

# **International Norms, Socialization, and the South African Nuclear Rollback – Completing the Puzzle**

**Chris J. Berkhout**

**S1167014**

**Master's thesis**



**Universiteit Leiden**

## TABLE OF CONTENTS

Introduction	3
Constructivism and socialization	6
The nuclear non-proliferation norm	9
The life cycle of the nuclear non-proliferation norm	11
Why? South Africa's nuclear reversal	13
The inadequacy of current explanations	15
How? Normalization of relations with the international community	17
South Africa's peaceful nuclear history	17
States	18
International organizations	21
Beyond nuclear disarmament	24
Conclusion	26
Works cited	29

## INTRODUCTION

South-Africa's signature under the Non-Proliferation Treaty (NPT) in 1991 after successfully developing six nuclear weapons in the 1970s and 1980s appears to be just any other case in a period of nuclear disarmament success, in which an increasing number of states renounced their nuclear weapons (programs). The former Soviet Union (SU) satellites of Belarus, Ukraine, and Kazakhstan, for instance, agreed to destroy their Soviet inherited nuclear weapons. At least a dozen more states have in the past launched serious nuclear weapons programs – among others Libya, Iraq, and Argentina – but the majority of these states have currently abandoned their programs. The South African case, however, is actually one of its kind. To date, South Africa is the only country to indigenously acquire and later abandon nuclear weapons. As such, South Africa presents a unique opportunity to research nuclear disarmament and the motivations behind it, which exactly is the intent of this thesis. The main research question of this thesis is as follows:

*Why and how did South Africa decide to abandon its nuclear weapons program?*

By far the most literature on nuclear proliferation and disarmament is concerned with the question why states develop nuclear weapons in the first place. This existing body of literature regarding nuclear proliferation is enormous, providing a plethora of explanations for nuclear proliferation. Kenneth Waltz (1981) and John Mearsheimer (1998) argue that state security interests influence nuclear acquisition. Mitchell Reiss (1988) and Etel Solingen (1994) forward a domestic political processes and organizational explanation. Jacques Hymans claims that it is the national identity conception that impacts on the decision to acquire nuclear weapons (2006). Maria Rost Rublee is perhaps the best-known scholar who argues for an appreciation of the social dimension to nuclear proliferation (2009). According to this explanation, “state behavior is determined not by leaders' cold calculations about the national security interests or their parochial bureaucratic interests, but rather by deeper norms and shared beliefs about what actions are legitimate and appropriate in international relations” (Sagan 1996, 73).

The decision to give up nuclear weapons can be explained by the reverse of the aforementioned models to nuclear proliferation. For instance, a state may abandon nuclear

weapons because of improvements in its external security environment, economic benefits, domestic politicians' push for nuclear reversal, or the emergence or reinforcement of norms which pressures states towards relinquishing nuclear weapons (Paul 2000, 3-11). This thesis focuses on this latter explanation of nuclear reversal. It shows how materialist explanations do not suffice in explaining South Africa's nuclear turnaround. When the constructivist explanation of norms is excluded, the South African case makes substantially less sense. As such, this thesis researches from a constructivist angle whether South Africa's abandonment of its nuclear capability can be explained with reference to the fortification of the norm against nuclear proliferation through socialization – mainly diplomatic pressures and the implementation of sanctions. Indeed, constructivist literature argues that when a norm is breached, the international community responds by strengthening the norm through carrying out acts of socialization.<sup>1</sup> There is reason to believe that South Africa was socialized into acceptable behavior, *id est* abandoning their nuclear weapons program in the late 1980s, by the international community after breaching the nuclear non-proliferation norm approximately fifteen years earlier.

The main research question is split into two components – why and how. The *why*-question tests the constructivist explanation of socially constructed norms as a possible impetus behind South Africa's nuclear reversal. Adding *how* to the main research question is essential to probe into the precise mechanisms behind South Africa's nuclear turnaround. To do so, process tracing is applied, a method that can be understood as “an analytic tool for drawing descriptive and causal inferences from diagnostic pieces of evidence – often understood as part of a temporal sequence of events or phenomena” (Collier 2011, 824). Process tracing will support this thesis as it allows for identifying the causal sequence of South Africa's course towards nuclear reversal in detail. When the *why* and *how* of South Africa's nuclear reversal are answered, the value of the social constructivist perspective on South Africa's nuclear reversal is compared to alternative, existing explanations. The significance of this academic endeavor stems from the importance of nuclear weapons to global security. An improved understanding of the sole case of indigenous nuclear weapons proliferation and disarmament can contribute to providing a unique insight in how the nuclear non-proliferation norm is transmitted, how states respond to sanctions and diplomatic pressures, and whether a

---

<sup>1</sup> As will be substantiated later, these arguments are forwarded by Finnemore and Sikkink 1998.

state finally caves in as a result of socialization. This knowledge may result in important policy implications for decision-makers and scholars alike.

The first sections of this thesis establishes the theoretical framework, which to a certain extent is based upon the entrenched literature on norms, sanctions, and socialization. The subsequent analytical contribution of this thesis – mapping the process of socialization of South Africa carried out by the international community – is based entirely on primary source material. This material comprises an array of records – personal memoranda, letters from key decision makers, treaties, acts, resolutions, intelligence reports, and speeches – which provide an insight in South Africa’s nuclear history. The Woodrow Wilson International Center for Scholars’ South African Nuclear History Collection serves as the main source of primary materials, complemented with International Atomic Energy Agency (IAEA) and United Nations (UN) documents, as well as United States (US) legislation.

Unfortunately however, official documentation on nuclear development from the South African government in the period 1974-1989 is scarce and, where available, mostly unreliable.<sup>2</sup> The paucity of documentation can predominantly be ascribed to South African President De Klerk’s destruction of over 12,000 documents relating to the South African nuclear program. In addition, only around 250 people – 1,000 in total during the period 1974-1989 – were employed in the top-secret nuclear weapons program at any particular point in time (Stumpf 1995, 6). As a consequence of the incompleteness of records from within South Africa’s inner circles, establishing the process of socialization of South Africa by the international community and its precise effects on South Africa is challenging.

Due to restrictions in available sources, the methodology applied in this thesis is specifically adapted to cope with the limited amount of available South African information. With De Klerk’s statement about the reasons behind South Africa’s nuclear disarmament as starting point, this project will inquire whether the possibility for a normative dimension to the South African nuclear rollback exists – as identified by the literature on nuclear non-proliferation in general – by trying to explain South Africa’s behavior by completely excluding norms. After establishing that these explanations are incomplete, this thesis moves on to investigate the process of socialization – a fundamental way of spreading norms – by state entities and international bodies towards South Africa, which was initiated in response to South Africa’s

---

<sup>2</sup> As will be clarified later, the period from 1974 to 1989 was the period in which South Africa held its weaponized nuclear program.

breach of the nuclear non-proliferation norm. It does so by examining mostly data from actors carrying out socializing acts, rather than the scarce documents from South Africa itself. This project in turn determines that South Africa's abandonment of nuclear weapons was motivated by a long-term commitment to an internalized norm rather than by rational calculations about short-term benefits from lifting sanctions and ending diplomatic pressures, thereby signaling that such an internalization was the consequence of a process of socialization. That South Africa was socialized and eventually internalized the nuclear non-proliferation norm is established by looking at South Africa's behavior and its stance on nuclear proliferation from the early 1990s onwards. Documentation from after South Africa's nuclear turnaround is generally more available and reliable than during South Africa's system of apartheid and secret nuclear program. Together with the limited amount of sources regarding South Africa's disarmament from within South Africa's governmental circles, this thesis is in the position to conclude that the process of socialization of the nuclear non-proliferation norm by the international community is the crucial, missing piece of South Africa's nuclear rollback puzzle.

#### **CONSTRUCTIVISM AND SOCIALIZATION**

The starting point for theorizing in a neorealist or neoliberal fashion is the view that "the distribution of material capabilities among states is the key factor for understanding world politics" (Maersheimer 1995, 91). In this approach, power and national interest – viewed as material entities – dominate international politics. Another assumption that neoliberals and neorealists make is that actors are rational. When various options are available, the actor chooses the option which best aligns with its interests, which are exogenously given prior to social interaction and divorced from ideas. Preferences thereby become 'material' because they do not depend on ideas. When embracing these assumptions, ideas matter little and only to rationalize actions determined by material factors (Wendt 1999, 115; and Checkel 1998, 327).

It is exactly these materialist and rationalist views that social constructivism has challenged. The fundamental principle underlying constructivism as a social theory – a general framework to interpret social phenomena – is that world politics is socially constructed (Wendt 1992, 396-397). Material objects "only acquire meaning for human action through the structure of shared knowledge in which they are embedded" (Wendt 1995, 73; and Checkel 1998, 325-328). It is thus the meaning given to material resources by the social environment through

which they are interpreted that is important. Precisely because international politics is a social construct constituted by agents and their structure, interests are constructed by shared ideas rather than given by nature in much the same way.

