVAP's increasing role in international public tenders since the Egyptian case.[47]

The *invapianos* took note of the changes in the international nuclear environment and Argentina's position in the system. Though the end of the Cold War and the bipolar conflict had contributed to a decrease of the nuclear threat; an energy crisis, stimulated by the invasion of Kuwait by Iraq and the subsequent Gulf War; a curtailment of oil exports from the area, and a rapid and significant increase in oil prices in mid-1990s, offered a window of opportunity for policy change in the realm of nuclear exports.

Perhaps as a consequence of the rapprochement achieved during the 1980s, Argentina and Brazil launched a Common System for Accounting and Control of Nuclear Materials in November 1990, laying the basis for the creation of the Brazilian–Argentine Agency for Accounting and Control of Nuclear Materials (ABACC) in July 1991. Soon thereafter, Brazil, Argentina, the ABACC and the IAEA concluded a Quadripartite Agreement for application of full-scope safeguards to the nuclear facilities of both countries identical to those under the NPT.[48]

Nuclear policy-making of those times also became highly controversial and aggressively opposed by environmentalist groups in many nuclear countries. In reaction to the environmentalists' demands, many countries boosted enforcement in order to ensure safety and design standards, reduce economic and regulatory risk, and establish an effective high-level nuclear waste disposal programme, such as was stipulated by the US Energy Policy Act in 1992.[49]In parallel with this new international environment, institutional domestic changes took place in policy-making. The *diganistas* saw themselves strengthened in nuclear multilateral discussions and exports policy-making. With the new institutional framework created by the Decree 603/92,[50] the *cneistas* faced a power loss, when both the head governor and the presidency of the country's delegation in the IAEA were assigned to the career diplomats.[51] After this point, the support to the INVAP's position in nuclear businesses improved

steadily, particularly in 1997, when the *invapianos* decided to make a proposal for an ANSTO's pre-qualification of international companies, interested in the construction of a new research reactor. After a rigorous bidding procedure in Australia, in which they competed successfully against German, French and Canadian proposals, the contract was signed in July 2000, inaugurating the first Argentine South–North nuclear export.

Argentine anti-nuclear and environmentalists' groups came onto the scene in order to block nuclear exports. As a result of their pressures, the required bilateral agreement concerning cooperation with Australia in the peaceful uses of nuclear energy, which had been signed in March 2001 during Fernando De la Rúa's administration, could not be ratified by the Argentine National Congress until 2004, as it faced strong public opposition of an anti-nuclear and environmentalist coalition led by Greenpeace Argentina and more than 300 non-governmental organisations.[52] This minority coalition rejected the Argentine commitment to accept nuclear waste from the reactor back for processing and re-exporting to Australia, alleging that article 41 of Argentina's Constitution forbids the importation of radioactive waste.[53] Although these struggles suspended the agreement's entry into force, they could not block the INVAP's business initiatives that were garnering more international interest in the wake of the Australian experience.

5. Conclusions

This paper represents an important step towards understanding how an emerging nuclear supplier has structured its export policies. In an analysis that emphasises the interaction between international and domestic political factors, this paper contributes to the literature on foreign policy change, accounting for variations in behaviour within developing countries. In so doing, it provides a comparative diachronic analysis of why domestic actors influenced changes in Argentine nuclear exports policy from 1976 to 2004.

This article aims to prove that new incentives form international and institutional domestic nuclear environments can lead to shifts in the balance of power amongst dominant and minority advocacy coalitions in nuclear exports that can influence change in policy outcomes. In this regard, Argentine nuclear exports policy changed from initial defensive and protectionist goals to finally moving away from balanced levels of technological autonomy to an offensive and pro-commercial openness paradigm.