Constructivists thus emphasize the role of ideas in international politics. A distinction can be made between different types of ideas. Normative beliefs or norms are one type of ideas, consisting of “values and attitudes that specify criteria for distinguishing right from wrong or just from unjust and they imply associated standards of behavior” (Tannenwald 2005a, 15-16). More generally defined, a norm is “a standard of appropriate behavior for actors with a given identity” that is shared between actors (Finnemore and Sikkink 1998, 891). Norms progress, spread, and gain influence through a ‘life cycle,’ according to Finnemore and Sikkink’s seminal article ‘International Norm Dynamics and Social Change.’ This norm life cycle can be split into three stages. The first stage a norm will reside in is called ‘norm emergence.’ After the ‘tipping point’ has been reached, in which a “critical mass” of relevant actors have adopted the norm, the norm enters the second stage of the life cycle. This phase is called ‘norm cascade,’ where the norm is broadly accepted and ‘cascades’ through the social environment. The final phase involves ‘internalization,’ through which the norm attains a ‘taken-for-granted’ quality. It should be stressed from the outset that not every norm is destined to complete the norm life cycle. In fact, many emergent norms wither away and fail to gain influence (Finnemore and Sikkink 1998, 895).

Each stage of the life cycle is characterized by different actors and mechanisms of spreading the norm. Critical in the first stage are norm entrepreneurs using organizational platforms, which attempt to persuade a critical mass of relevant actors to espouse the norms they promote. At the second stage, it is no longer persuasion that constitutes the dominant dynamic. Rather than caving to pressure, actors are from this point onwards socialized to embrace new norms.<sup>3</sup> In the final stage so called professions, bureaucracies, and the law are the dominant actors involved in firmly incorporating a norm. Like habit and imitation, a powerful mechanism at work at this stage is institutionalization. In the case of South Africa, the main mechanism to consider during its nuclear weapons experience is an active process of socialization, as will be clarified into detail later.

---

<sup>3</sup> Finnemore and Sikkink note that in addition to socialization two other main mechanisms are at work in the second phase; institutionalization and demonstration. However, they also clearly point out that socialization is truly the key mechanism in the cascade phase, upon which the focus of this thesis lies (Finnemore and Sikkink 1998, 902-904).

However helpful Finnemore and Sikkink's framework may be in identifying that socialization is the central mechanism of spreading a norm at a particular point in time, their theory falls short of delineating what socialization exactly is and how it precisely works. Other than nothing that socialization is the key mechanism in the cascade phase and explaining what makes socialization work, the only reference to the substance of socialization is but a brief footnote that demarcates the definition of socialization. In order to create a theoretical framework that suits the aims of this thesis, Finnemore and Sikkink's work has to be complemented by other authors on several fronts.

When Finnemore and Sikkink discuss the "critical mass" that should support a norm before it reaches the tipping point and moves to the second stage, they emphasize that states are not equal in normative weight. In other words, there are more important and less important states, and as a consequence support of the norm by some states weighs heavier than support by others. Unfortunately, Finnemore and Sikkink do not extend this differentiation in the relative weight of states to the process of socialization, but Rublee does. She argues that for some actors, other actors' perceptions of norms are especially important to what they themselves believe about what constitutes appropriate behavior. Actors that are important to other actors – "important others" – can thereby have a significant impact on norm transmission. The more convinced actors are that "important others" believe they should adopt certain behavior, the more likely they are to actually behave appropriately. The peer pressure on a state thus increases if states important to that state adopt the norm (Rublee 2009, 40-44).

Kai Alderson further fills the socialization-void left by Finnemore and Sikkink. In concert with Finnemore and Sikkink, Alderson believes that socialization is one of the crucial ways to diffuse norms to other actors. During this process of socialization, actors "can be expected to internalize patterns of behaviour and role expectations which characterize the groups in which they interact" (2001, 416). With respect to the international level, state socialization is the process by which states internalize norms originating elsewhere in the international system. It should be stressed from the outset that there exists a difference between socialization and socializing acts or acts of socialization. Socialization is the correct term for the outcome – the internalization of foreign norms – whereas acts of socialization are its cause – the individual moves which may or may not lead to socialization (Alderson 2001, 417).

Having defined what socialization is, how do we recognize socialization when we see it? As clarified earlier this section, the view of actors as exclusively rational utility-maximizers seeking to transform overwhelmingly material interests into outcomes is rejected, opening up



the possibility of behavior guided by ideational factors. Rebuffing rationalism, however, does little to answer the question, because how can normative internalization be distinguished from rational utility maximization? To phrase it slightly different, if a state finally adopts a stance that has been promoted by the international community, how can one know for sure that that state has done out of normative considerations and not because of blunt self-interest? Kai Alderson provides the answer by pointing out that;

*'state socialization' is opposed to a decision-theoretic approach to compliance. Such approaches suggest that behavioural compliance results from the tactical adaptation to immediate environmental imperatives. As circumstances change, so will state behavior. Students of state socialization, in contrast, are interested in 'sticky' behavioural change which is not dependent on immediate environmental imperatives. ... it is impossible to speak meaningfully about state socialization without accepting the notion of an 'internal gyroscope' which keeps states behaving in certain ways even as external conditions change (Alderson 2001, 423).*

In other words, socialization in the constructivist sense is different from socialization from a rationalist approach, where states choose to comply with a norm because their short-term cost-benefit analysis resulted in behavior according their selfish interests, which happened to be aligned with embracing a norm at that time. When something is to be gained from renouncing that same norm, a state will not hesitate to change its behavior. However, it is exactly the long-term change in behavior in which the conduct of a state – irrespective of material gains – remains constant that distinguishes normative considerations from short-term cost-benefit calculations.

#### **THE NUCLEAR NON-PROLIFERATION NORM**

While many scholars talk about 'the nuclear non-proliferation norm,' most just declare the existence of it without defining what such a norm entails. Even the authoritative account of non-proliferation norms, the book 'Nonproliferation Norms: Why States Choose Nuclear Restraint' by Rublee (2009), is silent on the exact definition of the non-proliferation norm. Perhaps the easiest way to define the non-proliferation is to first determine what it is not. It is not a norm against the existence of nuclear weapons. Achieving a world completely free of nuclear weapons is definitely what various peace movements have envisioned, but it is not what the nuclear non-proliferation norm represents. The non-proliferation norm is not equal

either to the taboo on the first-use of nuclear weapons as identified by Nina Tannenwald (2005b and 2007).

A norm of disarmament comes closer to the nuclear non-proliferation norm. Like the nuclear non-proliferation norm, the disarmament norm – a norm of legitimate expectation of progress towards disarmament – is embodied in the NPT (House of Commons Foreign Affairs Committee 2009, 132). Only Nuclear Weapons States (NWS) can factually commit themselves to the disarmament norm. Legally speaking, the disarmament norm does not apply to states other than the US, Russia, United Kingdom (UK), France, and China, since they are not allowed to maintain nuclear weapons in the first place. In contrast, the non-proliferation norm applies to all states, nuclear or non-nuclear alike as will be demonstrated henceforth. The non-proliferation norm can further be distinguished from the disarmament norm in the sense that the latter is concerned with already existing nuclear weapons arsenals, whereas the former is concerned with preventing the increase or spread of nuclear weapons in the first place. Article VI of the NPT deals with the disarmament of nuclear weapons state and codifies the disarmament norm (Treaty on the Non-Proliferation of Nuclear Weapons 1968).

Then, what does the nuclear non-proliferation norm entail? The basic assumption behind this norm is the belief that the spread of nuclear weapons into the hands of many will endanger international peace and security. Nuclear weapons enhance the danger of nuclear war, which in turn would visit “devastation ... upon all mankind” and creates “the consequent need to make every effort to avert the danger of such a war and to take measures to safeguard the security of peoples” (Treaty on the Non-Proliferation of Nuclear Weapons 1968). Articles I and II of the NPT represent the non-proliferation norm and establishes the main obligations of NWS and non-nuclear weapons states (NNWS);

#### *Article I*

*Each nuclear-weapon State Party to the Treaty undertakes not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly, or indirectly; and not in any way to assist, encourage, or induce any non-nuclear-weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices.*

#### *Article II*

*Each non-nuclear-weapon State Party to the Treaty undertakes not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly; not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices; and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices (Treaty on the Non-Proliferation of Nuclear Weapons 1968).*

Since norms are a standard of appropriate behavior for actors with a given identity, the standard of appropriate behavior for NWS is not to directly or indirectly transfer nuclear weapons (Finnemore and Sikkink 1998, 891). NNWS' correct behavior consists of forgoing the acquisition of nuclear weapons. It should be noted, though, that these interpretations of the NPT is subject to fierce debate.<sup>4</sup> The nuclear nonproliferation norm does even establish an expectation of appropriate behavior for states – NWS and NNWS alike – that are completely distant from any nuclear weapons program whatsoever to criticize, pressure, or sanction other states that violate the nuclear nonproliferation norm. Consequently, without the institutionalization of the non-proliferation norm in the NPT and the global non-proliferation regime, the norm would lack a powerful and legitimate authority (Ritchie 2012, 127).<sup>5</sup>

#### **THE LIFE CYCLE OF THE NUCLEAR NON-PROLIFERATION NORM**

Constructivism as a social theory is too general to be empirically tested. Substantive theories that can be subject to empirical testing – about cooperation, war, or norms – have to be built on top of the general premises of the constructivist approach and its assumptions (Adler 1997, 323). In order to answer the question posed earlier, this research project uses Martha Finnemore and Kathryn Sikkink's norm life cycle as substantive theory. As a theoretical framework, Finnemore and Sikkink's norm life cycle can be applied to a variety of norms, including the nuclear non-proliferation norm. To ascertain by which mechanism the nuclear non-proliferation norm was spread and gained influence in the period 1974-1989, the nuclear non-proliferation norm has to be pinned down to one (or more) stages of Finnemore and Sikkink's life cycle. The only way to decide at which stage the norm resided in the period in

---

<sup>4</sup> See, for instance, Joyner 2011.