Cases-analysis of INVAP's growing international influence in nuclear exports (Peru, Algeria, Egypt, Iran and Australia) in the period 1976–2004 have distinguished two policy changes that refer to shifts in the balance of power among dominants and minority advocacy coalitions. In 1984, under a new international environment signalled by the prevalence of confidence-building measures with the US and Brazil, the new democratic government successfully secured INVAP's commitment to transparency and non-proliferation policies by creating a new institutional nuclear framework in the Ministry of Foreign Affairs, enabling teamwork between the *diganistas* and the *invapianos* in international projects. This contributed to technological autonomy and South–South nuclear trade policies, promoting science diplomacy initiatives through institutional channels. In the 1990s, under the influence of other experiences, environmentalists' groups have been defiantly opposed to the idea of nuclear waste disposals. Additionally, the suspension of the Iranian contracts and the creation

of the CONCESYMB brought the CNEA's participation in nuclear export decision-making to an end. This opened the way for INVAP to become a stronger influence in this process, although a minority coalition of anti-nuclear and environmentalist groups became the new veto players, trying to complicate and raise the costs of pro-nuclear business and commercial openness policies in this area. Delays in the ratification process of the agreement with Australia, for example, have proved how these struggles might affect policy-making.

But the argument of this article has limits. It does not consider intra-group dynamics or overlaps between advocacy coalitions. Groups cannot always align all members along a uniform platform or core policy beliefs and thus there can be factions, even within the same coalitions of science diplomats. For instance, it should be possible to find *cneistas* that were proponents of pro-commercial openness policies or *invapianos* that supported protectionism. These crosscutting cleavages need an in-depth analysis in order to understand how dominant coalitions can weaken the capacity of the influence of minority coalitions, by taking advantage of these fissures to divide them.

Finally, these findings have theoretical implications. By explaining variations in nuclear export policy-making, they prove how FPA contributes to shed light on the idea that interactions between international and domestic factors influence change in nuclear foreign policies over time. This research demonstrated how dominant advocacy coalitions were key to capitalising on critical junctures in the international nuclear system (e.g. the Carter's Nuclear Non-Proliferation Act in 1978, the confidence-building measures between Argentina, the US and Brazil in 1984, and the US Energy Policy Act in 1992) and opportunity windows of the domestic nuclear arena (e.g. the impact of political regime change in nuclear institutions, the creation of the DIGAN in 1984 and the set of a new nuclear-related export control regime in 1992) to induce policy changes that had the possibility of facilitating business, investment and trade despite domestic opposition of the veto players. These insights also underscore how further investigations are required to establish stronger links between IR and advocacy coalitions analysis by comparing with other emerging nuclear suppliers, promoting useful cross-fertilisation and new scholarly insights on foreign nuclear policy variations concerning stability and change.

Disclosure statement

No potential conflict of interest was reported by the author.

Funding

This work was supported by the Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET), Argentina; the Universidad Nacional de Quilmes [grant number PUNQ 1403].

Acknowledgments

I benefited from the incisive comments of different colleagues who wish to remain anonymous and two reviewers. I am very grateful to each one in the list of interviewees who illuminated these complex historical policymaking processes.

Note on Contributor

Bernabé H. Malacalza holds a PhD in Social Sciences from the Latin American Faculty of Social Sciences. He is a Research Scientist at the National Scientific and Technical Research Council (CONICET) based at the National University of Quilmes (UNQ) in Argentina. He is also professor at the PhD in Economic Development at UNQ. His publications include 'International Co-operation in Science and Technology: Concepts, Politics, and Dynamics in the Case of Argentine-Brazilian Nuclear Co-operation' Contexto Internacional, *Journal of Global Connections* (2016); 'The domestic sources of South-South development cooperation policy of Argentina: foreign policy, development and institutional framework', *Brazilian Journal of International Relations* (2015).