<sup>5</sup> The question that immediately pops up is what counts and what does not count as nuclear proliferation? It is beyond the scope of this thesis to define proliferation. Since this research is confined exclusively to South Africa, questions about what constitutes nuclear proliferation would only unnecessarily complicate matters, while it is quite evident that nuclear weapons proliferated in South Africa. After all, South Africa blatantly admit to have constructed nuclear weapons.

which South Africa held a weaponized nuclear program is to compare empirical evidence with the characteristics of the life cycle stages as offered by Finnemore and Sikkink.

When it comes to nuclear non-proliferation, Great Powers such as the US, the SU, France, and the UK, and a group of states comprised notably of Germany, Switzerland, Norway, Finland, Denmark, Sweden, Japan, Australia, and Canada can be identified as norm entrepreneurs. Non-state actors like the UN, the Organization for Security and Cooperation in Europe, and the IAEA actively contributed to the promotion of the nuclear non-proliferation norm as well. Anti-nuclear social groups, peace movements, and epistemic communities complete the group of norm entrepreneurs. Some of these entrepreneurs have argued against nuclear proliferation even before and ever since the first nuclear weapons arose (Tannenwald 2005b; and Rublee 2009, 34-52).

Hereafter, the nuclear non-proliferation norm has passed the tipping point and became institutionalized by cause of the global nuclear non-proliferation regime, whose agreements, structures, and relationships are in one way or another supported by the NPT. The non-proliferation regime includes *inter alia* bilateral agreements, multilateral agreements, numerous United Nations Resolutions, the Comprehensive Test Ban Treaty, Nuclear Weapons-Free Zones, and the erection of the IAEA, all of which gained momentum as early as the 1960s and 1970s (Rublee 2009, 38-40). Whereas the early UN resolutions or the erection of the IAEA could be seen as the first signs of the institutionalization of the non-proliferation norm, the norm was certainly institutionalized when in 1970 the SU, the US and forty other states had signed the NPT, thereby entering into force.

From that moment onwards, the nuclear non-proliferation norm cascaded through the social environment, whereby an active process of socialization was carried out to punish noncompliance with the norm while rewarding appropriate behavior. David Cortright and George Lopez call the 1990s the “sanctions decade,” or the apex of socialization, in which dozens of states were punished for their breaches of international norms, including aspiring or maintaining a nuclear weapons arsenal (2000). At the same time that some states were disciplined, other states were seen as models and rewarded for their compliant behavior, for instance the former Soviet states when they relinquished their inherited nukes. As of today, these socialization efforts regarding nuclear proliferation are mainly concentrated on Iran and North-Korea, but have not too long ago targeted a plethora of state entities, including South-Africa and Libya.

The question that remains is whether the non-proliferation norm has flowed into the final phase. While it is certainly true that an overwhelming majority of critical actors supports the norm, it cannot yet be seen as having received a taken-for-granted quality. Discussions regarding nuclear non-proliferation, on the grounds that compliance with an internalized nuclear non-proliferation norm is natural, are not yet absent. As such, the nuclear non-proliferation norm has not moved to the final stage of the life cycle, but has remained in the second stage during the entirety of South Africa's nuclear program. A process of socialization by state entities and international organizations thereby become the mechanisms and actors to focus on.

### WHY? SOUTH AFRICA'S NUCLEAR REVERSAL

South Africa initially maintained a civilian nuclear program, but the South African government decided to secretly launch a nuclear weapons program somewhere in the 1970s. The exact date of its inception is not entirely clear, with even primary accounts differing. Whereas the head of the Atomic Energy Corporation (AEC) J.W. de Villiers and his deputy Waldo Stumpf argue that the decision to militarize the South African nuclear program was only officially made in 1978, De Klerk contended that;

*The decision to develop this limited capability was taken as early as 1974, against the background of a Soviet expansionist threat in southern Africa, as well as prevailing uncertainty concerning the designs of the Warsaw Pact members. The build-up of the Cuban forces in Angola from 1975 onwards reinforced the perception that a deterrent was necessary - as did South Africa's relative international isolation and the fact that it could not rely on outside assistance, should it be attacked.<sup>6</sup>*

The IAEA, tasked with South Africa's disarmament, corroborates with De Klerk's account, pinpointing 1974 as the date of the shift from a civilian to a weapons program, citing the Prime Minister's decision (Baeckmann *et al.* 1995). There is virtually no possibility to decisively determine on which date the South African weapons program was initiated if even first-hand sources differ. Furthermore, it will likely be a matter of perspective of what counts as proliferation. It is still important to pinpoint the dawn of the weapons program on a specific date, mainly because it will give an exact starting date from which data has to be taken into

---

<sup>6</sup> De Villiers *et al.* 1993, 100; Stumpf 1995, 5; and United Nations Disarmament Commission 1993, 3.

consideration. Taking 1978 as the starting point risks omitting important socialization acts. To make sure to capture the events that happened in the interim of its commencement and cessation of the South African nuclear program to the fullest extent, it is assumed that 1974 was the birthdate of the nuclear weapons program based on Prime Minister Vorster's approval of developing a 'peaceful' nuclear explosive.

On 24 March 1993, De Klerk made the announcement that South Africa had covertly developed a 'limited nuclear deterrent capacity,' confirming many suspicions. At that moment, De Klerk had already dismantled South Africa's entire nuclear weapons program, including six functioning nuclear weapons (United Nations Disarmament Commission 1993). According to De Klerk, the program was terminated because;

*the global political situation [had] changed dramatically:*

- *A cease-fire in Angola was agreed;*
- *On 22 December 1988, a tripartite agreement was signed at the United Nations with Cuba and Angola which provided for the independence of Namibia and the withdrawal of 50,000 Cuban troops from Angola;*
- *The Cold War had come to an end and developments leading to the destruction of the Berlin Wall and the breakup of the Soviet bloc had become the order of the day;*
- *The prospects of moving away from a confrontational relationship with the international community in general and with our neighbours in Africa, in particular, to one of cooperation and development were good. In these circumstances a nuclear deterrent had become, not only superfluous, but in fact an obstacle to the development of South Africa's international relations.*

*World opinion had also become increasingly opposed to nuclear weapons, and significant advantages for South Africa could be forthcoming should it accede to the NPT. Although it already had an advanced nuclear technology base and nuclear industry, accession would facilitate the international exchanges of the new technology for its future development. It could also be of benefit to our neighbouring States and in due course to Africa as a whole (1993, 4-5).*

Furthermore, political transition from the white minority to the black majority was forthcoming. The prospects of nuclear weapons in the hands of the African National Congress (ANC) frightened the ruling elite (Reiss 1995, 20-21). Other domestic political shifts had

already taken place. Two founding fathers of the South African nuclear program, Wally Grant and A.J.A Roux, had relinquished power and left office. Both had been crucial in the process of convincing the government to acquire nuclear weapons in the 1970s. By 1989, even more nuclear weapons protagonists retired, including P.W. Botha, while the reform-minded De Klerk assumed power as president. As a consequence of these shifts, senior figures within the AEC suddenly supported the decision to terminate the weapons program (Purkitt and Burgess 2005, 123-126; Sagan 1996, 69-71; and Reiss 1995, 20-21).

### THE INADEQUACY OF CURRENT EXPLANATIONS

The introduction of this thesis discussed three general models which explain nuclear disarmament: security, norms and domestic politics. In South Africa, each of these three typical reasons for nuclear disarmament were present, and they may all have influenced South Africa's decision to roll back its program.<sup>7</sup> The improved security considerations consisted of the conclusion of a cease-fire in Angola, the independence of Namibia, and implosion of the SU. The norms model is crystallized by South Africa's desire to end its isolation and normalize relations with the international community. Finally, power shifts within government and positions connected to South Africa's nuclear program are evidence of the contribution of the domestic politics model to South Africa's turnaround.