Notes

1. Since the early 1980s, Argentina, Brazil, China, South Korea, India, Pakistan, Spain, Israel, Japan, Romania, South Africa, Taiwan, the former Yugoslavia, Vietnam and México frequently have been mentioned in this category. China, India, Pakistan and Israel are nuclear weapon states, while Argentina, Brazil, South Africa and Vietnam count as emerging and non-weapon nuclear suppliers of the Third World; however, Argentina is the only one who exports nuclear research reactors.
2. Stahl, "Emerging Nuclear Suppliers in the Third World."
3. The application of the advocacy coalitions concept to foreign policy analysis remains an underdeveloped area, with few works explicitly focused on these issues. See Litfin, "Advocacy Coalitions Along the Domestic–Foreign Frontier"; Pierce, "Coalition Stability and Belief Change."
4. For example, Russell, "La posición argentina frente al desarme"; Solingen, "Macropolitical Consensus"; Solingen, "Domestic Sources of Nuclear Postures"; Sheinin, "Nuclear Development"; and Carasales, "The so-called Proliferator."
5. CNEA was created on 31 May 1950 by the Decree Nr. 10,936/50. Its purpose is to promote and carry out scientific and industrial research and applications on nuclear transmutations and reactions.
6. Solingen, "Macropolitical Consensus and Lateral Autonomy."
7. See also, Hurtado, *El sueño de la Argentina atómica*; Gregorio-Cernadas, *Una épica para la paz*.
8. Adler, "State Institutions, Ideology, and Autonomous Technological Development"; Hymans, "Of Gauchos and Gringos."
9. Hurtado, "Cultura tecnológico-política sectorial."
10. On the role of epistemic communities in Argentine nuclear policy, see Alcañiz, "Ideas, Epistemic Communities and Regional Integration"; Wrobel and Redick, "Nuclear Cooperation in South America"; Kutchesfahani, "Politics and the Bomb"; Mallea, "La cuestión nuclear en la relación argentino-brasileña"; Hymans, "Dynamics of Nuclear Politics"; Mallea et al., "Origins of Nuclear Cooperation."
11. On nuclear cooperation, see Fuhrmann, "Taking a Walk on the Supply Side"; Alcañiz, "Bureaucratic Networks and Government Spending"; Malacalza, "International Co-operation in Science and Technology." On a literature review of proliferation theories, see Hymans, *Theories of Nuclear Proliferation*.
12. For example, Bratt, *The Politics of CANDU Exports*; Häckel, "Politics of Nuclear Exports"; Lantis, "Nonproliferation and Norm Discourse."
13. For example, Tuomi, "International Nuclear Commerce in Transition"; Boardman and Keely, *Nuclear Exports and World Politics*.
14. Potter, *International Nuclear Trade and Nonproliferation*.
15. Lima, "Political Economy of Brazilian Foreign Policy," 162.
16. Gustavsson, "How Should We Study Foreign Policy Change?" underscores some of the few contributions that address explicitly the issue of foreign policy change.

17. Pioneering works of Snyder, Bruck and Sapin, *Foreign Policy Decision-Making*; Sprout and Sprout, *Man-Milieu Relationship Hypotheses*; Allison, *Essence of Decision*; and Rosenau, "Pre-Theories and Theories of Foreign Policy" have sharpened the intra-national focus on interest group competition and policy change within the state.
18. Pioneering analyses by Van Klaveren, "El análisis de la política exterior latinoamericana"; Tomassini, "Elementos para el análisis de la política exterior"; Russell, "Política exterior y toma de decisiones"; and Hirst, "Relações Internacionais no Brasil como área de pesquisa" proposed new insights, considering political systems, development strategies and historical factors as domestic variables that influence foreign policy change. Lima, "Political Economy of Brazilian Foreign Policy" has illustrated how advocacy and veto coalitions influence international strategies. Foreign policy-making has recently been studied by Tokatlian and Merke, "La política exterior como política pública" in Argentina and by Milani and Pinheiro, "Politics of Brazilian Foreign Policy" in Brazil, analysing the place of the executive power in policy-making and its relationships with Congress, political parties, civil society and other actors.
19. Vertzberger, "Bureaucratic–Organizational Politics," 89.
20. Putnam, "Diplomacy and Domestic Politics," 434.
21. Risse-Kappen, "Ideas do not Float Freely," 207.
22. Solingen, "Domestic Sources of Nuclear Postures."
23. Sabatier and Jenkins-Smith, "Advocacy Coalition Framework," 150.
24. Parsons, *Public Policy*, 202.
25. Nohrstedt, "External Shocks and Policy Change," 1046.
26. On the science diplomacy concept, see Fähnrich, "Science Diplomacy"; Flink and Schreiterer, "Science Diplomacy at the Intersection."
27. INVAP S.E. is a technology company created in the Decree Nr. 661/76 by the Government of the Province of Río Negro located in San Carlos de Bariloche. Its products are research reactors, radioisotope plants, nuclear fuel facilities, aerospace technology and alternative energies, among others. See more at www.invap.com.ar/en/invap-2/about-invap.html.
28. The Peronist Navy Edecan Pedro Iraolagoitía had accepted the offer made by president Juan Domingo Perón to preside CNEA in 1950, without knowing anything about the nuclear issue.
29. Adler, "State Institutions, Ideology, and Autonomous Technological Development," 62.
30. Hymans, "Of Gauchos and Gringos."
31. Argentina's rejection of the NPT was motivated in the strong belief that the non-proliferation regime – including the NSG – had been created to function 'as cartels that restricted access to peaceful nuclear technology for states not considered friends of the nuclear haves'; Diez, "National Development and Argentina's Nuclear Policy," 26.
32. Interviews with INVAP's nuclear managers in Bariloche, 16 May 2016.
33. In the case of the RP-10, INVAP S.E. provided the electronic components for the Peruvian reactor RP-10.
34. Interview with INVAP's former international representative in Buenos Aires, 10 May 2016.
35. Mallea, "Resolving the Dilemma of Nuclear Mistrust."
36. Interview with CNEA's former international representative in Buenos Aires, 26 May 2016.
37. Interview with CNEA's former international representative in Buenos Aires, 26 May 2016.
38. Interview with DIGAN's former diplomat in Buenos Aires, 19 August 2016.
39. Interview with INVAP's former international representative in Algeria and Egypt, 17 May 2016.
40. Interview with INVAP's general manager in Bariloche, 19 May 2016.
41. Argentinean Minister of Foreign Affairs asked Iran to confirm that this operation was to be carried out for peaceful purposes, which the Iranian embassy did it by means of a note, drawn up on March 1988. This allowed adding a deeper engagement to supply a uranium oxide purification and conversion pilot plant (CPP) and a fuel manufacturing pilot plant (FMPP). See Buch, "La proyección comercial internacional," 183.
42. Carlos Menem won the 1989 elections by a wide margin, and was scheduled to take office on 10 December, but social conditions took a turn for the worse. As result, Raúl Alfonsín resigned and transferred power to Menem five months early, on 8 July.