Despite the fact that international norms are often mentioned as a possible motivation for a state's nuclear rollback in general, the literature on South Africa in specific appears to largely ignore this explanation.<sup>8</sup> These current analyses, however, are incomplete. Regarding the domestic politics explanation, De Klerk's rise to power and the decline of the influence of senior politicians which had pushed for the erection of a nuclear weapons program appears to be pivotal to understand the nuclear disarmament of South Africa. Yet, such an explanation takes for granted why De Klerk and his more reform minded colleagues wanted to rid nuclear weapons. It is highly doubtful that they just felt like reversing a multi-million dollar

---

<sup>7</sup> This roughly corroborates with T.V. Paul's account that no single variable is sufficient to understand nuclear reversal. See Paul 2000, 3-11.

<sup>8</sup> It should be noted that Libermann 2001, for one, accounts for South Africa's nuclear turnaround with the help of each of the three possible perspectives, including international pressure. Yet he does not link it to a constructivist paradigm of norms and socialization. Libermann takes a neoliberal institutionalist approach, where the international pressure from the international community prevented South Africa from enjoying the benefits of international political and economic cooperation. Even fewer studies consider norms and socialization as explanations on their own.

program. More importantly, the aborted negotiations concerning NPT entry between the IAEA and South Africa were resumed a little over a year before De Klerk and his colleagues assumed power (Masiza 1993). Because of the unlikelihood of randomly terminating the nuclear program, answering the *why* behind the South African nuclear turnaround means circling back to the public statement by De Klerk himself in 1993 about his country's nuclear past. Indeed, the decision to abandon nuclear weapons should be backed up by arguments. After all, the desire of *avant-garde* politicians to rid nuclear weapons cannot simply be assumed. In his 1993 statement, De Klerk cited security arguments and the desire to be on good terms with the rest of the international community. Scholars added another reason, not mentioned by De Klerk, namely the fear of the African National Congress with nuclear weapons. Having shown the limits of the domestic politics model, it is time to critically consider each of the remaining explanations.

By far the most cited factor behind South Africa's nuclear reversal is the argument that the security environment radically changed; a ceasefire was agreed in Angola, a withdrawal of 50,000 Cuban troops close to South Africa's border was witnessed, and the Cold War ended. At first glance, this indeed appears a credible explanation, but if South Africa's security interests genuinely changed, could it account for South Africa's nuclear reversal? Assume that by virtue of changed security interests there was no need anymore for South Africa to aggressively pursue nuclear weapons like it did in the 1970s and 1980s. Yet, does the superfluous quality of a nuclear weapons program equal the destruction of the entire program including the already manufactured devices? Not necessarily. Consider the financial costs associated with the dismantlement of the entire program. Furthermore, the vast millions invested throughout previous years were all for nothing. Additionally, although security reasons were (together with international isolation) pivotal for the initial development of a nuclear weapons program, it is too naïve to just assume that a state will abandon its nuclear weapons arsenal if its original motivations are removed (Levite 2003, 64). The United States and many other countries, for example, hold on to it nuclear arsenal despite the fact that their initial motivations have vanished.

An equally insufficient explanation for South Africa's accession to the NPT was the South African elite's intent "to "tie the hands" of the future ANC government, thereby preventing any potential misuse of the technology" (Babbage 2004, 1). Following this line of argument, the ANC could not be trusted with weapons of mass destruction. However, why did the South African political elite not dismantle its covert chemical and biological programs at the same



pace? To phrase it slightly different, why was the ANC allowed to continue parts of the apartheid regime's chemical and biological program but was the nuclear weapons program completely cut off from the ANC (Truth and Reconciliation Commission 1999; and Purkitt and Burgess 2005, 146-177)? Moreover, why did South Africa not destroy other weapons capable of mass destruction, for instance its missile system, anti-aircraft weapons, or anti-tank weaponry, not just the missiles capable of carrying a nuclear warhead? Perhaps, from a purely security perspective nuclear weapons were by the South African government considered more lethal than chemical and biological weapons or other weapons capable of mass destruction.

As demonstrated, one is left with an unsatisfactory answer as to why South Africa's decided to abandon nuclear weapons. It is only when the often overlooked explanation that takes into account the international social environment and South Africa's desire to normalize the relationship with the international community that the South African case starts to make sense. In this social environment, not having a nuclear weapons program was considered appropriate behavior. In fact, having or developing nuclear weapons in the international community was outlawed by the widely shared nuclear non-proliferation norm. South Africa's aspiration to enter that same community was severely jeopardized if not made impossible as long as it violated one of the principal terms of entering. As a consequence, only renouncing its much criticized system of apartheid was not enough to relinquish South Africa from its pariah status within the international society. Gradually, South Africa's desire to join the society of states – aided by inducements by the international community – grew strong enough to make the necessary financial sacrifices. Moreover, if South Africa truly deemed nuclear weapons a threat to peace and security – as embraced by the nuclear non-proliferation norm – it would make sense why South Africa abandoned nuclear weapons, but did not quit its chemical and biological weapons program to the same extent.

Considering the above analysis, it is not only plausible that norms contributed to South Africa's decision, it is probable as well. However, deciding whether the nuclear non-proliferation norm and its active promotion by the international community actually contributed to South Africa reversing its nuclear weapons program can only empirically be done by an in-depth case study which focuses on the socialization acts – sanctions and diplomatic pressures – of both states and international organizations to promote the norm of nuclear non-proliferation and its effect on South Africa's choice to abandon its program.

#### **HOW? NORMALIZATION OF RELATIONS WITH THE INTERNATIONAL COMMUNITY**

### *South Africa's peaceful nuclear history*

In 1977 South Africa was spotted preparing for an underground nuclear test in the Kalahari Desert – a watershed moment from which it rapidly descended into pariah status within the international community. Before the Kalahari episode, however, South Africa reaped the benefits from nuclear cooperation despite its partner's reservations about apartheid policies. South Africa's peaceful nuclear program can be traced back to its participation in the Western alliance and programs during the 1940s and 1950s. Not long after the emergence of the first nuclear weapons programs South Africa became the major uranium supplier for numerous Western countries. The US and UK decided to enter into a partnership with South Africa to extract uranium ore and secure a steady supply of uranium to fuel their youthful nuclear weapons programs. Not much later the United States and South Africa entered into a contract under the 1957 Atomic Energy Act. In return for nuclear resources, the United States agreed to train nuclear scientists, build the SAFARI-1 reactor, and would ensure enriched uranium to fuel the SAFARI-1 reactor. In line with the Atomic Energy Act, the US supplied nuclear research reactor was put under trilateral safeguards between the US, South Africa, and the IAEA. Other countries, such as France, went into similar agreements with South Africa, which were only strengthened by "Atoms for Peace" thinking inspired by the US (Pabian 1995; and Purkitt and Burgess 2005).

In 1974, South Africa was only thought of as a candidate for nuclear proliferation by US intelligence and only if security conditions would deteriorate in the future. The US was more concerned about whether South Africa's nuclear supplies would go rampant than it was consumed by a South African nuclear weapons program (Special National Intelligence Estimate 1974). In the same year, however, the South African Atomic Energy Board – which controlled trade in and production of uranium – reported to Prime Minister Vorster that it was capable of constructing a nuclear device. Vorster subsequently approved a plan for the development of, allegedly, peaceful nuclear explosives later in 1974. The program was treated as top-secret mainly because world opinion was unfavorable to the use of nuclear explosives for peaceful purposes, as witnessed by the international reaction to India's 'peaceful' explosion in 1974 (Stumpf 1995, 4). During the next fifteen years, at least six devices were built. If the argument about socialization and norms as driving force behind South Africa's rollback is to hold, these fifteen years should have witnessed rigorous acts of socialization of the nuclear non-proliferation norm, both by states and international organizations.

### *States*

Although clear evidence about South Africa's nuclear intentions had yet to surface for the international community, the first acts of socialization were witnessed only two years after the decision to construct nuclear devices by Prime Minister Vorster was taken. Even South Africa's "important others," notably its Western allies, frequently disapproved South African policies. In response to Congressional opposition to South Africa's refusal to put the Y-plant, a uranium enrichment plant, under safeguards and its apartheid policies, the Carter administration ended supplies to the Koeberg power plant, despite the long-term contract between the two states (Stumpf 1995, 4). The French National Assembly, for its part, raised doubts about the sale of two nuclear power plants to South Africa because of the possibility of military application. French Minister of Foreign Affairs Jean Sauvagnargues in response to these queries by the lower house reassured that this agreement would not contribute to South African nuclear weapons capability. Sauvagnargues also stressed that the French government would strictly oppose the production of nuclear weapons by South Africa ("Reply, French Minister" 1976). These initial doubts about South Africa's plans were just the tip of the iceberg. Already on bad terms with the international community because of its apartheid policy and more recently the 1976 Soweto Uprising, problems surrounding its nuclear program started to mount steadfast when South Africa was caught preparing for an underground nuclear explosion in 1977.