43. Several analysts have tried to explain that decision as motivated by the complex political situation in the Middle East and because of the risk that Iran might have had the intention of using the materials provided for weapons development. But according to Botta and some interviewees, the crucial fact was a phone call received by president Menem from US ambassador in Argentina Terence Todman to rescind the contracts. See Botta, "La cooperación en el ámbito nuclear"; Interview with INVAP's former international representative in Bariloche, 19 May 2016.
44. CONCESYMB reassesses the functions of the former Commission of Policy Coordination for War Material Exports. See also Picazo and Jordan, "Control de exportaciones sensitivas."
45. CONCESYMB was composed by the Ministry of Foreign Affairs, International Trade and Worship, the Ministry of Defence, the Ministry of Economic Affairs and Production, the General Customs Directorate and the Nuclear Regulatory Authority (ARN).
46. Menem's administration took two actions in order to confirm its international alignment with the US: first, the withdrawal of the country from the Non-Aligned Movement; and next, the decision to sign Tlatelolco in 1991 and the NPT in 1995.
47. 'We could not have sold anything to developed countries without the membership in NSG'; Interview with INVAP's former international representative in Bariloche, 16 May 2016.
48. Sheinin, *Argentina and the United States.*
49. Joskow, "US Energy Policy During the 1990s."
50. According to the Decree 150/1994, the new National Nuclear Regulatory Authority (ARN) received a wide range of powers of regulation within the nuclear exports' control regime. CNEA formally became to integrate as a subunit the Secretary of Science and Technology within the Ministry of Education (Decree 660/1996).
51. Interview with Argentina's former diplomat from DIGAN in Buenos Aires, 19 August 2016.
52. Since the Chernobyl accident of 1986, anti-nuclear and environmentalist groups (ecologists, NGO activists and some journalists) became stronger and active in reaction to nuclear waste management. Greenpeace Argentina was created in 1987; Gregorio-Cernadas, *Una épica para la paz*.
53. Villalonga, "Acuerdo nuclear con Australia: peligroso e ilegal."

Bibliography

Adler, Emanuel. "State Institutions, Ideology, and Autonomous Technological Development: Computers and Nuclear Energy in Argentina and Brazil." *Latin American Research Review* 23, no. 2 (1988): 59–90.

Alcañiz, Isabella. "Ideas, Epistemic Communities and Regional Integration: Splitting the Atom in Argentina and Brazil." Ph.D. diss., Northwestern University, 2004.