When the SU discovered through satellite pictures that South Africa might be completing a nuclear weapon and was preparing for a nuclear explosion test, Soviet ruler Leonid Brezhnev immediately sought contact with his US counterpart Jimmy Carter. In response, the US swiftly acknowledged the special responsibility of the two countries, as permanent members of the UN Security Council and parties to the NPT, to prevent proliferation of nuclear weapons. Indeed, the US viewed a nuclear South Africa with animosity and stressed the need for US-Soviet cooperation on this delicate matter ("Letter, Warren Christopher" 1977). The US ambassador to South Africa directly contacted the South African Minister of Foreign Affairs, pressuring him to abandon nuclear weapons and issued a warning that further steps towards nuclear weapons would have;

*"the most serious consequences for all aspects of our relations and would be considered by us as a serious threat to the peace. Under these circumstances you should know that we do not believe that South Africa could continue to count on help from the Western Powers in any field and you should also be aware of the*

*possibility that the issue may arise in the United Nations Security Council on short notice with unforeseeable results*” (“Letter, US Ambassador” 1977).

Other major powers followed suit and regarded a nuclear weapons test as decisively unacceptable. France, for instance, sounded similar public warnings like the US did, whereas West Germany, the SU, and the UK pushed hard in private (“South African Ambassador 1977; and “Supplement to Brief” 1997). That the major nations in the international community pressed hard on this matter did certainly not go unnoticed in Pretoria, calling them “extreme pressures” and as “putting terrific heat on the South African government” to cease their march towards nuclear weapons (“Telegram from South” 1977; and “Letter from South” 1977).

In response, South Africa reassured all the parties that South Africa had no intention whatsoever to build a nuclear weapons and claimed that the Kalahari Desert site was not a nuclear testing facility (“Cable, South African” 1977). The US finally concluded to stop inquiring about the exact nature of the Kalahari Desert site, but this did not mean that the US would suddenly accept a potential South African nuclear test. The US felt that it better devote its energy to pressuring South Africa to adhere to the NPT rather than query about the Kalahari Desert incident (“Draft Letter to” 1977). Ultimately, South Africa did not conduct its test and realized that despite having dodged the bullet, the relationship with the international community had become strained and it would not immediately be a return to business as usual (“US Interagency Intelligence” 1977, 6; and “Telegram from S.A.” 1977).

March 1978 witnessed US Congress enacting the Nuclear Non-Proliferation Act (NNPA). Intended only to curb the spread of nuclear weapons materials and technology, the NNPA did encourage nuclear power for peaceful purposes. Recipient states of US nuclear assistance were to accept “IAEA safeguards on all their peaceful nuclear activities, do not manufacture or otherwise acquire any nuclear explosive device, do not establish any new enrichment or reprocessing facilities under their de facto or de jure control, and place any such existing facilities under effective international auspices and inspection” if they wished to keep receiving peaceful nuclear goods and services from the US (United States 2013, sec. 104 (d) and 305). As a result of the NNPA’s retroactive application, the South African contract under the 1957 Atomic Energy Act was rescinded, despite its extension in 1974 to 2007. South Africa, as too often, claimed that it was treated as a special case. It kept reminding the US that it would observe the principles of the NPT and that it was in principle not opposed to NPT accession, given that its basic requirements are met (“Report, South African” 1981). This

South African rhetoric to evade the newly enacted act was not met by a sympathetic response from the US. Because of suspicions that South Africa was embarking on a nuclear weapon and its refusal to put all of its nuclear facilities under IAEA safeguards, the US stood firm and ended the contract. (United States 2013, sec. 404 (a); and “International Nuclear Fuel” 1981).

In September 1979 another key event took place when the US Vela-satellite detected a double flash in the southern part of the Atlantic and Indian Oceans, which supposedly was a nuclear weapons explosion. Although not entirely certain, intelligence services had “high confidence” that indeed a nuclear explosion had taken place on September 22. The US intelligence community concluded that South Africa was the “most responsible party by virtue of its geographic location, its advanced nuclear status . . . , and evidence that it has actively explored development of a nuclear explosives capability,” although the option of Israel as the perpetrator should not be closed off (“Discussion Paper, South 1979). Not having enough credible evidence to directly confront South Africa, the US appeared very cautious about what to do (“International Technology Office” 1979; “Letter from US” 1980; and “Discussion Paper for” 1980). In fact, years after the incident, the US intelligence community could still not confirm that it was indeed a nuclear test and, if so, conducted by South Africa (Director of Central Intelligence 1984). Nonetheless, the timing of the incident was highly suspicious, given South Africa’s preparations for a nuclear test in the Kalahari Desert. The Vela incident put another strain on the relationship with its fellow member states.

In the meantime, Ronald Reagan had won the US presidential elections. In a 1981 letter to Botha, Reagan stated that he was “ready . . . to develop a new, constructive relationship between the United States and South Africa solidly based on shared concerns, interests, and objectives” (“Letter from US 1981). In the mid-1980s, however, Reagan’s policy of constructive engagement, which was initiated shortly after he took on office, had failed to produce results. Reagan’s new policy was called ‘active constructive engagement,’ during which time the Executive Order Prohibiting Trade and Certain other Transactions Involving South Africa and the Comprehensive Anti-Apartheid Act (CAAA) were signed.

The US, frequently lax in term of implementing mandatory embargoes, refreshed its commitments in the mid-1980s when it found out that its current policies were not paying off. However, the road towards this renewed pledge was not without obstacles. When Congress passed the CAAA, Reagan vetoed the piece of legislation. In an attempt to ward off a congressional override of its veto and satisfy cravings for sanctions on South Africa within Congress, Reagan implemented the Executive Order, which was less rigorous than the

CAAA. The Order prohibited trade in the nuclear field, except to satisfy safeguards set by the IAEA or necessary for humanitarian reasons to protect health and safety (Exec. Order No. 12532 1985; Reagan 1985; and Ullman and Fireman 1986). In the end, Congress decided to override its president and passed the CAAA (Poole 1986; and “Senate Rebukes Reagan” 1986). The Act signified the harshest piece of diplomatic pressure and sanctions on South Africa, as it banned any nuclear cooperation whatsoever with South Africa until it had signed the NPT (Comprehensive Anti-Apartheid Act of 1986, sec. 307).

### *International organizations*

Condemnation by international organizations took off from the moment that the international community discovered of the Kalahari Desert site, which had already distorted South Africa’s relationship with its fellow nation states. Part of a Group of 77 campaign to expel South Africa from several international bodies, the offensive spilled over to the IAEA (Sole 1997, 307). The South African attachment and the value ascribed to the IAEA cannot be underestimated. South Africa was closely involved in the negotiations leading to the establishment of the IAEA in 1957. For instance, it was invited to join the conference summoned to draft a statute for the IAEA in 1956 and participated in the Preparatory Commission which set up the practical arrangements for the establishment of the IAEA. Donald Sole, a South African diplomat involved in these negotiations and later Chairman of the IAEA Board of Governors, asserted that the primary goals of his delegation was to secure a seat at the Board. The formula finally adopted for the composition of the Board was favorable to South Africa’s wishes, as long as it continued to be “the member most advanced in the technology of atomic energy, including the production of source material” of the African continent (Sole 1997, 21).

During the first two decades of the IAEA, South Africa was able to maintain its seat on the governing body since it was being regarded as the leader in nuclear technology in Africa. However, in 1977 it was expelled from the Board and was replaced by Egypt as the representative from Africa. As always, South Africa considered this “discrimination,” referring to other Board members’ failure to meet their commitments (“Extract from Speech” 1977). Under Article VI of the Statute – and especially concerning the phrase “including the production of source materials” for which Sole had stood firm during the initial negotiations

which set up the IAEA – South Africa claimed it had the continent’s most advanced nuclear program, by virtue of “its recognized position as a major producer of uranium, as well as its achievements in the field of nuclear research, including the development of a new enrichment process” (“Extract from Speech” 1997). Nonetheless, the decision was final and South Africa could no longer represent the African region on the Board (Sole 1997, 15-26; Statute of the International Atomic Energy Agency 1989; and IAEA General Conference GC(XXI)/579 1977).

Only a month after the Soviet satellites had discovered the preparations in the Kalahari Desert, the United Nations Security Council installed a mandatory arms embargo. A group of African states within the UN had pushed for tougher sanctions on South Africa, which found resonance with their counterparts. Acting under Chapter VII of the UN Charter, UN Security Council Resolution 418 unanimously condemned the South African apartheid policies and the Security Council noted that it was gravely concerned by recent steps taken by South Africa towards nuclear weapons. The US initially was cautious of an arms embargo on South Africa. Zbigniew Brzezinski, US President Carter’s national security adviser, noted that too many sanctions could be counterproductive. On the same note, US Ambassador to the UN Andrew Young claimed that “to cut things now would only encourage separate development of South Africa’s own nuclear development. By maintaining some kind of relationship, we do have the possibility of influencing them to sign the nuclear nonproliferation treaty” (Benjamin 1977). Together with France and Britain, the US even threatened to use their veto and block additional sanctions on South Africa (Benjamin 1977). In the end, Western states aligned themselves with the countries responsible for the introduction of the arms embargo, thereby strengthening the international community’s condemnation of South Africa’s policies even more.

In December 1979 South Africa’s credentials were rejected during the 211<sup>th</sup> Plenary Meeting of the IAEA General Conference. Nigeria stressed that South Africa’s credentials should have been rejected as early as 1976, on the basis of its apartheid policies and because it did not represent the majority of the people of South Africa. This was not taken up by other parties at the time (IAEA General Conference GC(XX)/575). When Nigeria raised the issue about the credentials of the South African delegation to the IAEA once again in 1978, it found support from a plethora of states, including Algeria, Indonesia, Poland, East Germany, the USSR, India, Tunisia, Egypt, and Czechoslovakia. This group of countries were fiercely opposed to South African racist policies, which led them to believe that the South African delegation was

not representing the South African population, and feared that it was embarking on a nuclear weapon, a practice against the principles of the Agency's statute ("Two Hundred and" 1979).

Not every member of the IAEA agreed with South Africa's rejection. The aforementioned bloc's political arguments regarding South Africa's credentials were not supported by notably Ireland (on behalf of the European Community), the US, the UK, France, Canada, Japan, and West Germany, which stressed that the determination of invalid credentials could only be based on procedural requirements. South Africa, as a matter of form, called these initiatives led by Nigeria "wholly illegal," "without precedent," and "blatantly unconstitutional" ("Two Hundred and" 1979). The Conference proceeded to a roll-call vote, in which the Nigerian proposal was adopted by 49 votes in favor and 24 against, with 9 abstentions. Although South Africa was not completely ostracized from two of the most important international organizations, it was already no member of the IAEA Board of Governors anymore, was sanctioned by a mandatory arms embargo under Chapter VII of the UN Charter, and it could from this moment no longer participate in the General Conferences of the IAEA ("Two Hundred and" 1979).

South Africa only went further down the road of isolation when the UN General Assembly and the IAEA continuously adopted resolutions calling on states to terminate all nuclear trade with South Africa. The UN General Assembly urged the IAEA in December 1982 to exclude South Africa from its technical working groups and to forgo all nuclear assistance to the country (United Nations General Assembly A/RES/37/69). These calls from the General Assembly remained on its agenda in subsequent years. The IAEA in 1983, in turn, called upon members which had not already done so to terminate cooperation with South Africa and requested the Board of Governors to investigate the possibility to exclude South Africa from the technical groups of the Agency through a resolution introduced by Nigeria, on behalf of the Group of 77 (IAEA General Conference GC(XXVII)/702; and IAEA General Conference GC(XXVII)/RES/408). In 1987, the Board – along its traditional Western and non-Western cleavage – recommended the General Conference to suspend South Africa from the exercise of its rights and privileges of membership, which was equal to South Africa being expelled from the Agency (IAEA General Conference GC(XXXI)/807 1987).

However, in the end no decision was made. Distinct from its idle commitments and empty rhetoric of the past decades – which often came right before or during the IAEA's conferences – South Africa appeared to be genuinely willing to make concessions when the decision about South Africa's expulsion was due to be taken in the General Conference (IAEA General



Conference GC(XXXI)/807 1987). These negotiations led to an agreement with the IAEA on putting South Africa's nuclear activities under safeguards, which paved the way for subsequent NPT ratification. De Klerk made its country's nuclear past public in 1993, when the IAEA concluded its inspections and successfully disarmed South Africa (IAEA Information Circular INFCIRC/394 1991; and IAEA General Conference GC(XXXVI)/1015).

#### **BEYOND NUCLEAR DISARMAMENT**

This thesis has focused on the internalization of the socialized nuclear non-proliferation norm as possible explanation for South Africa's eventual nuclear turnaround. Socialization, as argued earlier, can be understood from a rational and constructivist perspective. Rationalist theories would argue that South Africa's reversal was principally motivated by short-term gains acquired from renouncing nuclear weapons and ending diplomatic pressures and sanctions. The costs of a decade and a half of international pressures has likely become too high, and South Africa realized that it could substantially benefit when the pressures and sanctions were lifted, or so the rationalist argument goes. On the other hand, if a socialized nuclear non-proliferation norm in line with constructivist understandings played an important role in South Africa's nuclear turnaround rather than short-term benefits, this would help explain why South Africa did not only abandon its nuclear weapons program, but also became a strong advocate of nuclear non-proliferation after 1991.

After South Africa's transformation, it has vehemently committed itself to the non-proliferation of nuclear weapons. Shortly after South Africa's signature under the NPT, the country indeed became a disarmament and non-proliferation trendsetter domestically, among fellow states, and during international fora. In 1993, South Africa announced the 'Act on the Control of Non-Proliferation of Weapons of Mass Destruction,' which codified its renewed assurances on limiting the spread of nuclear technology. The Act made it illegal for weapons of mass destruction to be developed by South African nationals and put weapons of mass destruction-related substances under strict national control. Not much later, South Africa was by law no longer allowed to export weapons of mass destruction-related goods to countries not able to prove the peaceful application of the good and when recipient states refused to sign a safeguards agreement with the IAEA (Stumpf 1995, 8). South Africa's new role was further cemented when it took a lead role in negotiations leading up to the infinite extension of the Nuclear Non-Proliferation Treaty in 1995, the erection of an African Nuclear-Weapon-Free Zone, and demanded its arms industry to curb and audit arms sales (Purkitt and Burgess

2005, 178). Regarding the infinite extension of the NPT and 2000 Nuclear Non-Proliferation Treaty Review Conference, for instance, South Africa emerged as a diplomatic bridge-builder to bring potential partners together in order to strengthen the non-proliferation regime (Purkitt and Burgess 2005, 178-207).

South Africa has even developed its nuclear diplomacy as niche diplomacy, based on its unique nuclear history. Jo-Ansie Van Wyk argues that “South Africa’s socialisation of these norms [related to nuclear non-proliferation, nuclear disarmament and the peaceful uses of nuclear energy] resulted in the country’s internalisation of them, as is evident in its relations with the IAEA, where in turn South Africa has often acted either as a norm entrepreneur” (2012, 183). Already during the verification process by the IAEA, South Africa was highly cooperative. After finally regaining its much-valued seat at the Board and being allowed to fully participate in the IAEA, four issues are prominent on the South African agenda; “[its] commitment to nuclear non-proliferation, its call for the complete elimination of nuclear weapons, its support for the inalienable rights of all states to develop nuclear energy for peaceful purposes, and its call for more representation of developing countries in the IAEA” (Wyk 2012, 195). Regardless of South Africa’s external environment, it has from the early 1990s until present behaved in a way that illustrated its impassive support for nuclear non-proliferation, rather than opting for short-term benefits yielded from lifting sanctions and ending pressures. As such, South Africa internalized the norm of nuclear non-proliferation, rather than acting according short-term rationality.

These developments regarding South Africa’s nuclear program cannot be seen outside the broader political transition from apartheid to non-racial democracy taking place in South Africa in the late 1980s and early 1990s. In less than five years, the rogue state of South Africa was morphed into one that gave up its nuclear weapons and ended apartheid. This transformation was accompanied by a quest for a new South African identity, based on the desire of reintegration within the international community. As De Klerk said, “I have one vision in my term of office. I want to make this country once again a respected member of the international community and we’ll have to turn around the politics and we’ll have to terminate this program, turn it around and accede to the Nuclear Non-Proliferation Treaty” (qtd. in Purkitt and Burgess 2005, 124). To achieve this, solely ending apartheid was not enough. Because the international community policed its membership and denied membership to those states that violated the widely-shared norm against nuclear proliferation, South Africa had to give up its nuclear weapons as well (Clark 2009, 173-174). Through a fifteen-year process of

socialization the international community eventually compelled the would-be member South Africa to renounce nuclear weapons and allowed it to enter

### CONCLUSION

This thesis is concerned with understanding the *why* and *how* behind South Africa's nuclear reversal. Why did South Africa abandon its nuclear weapons arsenal and how did it do so? The literature on South Africa's decision to repeal its nuclear program displays a general tendency to emphasize the shift in South Africa's security climate, bureaucratic politics, and the prospects of a nuclear armed ANC as determinants for South Africa's nuclear turnaround. Although South Africa is one of the most intriguing cases to study nuclear non-proliferation, the existing literature falls short of providing a satisfactory explanation for South Africa's nuclear turnaround. The general literature regarding nuclear disarmament points to norms as another possible reason behind a state's abandonment of nuclear weapons. In the case of South Africa, however, norms so far had not been analyzed as a contributor on its own and are at best considered in combination with the other, aforementioned determinants. Yet, this thesis has shown that the exclusion of a normative dimension to the dominant explanations denies an adequate understanding of the South African case. As a result, the deficiencies in these prevailing arguments functions as a warrant to study the social constructivist explanation of international norms as one of the key contributors to South Africa's disarmament.