Alcañiz, Isabella. "Bureaucratic Networks and Government Spending: A Network Analysis of Nuclear Cooperation in Latin America." *Latin American Research Review* 45, no. 1 (2010): 148–172. doi:10.1353/lar.0.0128.

Allison, Graham T. *Essence of Decision, Explaining the Cuban Missile Crisis*. Boston, MA: Little Brown, 1971.

Boardman, Robert, and J. Keeley. *Nuclear Exports and World Politics: Policy and Regime*. London: MacMillan, 1983.

Botta, Paulo. "La cooperación en el ámbito nuclear entre Argentina e Irán (1986-1997)." [Cooperation between Argentina and Iran in the Nuclear Field (1986–1997).] *Cuadernos de Política Exterior Argentina* 101 (2010): 3–34.

Bratt, Duane. *The Politics of CANDU Exports*. Toronto: University of Toronto Press, 2006.

Buch, Tomás. "La proyección comercial internacional." [International Commerce Projection.] In *La cooperación internacional de Argentina enel campo nuclear* [Argentine International Cooperation in the Nuclear Field], edited by Julio C. Carasales and Roberto M. Ornstein, 147–208. Buenos Aires: CARI, 1998.

Carasales, Julio C. "The So-called Proliferator that Wasn't: The Story of Argentina's Nuclear Policy." *The Nonproliferation Review* 6, no. 4 (1999): 51–64.

Diez, Eduardo. "National Development and Argentina's Nuclear Policy." In *Perspectives on the Evolving Nuclear Order*, edited by Toby Dalton, Togzhan Kassenova, and Lauryn Williams, 25–34. Washingtonm, DC: Carnegie Endowment for International Peace, 2016.

Fähnrich, Birte. "Science Diplomacy: Investigating the Perspective of Scholars on Politics–Science Collaboration in International Affairs." *Public Understanding of Science* (2015): 1–16. doi:10.1177/0963662515616552.

Flink, Tim, and Ulrich Schreiterer. "Science Diplomacy at the Intersection of S&T Policies and Foreign Affairs: Toward a Typology of National Approaches." *Science and Public Policy* 37, no. 9 (2010): 665–677.

Fuhrmann, Matthew. "Taking a Walk on the Supply Side: The Determinants of Civilian Nuclear Cooperation." *Journal of Conflict Resolution* 53, no. 2 (2009): 181–208.

Gregorio-Cernadas, Maximiliano. *Una épica para la paz. La política de seguridad externa de Alfonsín* [An Epic of Peace. The Foreign Security Policy of Alfonsín]. Buenos Aires: EUDEBA, 2016.

Gustavsson, Jakob. "How Should We Study Foreign Policy Change?" *Cooperation and Conflict* 34, no. 1 (1999): 73–95.

Häckel, Erwin. "The Politics of Nuclear Exports in West Germany." In *Nuclear Exports and World Politics*, edited by Robert Boardman and J. Keeley, 62–78. London: Palgrave Macmillan, 1983.

Hirst, Monica. "Relações Internacionais no Brasil como área de pesquisa." [International Relations in Brazil as a Research Area.] In *Temas e problemas da pesquisa em ciências sociais* [Issues and Problems of Research in Social Sciences], edited by Sergio Miceli, 64–74. São Paulo: IDESP, 1992.

Hurtado, Diego. "Cultura tecnológico-política sectorial en contexto semiperiférico: el desarrollo nuclear en la Argentina (1945-1994)." [Technological and Political Sectorial Culture in a Semi-peripheral Context.] *Revista iberoamericana de ciencia tecnología y sociedad* 7, no. 21 (2013): 163–192.

Hurtado, Diego. *El sueño de la Argentina atómica: política, tecnología nuclear y desarrollo nacional (1945–2006)* [The Dream of the Atomic Argentina: Politics, Nuclear Technology and National Development (1945–2006)]. Buenos Aires: Edhasa, 2014.

Hymans, Jacques E. C.. "Of Gauchos and Gringos: Why Argentina Never Wanted the Bomb, and Why the United States Thought It Did." *Security Studies* 10, no. 3 (2001): 153–185.

Hymans, Jacques E. C. "Theories of Nuclear Proliferation: The State of the Field." *Nonproliferation Review* 13.3 (2006): 455–465.

Hymans, Jacques E. C. "The Dynamics of Nuclear Politics: Lessons from Latin America." In *Routledge Handbook of Latin America in the World*, edited by Jorge I. Domínguez and Ana Covarrubias, 362–375. NY: Routledge, 2014.

Joskow, Paul L. "US Energy Policy During the 1990s." *WP* 8454 (2001). Washington, DC: National Bureau of Economic Research. Accessed November 3, 2016. https://goo.gl/6hyvx1

Kutchesfahani, Sara Z. "Politics and the Bomb: Exploring the Role of Epistemic Communities in Nuclear Non-Proliferation Outcomes." Ph.D. diss., University College London, London, 2010.

Lantis, Jeffrey S. "Nonproliferation and Norm Discourse: An Agentic Constructivist Model of US Nuclear Export Policy Changes." *Politics & Policy* 44, no. 2 (2016): 220–260.

Lima, Maria Regina Soares de. *Political Economy of Brazilian Foreign Policy: Nuclear Energy, Trade, and Itaipu*. Nashville, TN: Vanderbilt University, 1986.

Litfin, Karen T. "Advocacy Coalitions Along the Domestic-Foreign Frontier: Globalization and Canadian Climate Change Policy." *Policy Studies Journal* 28, no. 1 (2000): 236–252.

Malacalza, Bernabé. "International Co-operation in Science and Technology: Concepts, Politics, and Dynamics in the Case of Argentine-Brazilian Nuclear Co-operation." *Contexto Internacional* 38, no. 2 (2016): 663–684.

Mallea, Rodrigo. "La cuestión nuclear en la relación argentino-brasileña (1968–1984)." [The Nuclear Issue in the Argentine-Brazilian Relation.] MA diss., IESPUERJ, Rio de Janeiro, 2012.

Mallea, Rodrigo. "Resolving the Dilemma of Nuclear Mistrust: From Foz do Iguacu to the Constitution of ABACC (1985-1991)." Washington, DC: Woodrow Wilson Center, 2013. Accessed November 6, 2016. https://goo.gl/sNBW6w

Mallea, Rodrigo, Matias Spektor, and Nicholas J. Wheeler. "The Origins of Nuclear Cooperation: A Critical Oral History between Argentina and Brazil." Rio de Janeiro: FGV, 2015. Accessed November 6, 2016. https://hdl.handle.net/10438/13865

Milani, Carlos R., and Pinheiro Leticia. "The Politics of Brazilian Foreign Policy and Its Analytical Challenges." *Foreign Policy Analysis* 13, no. 2 (2017): 278–296.