Social constructivism as social theory complements rationalism and materialism. The value of constructivism stems from its emphasis on the social construction of identities that constitute actions and interests and on the role played by ideas in constructing the meaning of material entities. As such, actors are not exclusively motivated by rational cost-benefit calculations in order to achieve predetermined material interests, but their behavior can also be understood as a consequence of ideational commitments and interests can be subject to change through social interaction that reshapes actor's identities. Social constructivism, as a consequence, opens up another avenue for researching nuclear disarmament by offering an explanation which rational and material theories such as neorealism, neoliberalism, and neoliberal institutionalism deny importance.

Ideas fulfill a central role in social constructivism's curriculum. Different types of ideas can be distinguished. One of them are normative ideas or norms – ideas about right and wrong that constitute a standard of appropriate behavior for actors with a given identity. The nuclear

non-proliferation norm is such a normative idea. The literature fails to devote adequate attention to defining the nuclear non-proliferation, but it has been determined in this thesis that the nuclear non-proliferation norm establishes behavioral obligations for NWS as well as NNWS under the NPT to limit the spread of nuclear weapons. The standard of appropriate behavior for NWS is not to transfer in any way nuclear weapons, whereas NNWS shall eschew acquiring nuclear weapons themselves. As a consequence of the nuclear non-proliferation norm's firm institutionalization in the NPT, the nuclear non-proliferation norm also sets clear standards for NWS and NNWS alike to criticize, pressure, or induce states that have violated the norm to return to acceptable behavior, that is, abandoning their nuclear weapons or nuclear weapons program.

According to general constructivist literature, one of the ways of spreading norms is a process called socialization. Socialization is an actor's internalization of norms which characterize the groups in which they interact. During South Africa's weaponized nuclear program the international community and state entities, including South Africa's "important others," went to great lengths to influence South Africa's behavior and induce it to abandon nuclear weapons. This process of socialization was not an instant solution to South Africa's rogue behavior, but rather a fifteen-year process that eventually succeeded in achieving the desired outcome – South Africa's abandonment of nuclear weapons. The developments in the nuclear realm cannot be understood without reference to the larger political transition that took place in South Africa. The realization that apartheid was no longer tenable was accompanied by a new South African identity, in which the desire to normalize relations with the international community played an influential role. This normalization could not have been achieved by exclusively ending apartheid while at the same time holding on to its nuclear weapons, as there existed a norm against the spread of nuclear weapons in the society which South Africa wanted to enter. The process of socialization was pivotal in convincing South Africa to let go of its nuclear weapons, since the international community made its commitments to nuclear non-proliferation crystal clear through firm pressures and sanctions. From the moment of South Africa's nuclear abandonment forth, its behavior can be characterized by a vehement support for the nuclear non-proliferation norm, irrespective of the external circumstances. This behavior signals a long-term norm internalization rather than short-term gains from removing sanctions and ending pressure as driving force behind its reversal. The norm of nuclear non-proliferation, thus, became internalized by South Africa through a process of socialization by the international community.

All things considered, this thesis concludes that the process of socialization, including material sanctions and diplomatic pressures, of the nuclear non-proliferation norm carried out by international organizations and state entities gravely contributed to South Africa's nuclear rollback. With this in mind, the nuclear non-proliferation norm is not just one of the factors behind South Africa's nuclear turnaround. The other explanations make only sense when infused with a normative dimension. The process of socialization of international norms thereby becomes the crucial piece that completes the South African puzzle and makes it significantly better understandable.

#### WORKS CITED

- "Cable, South African Department of Foreign Affairs, 'South Africa: Nuclear Bomb Charges'." *History and Public Policy Program Digital Archive*. 26 Aug. 1977. Web. 30 Apr. 2015. <<http://digitalarchive.wilsoncenter.org/document/114180>>.
- "Discussion Paper for the Mini-SCC Meeting on January 9 on the September 22 Event in the South Atlantic." *The National Security Archive*. 7 Jan. 1980. Web. 30 Apr. 2015. <<http://www2.gwu.edu/~nsarchiv/NSAEBB/NSAEBB190/04.pdf>>.
- "Discussion Paper, South Atlantic Nuclear Event." 22 Oct. 1979. Web. 30 Apr. 2015. <<http://www2.gwu.edu/~nsarchiv/NSAEBB/NSAEBB190/01.pdf>>.
- "Draft Letter to B. Cardledge on Conversation with US Deputy Undersecretary of State Joseph Nye on South African Nuclear Intentions." *History and Public Policy Program Digital Archive*. Sept. 1977. Web. 30 Apr. 2015. <<http://digitalarchive.wilsoncenter.org/document/116626>>.
- "Extract from Speech by the South African Prime Minister at Congress of the National Party of Cape Province." *History and Public Policy Program Digital Archive*. 24 Aug. 1977. Web. 1 May 2015. <<http://digitalarchive.wilsoncenter.org/document/116617>>.

“International Nuclear Fuel Cycle Evaluation, South African - United States’ Nuclear Relations.” *History and Public Policy Program Digital Archive*. 20 Mar. 1981. Web. 30 Apr. 2015. <[http://digitalarchive.wilsoncenter.org/assets/media\\_files/000/001/669/1669.pdf](http://digitalarchive.wilsoncenter.org/assets/media_files/000/001/669/1669.pdf)>.

“International Technology Office, Los Alamos National Laboratory, ITO-79-155, '22 September 1979 Event Report Draft'.” *History and Public Policy Program Digital Archive* 26 Nov. 1979. Web. 30 Apr. 2015. <<http://digitalarchive.wilsoncenter.org/document/119216>>.

“Letter from South African Prime Minister Vorster to US President Carter on US-South Africa Relations.” *History and Public Policy Program Digital Archive*. Oct. 1977. Web. 30 Apr. 2015. <<http://digitalarchive.wilsoncenter.org/document/116634>>.

“Letter from US Naval Research Lab Director Alan Berman on Hydroacoustic Evidence on the Vela Incident.” *History and Public Policy Program Digital Archive*. 11 Dec. 1980. Web. 30 Apr. 2015. <<http://digitalarchive.wilsoncenter.org/document/116758>>.

“Letter from US President Reagan to South African Prime Minister P.W. Botha.” *History and Public Policy Program Digital Archive*. 11 Jun. 1981. Web. 30 Apr. 2015. <<http://digitalarchive.wilsoncenter.org/document/116766>>.

“Letter, US Ambassador Bowlder to South African Foreign Minister Botha.” *History and Public Policy Program Digital Archive*. 18 Aug. 1977. Web. 30 Apr. 2015. <<http://digitalarchive.wilsoncenter.org/document/114150>>.

“Letter, Warren Christopher to William Hyland, 'Response to Soviet Message on South Africa'.” *History and Public Policy Program Digital Archive*. 10 Aug. 1977. Web. 30 Apr. 2015. <<http://digitalarchive.wilsoncenter.org/document/119249>>.

“Prospects of Further Proliferation of Nuclear Weapons.” *Special National Intelligence Estimate* 4-1-74. 23 Aug. 1974. Web. 29 Apr. 2015. <<http://nsarchive.gwu.edu/NSAEBB/NSAEBB240/snle.pdf>>

“Reply, French Minister of Foreign Affairs, 'Sale of Two Nuclear Plants to South Africa'.” *History and Public Policy Program Digital Archive*. 2 Jun 1976. Web. 30 Apr. 2015. <<http://digitalarchive.wilsoncenter.org/document/114149>>.

“Report, South African Department of Foreign Affairs, 'South African-United States' Nuclear Relations'.” *History and Public Policy Program Digital Archive*. 20 Mar. 1981. Web. 30 Apr. 2015. <<http://digitalarchive.wilsoncenter.org/document/114183>>.

“Senate Rebukes Reagan.” *The Courier*. 3 Oct. 1986. Web. 30 Apr. 2015.  
 <<https://news.google.com/newspapers?id=yuxSAAAIBAJ&sjid=QIIDAAAIBAJ&dq=anti-apartheid%20act%20senate&pg=6111%2C354872>>.

“South African Ambassador to France, 'Unofficial Translation of French Aide-Memoire'.” *History and Public Policy Program Digital Archive*. 18 Aug. 1977. Web. 30 Apr. 2015.  
 <<http://digitalarchive.wilsoncenter.org/document/114151>>.

“Supplement to Brief No. A7 (Nuclear Questions): Soviet Allegations about South African Nuclear Weapons Development.” *History and Public Policy Program Digital Archive*. 22 Aug. 1977. Web. 30 Apr. 2015. <<http://digitalarchive.wilsoncenter.org/document/116615>>.

“Telegram from S.A. Embassy Washington to South African Secretary for Foreign Affairs.” *History and Public Policy Program Digital Archive*. 31 Sep. 1977. Web. 30 Apr. 2015.  
 <[http://digitalarchive.wilsoncenter.org/assets/media\\_files/000/001/667/1667.pdf](http://digitalarchive.wilsoncenter.org/assets/media_files/000/001/667/1667.pdf)>.