Nohrstedt, Daniel. "External Shocks and Policy Change: Three Mile Island and Swedish Nuclear Energy Policy." *Journal of European Public Policy* 12, no. 6 (2005): 1041–1059.
Parsons, Wayne. *Public Policy: An Introduction to the Theory and Practice of Policy Analysis*. Cheltenham: Edward Elgar, 1995.
Picazo, María V., and Jorge M. Jordan. "Control de exportaciones sensitivas y duales: una herramienta de política exterior." [Control of Sensitive and Dual Exports: A Tool for Foreign Policy.] *Temas de Política Exterior, Comercio y Relaciones Internacionales* 5 (2012). Buenos Aires: APSEN. Accesed October 22, 2016. https://www.apsen.org.ar/wp-content/uploads/2015/11/Revista-Temas-5.pdf
Pierce, Jonathan J. "Coalition Stability and Belief Change: Advocacy Coalitions in US Foreign Policy and the Creation of Israel, 1922–44." *Policy Studies Journal* 39, no. 3 (2011): 411–434.
Potter, William C., ed. *International Nuclear Trade and Nonproliferation: The Challenge of the Emerging Nuclear Suppliers*. Lexington, MA: Lexington Books, 1990.
Putnam, Robert D. "Diplomacy and Domestic Politics: The Logic of Two-Level Games." *International Organization* 42, no. 3 (1988): 427–460.
Risse-Kappen, Thomas. "Ideas do not Float Freely: Transnational Coalitions, Domestic Structures, and the End of the Cold War." *International Organization* 48, no. 2 (1994): 185–214.
Rosenau, James. "Pre-Theories and Theories of Foreign Policy." In *Approaches to Comparative and International Politics*, edited by Robert Farrell, 27–92. Evanston, IL: Northwestern University Press, 1966.
Russell, Roberto. "La posición argentina frente al desarme, la no proliferación y el uso pacífico de la energía nuclear." [The Argentine Stance on Disarmament, Non-proliferation and the Peaceful use of Nuclear Energy.] In *Desarme y desarrollo* [Disarmament and Development], edited by Wolf von Baudissin, Mario Cámpora, Monica Hirst, José Paradiso, and Carlos Perez Llana, 62–74. Buenos Aires: Fundación Illia, 1989.
Russell, Roberto. *Política exterior y toma de decisiones en América Latina* [Foreign Policy and Decision-making in Latin America]. Buenos Aires: Grupo Editor Latinoamericano, 1990.
Sabatier, Paul, and Hank Jenkins-Smith. "The Advocacy Coalition Framework: An Assessment." In *Theories of the Policy Process*, edited by Paul Sabatier and Christopher Weible, 112–134. Boulder, CO: Westview Press, 2014.
Sheinin, David. *Argentina and the United States: An Alliance Contained*. Athens: University of Georgia Press, 2010.
Sheinin, David. "Nuclear Development and the Shaping of an Independent Argentine Foreign Policy, 1950-1990." *Estudios Interdisciplinarios de América Latina y el Caribe* 16, no. 2 (2014): 37–62.
Snyder, Richard, H. Bruck, and Burton Sapin. *Foreign Policy Decision-Making: An Approach to the Study of International Politics*. New York: Free Press of Glencoe, 1962.
Solingen, Etel. "Macropolitical Consensus and Lateral Autonomy in Industrial Policy: The Nuclear Sector in Brazil and Argentina." *International Organization* 47, no. 2 (1993): 263–298.
Solingen, Etel. "The Domestic Sources of Nuclear Postures: Influencing Fence-Sitters in the Post-Cold War Era." *Policy Paper* 8 (1994). Accessed October 6, 2016. https://escholarship.org/uc/item/5pv9s8p4
Sprout, Harold Hance, and Margaret Sprout. *Man-milieu Relationship Hypotheses in the Context of International Politics*. Center for International Studies. Princeton: Princeton University Press, 1956.
Stahl, K. "Emerging Nuclear Suppliers in the Third World." In *Forschungsstaette der Evangelischen Studiengemeinschaft*, edited by C. Eisenbart and D. Ehrenstein, 451–471. Heidelberg, Germany, 1990.
Tokatlian, Juan Gabriel, and Federico Merke. "La política exterior como política pública." [Foreign Policy as Public Policy.] In *Instituciones, actores y políticas públicas en la Argentina* [Institutions, Actors and Public Policies in Argentina], edited by Carlos H. Acuña, 245–293. Buenos Aires: IIEP/UBA, 2013.
Tomassini, Luciano. "Elementos para el análisis de la política exterior." [Elements for Foreign Policy Analysis.] *Estudios Internacionales* 20, no. 78 (1987): 125–157.
Tuomi, Helena. "International Nuclear Commerce in Transition." *Current Research on Peace and Violence* 8, no. 2 (1985): 54–63.
Van Klaveren, Alberto. "El análisis de la política exterior latinoamericana: perspectivas teóricas." [The Analysis of Latin American Foreign Policy.] In *Entre la autonomía y la subordinación. Política exterior de los países latinoamericanos* [Between Autonomy and Subordination. Foreign Policy of Latin American Countries], edited by Muñoz, Heraldo y Tulchin, Joseph, 4–49. Buenos Aires: GEL, 1984.

Vertzberger, Yaacov. "Bureaucratic-Organizational Politics and Information Processing in a Developing State." *International Studies Quarterly* 28, no. 1 (1984): 69–95.

Villalonga, Juan Carlos. "Acuerdo nuclear con Australia: peligroso e ilegal." [The Nuclear Agreement with Australia: Dangerous and Illegal.] *REDES* 10, no. 19 (2002): 128–134.

Wrobel, Paulo S., and John R. Redick. "Nuclear Cooperation in South America: The Role of Scientists in the Argentine-Brazilian Rapprochement." *Annals of the New York Academy of Sciences* 866, no. 1 (1998): 165–181.