“Telegram from South African Embassy in the US on President Carter’s Press Conference on the Kalahari Nuclear Test Site.” *History and Public Policy Program Digital Archive*. 23 Aug. 1977. Web. 30 Apr. 2015. <<http://digitalarchive.wilsoncenter.org/document/116609>>.

“Two Hundred and Eleventh Plenary Meeting of the Twenty-Third International Atomic Energy Agency General Conference in New Delhi, Regarding the Credentials of the South African Delegate.” *History and Public Policy Program Digital Archive*. 05 Dec. 1979.  
 <<http://digitalarchive.wilsoncenter.org/document/116663>>.

“US Interagency Intelligence Memorandum, 'The 22 September 1979 Event'.” *History and Public Policy Program Digital Archive*. 21 Jan. 1979. Web. 30 Apr. 2015.  
 <<http://digitalarchive.wilsoncenter.org/document/116666>>.

Adler, E. "Seizing the Middle Ground: Constructivism in World Politics." *European Journal of International Relations* 3.3 (1997): 319-363. Web. 14 May 2015.  
 <[doi.org/10.1177/1354066197003003003](https://doi.org/10.1177/1354066197003003003)>.

Alderson, Kai. "Making Sense of State Socialization." *Review of International Studies* 27.3 (2001): 415-433. Web. 29 Apr. 2015. <<http://www.jstor.org/stable/20097743>>.

Babbage, Maria. “Why South Africa Gave up the Bomb and Implications for Nonproliferation Policy.” *Journal of International Affairs* 15 (2004): 1-20. Web. 29 Apr. 2015.  
 <<http://www.princeton.edu/jpia/past-issues-1/2004/11.pdf>>.

Baeckmann, Adolf Von, Garry Dillon, and Demetrius Perricos. "Nuclear Verification in South Africa." *IAEA Bulletin* (1995): 42-48. Web. 29 Apr. 2015.

<<http://www.iaea.org/sites/default/files/publications/magazines/bulletin/bull37-1/37105394248.pdf>>.

Benjamin, Milton R. "U.S. Warns of Veto on South Africa." *Washington Post*. 31 Oct. 1977. Web. 1 May 2015. <[https://wikileaks.org/plusd/cables/1977STATE260172\\_c.html](https://wikileaks.org/plusd/cables/1977STATE260172_c.html)>.

Checkel, Jeffrey T. "The Constructive Turn in International Relations Theory." *World Politics* 50.2 (1998): 324-48. Web. 14 May 2015. <<http://dx.doi.org/10.1017/S0043887100008133>>.

Clark, Ian. *Legitimacy in International Society*. Oxford: Oxford UP, 2005. Print.

Collier, David. "Understanding Process Tracing." *PS: Political Science & Politics* 44.4 (2011): 823-830. Web. 29 Apr. 2015.

<<http://polisci.berkeley.edu/sites/default/files/people/u3827/Understanding%20Process%20Tracing.pdf>>.

Comprehensive Anti-Apartheid Act of 1986. Pub. L. 99-440. 100 STAT. 1086. 2 Oct. 1986. Web. 30 Apr. 2015. <<http://www.gpo.gov/fdsys/pkg/STATUTE-100/pdf/STATUTE-100-Pg1086.pdf>>.

Cortright, David, and George A. Lopez. *The Sanctions Decade: Assessing UN Strategies in the 1990s*. Boulder, CO: Lynne Rienner, 2000. Print.

Director of Central Intelligence. "Trends in South Africa's Nuclear Security Policies and Programs." *National Intelligence Estimate* 73. 5 Oct. 1984. Web. 30 Apr. 2015.

<<http://digitalarchive.wilsoncenter.org/document/116905>>.

Exec. Order No. 12532, 3 C.F.R. (1985). Web. 30 Apr. 2015.

<<http://www.archives.gov/federal-register/codification/executive-order/12532.html>>.

Finnemore, Martha, and Kathryn Sikkink. "International Norm Dynamics and Political Change." *International Organization* 52.4 (1998): 887-917. Web. 29 Apr. 2015.

<<http://www.jstor.org/stable/2601361>>.

Finnemore, Martha, and Kathryn Sikkink. "Taking Stock: The Constructivist Research Program in International Relations and Comparative Politics." *Annual Review of Political Science* 4.1 (2001): 391-416. Web. 29 Apr. 2015. <[doi.org/10.1146/annurev.polisci.4.1.391](http://doi.org/10.1146/annurev.polisci.4.1.391)>.



House of Commons Foreign Affairs Committee. *Global Security: Non-proliferation: Report, Together with Formal Minutes, Oral and Written Evidence*. London: Stationary Office, 2009. Print.

Hymans, Jacques E. C. "Leaders National Identity Conceptions and Nuclear Choices." *The Psychology of Nuclear Proliferation: Identity, Emotions, and Foreign Policy*. Cambridge, UK: Cambridge UP, 2006. 16-46. Print.

IAEA General Conference GC(XX)/575. "Examination of Delegates' Credentials - Report of the General Committee." 27 Sep. 1977. Web. 1 May 2015.

<[https://www.iaea.org/About/Policy/GC/GC20/GC20Documents/English/gc20-575\\_en.pdf](https://www.iaea.org/About/Policy/GC/GC20/GC20Documents/English/gc20-575_en.pdf)>.

IAEA General Conference GC(XXI)/579. "Election of Members to the Board of Governors - Note by the Board of Governors. 30 Jun. 1977. Web. 1 May 2015.

<[https://www.iaea.org/About/Policy/GC/GC21/GC21Documents/English/gc21-579\\_en.pdf](https://www.iaea.org/About/Policy/GC/GC21/GC21Documents/English/gc21-579_en.pdf)>.

IAEA General Conference GC(XXVII)/702. "General Debate and Annual Report for 1982. South Africa's Nuclear Capabilities - Draft Resolution Presented by Nigeria, on Behalf of the Group of 77." 13 Oct. 1983. Web. 1 May 2015.

<[https://www.iaea.org/About/Policy/GC/GC27/GC27Documents/English/gc27-702\\_en.pdf](https://www.iaea.org/About/Policy/GC/GC27/GC27Documents/English/gc27-702_en.pdf)>.

IAEA General Conference GC(XXVII)/RES/408. "General Debate and Annual Report for 1982 – South Africa's Nuclear Capabilities." 9 Nov. 1983. Web. 1 May 2015.

<[http://www.iaea.org/About/Policy/GC/GC27/GC27Resolutions/English/gc27res-408\\_en.pdf](http://www.iaea.org/About/Policy/GC/GC27/GC27Resolutions/English/gc27res-408_en.pdf)>.

IAEA General Conference GC(XXXI)/807. "South Africa's Nuclear Capabilities – Report by the Board of Governors." 24 Aug. 1987. Web. 1 May 2015.

<[https://www.iaea.org/About/Policy/GC/GC31/GC31Documents/English/gc31-807\\_en.pdf](https://www.iaea.org/About/Policy/GC/GC31/GC31Documents/English/gc31-807_en.pdf)>.

IAEA General Conference GC(XXXVI)/1015. "South Africa's Nuclear Capabilities." 4 Sep. 1992. Web. 1 May 2015.

<[https://www.iaea.org/About/Policy/GC/GC36/GC36Documents/English/gc36-1015\\_en.pdf](https://www.iaea.org/About/Policy/GC/GC36/GC36Documents/English/gc36-1015_en.pdf)>.

IAEA Information Circular INFCIRC/394. "Agreement of 16 September 1991 between the Government of the Republic of South Africa and the International Atomic Energy Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons." Oct. 1991. Web. 1 May 2015.

<<https://www.iaea.org/sites/default/files/publications/documents/infcircs/1991/infcirc0394.pdf>>.

Joyner, Daniel H. *Interpreting the Nuclear Non-Proliferation Treaty*. New York: Oxford UP, 2011.

Levite, Ariel E. "Never Say Never Again: Nuclear Reversal Revisited." *International Security* 27.3 (2003): 59-88. Web. 29 Apr. 2015. <[http://iis-db.stanford.edu/evnts/3863/LeviteAriel\\_2004-0513.pdf](http://iis-db.stanford.edu/evnts/3863/LeviteAriel_2004-0513.pdf)>.

Lieberman, Peter. "The Rise and Fall of the South African Bomb." *International Security* 26.2 (2001): 45-86. Web. 29 Apr. 2015. <<http://www.jstor.org/stable/3092122>>.

Masiza, Zondi. "A Chronology of South Africa's Nuclear Program." *The Nonproliferation Review* 1.1 (1993): 34-55. Web. 29 Apr. 2015. <<http://cns.miis.edu/npr/pdfs/masiza11.pdf>>.

Mearsheimer, John J. "A Realist Reply." *International Security* 20.1 (1995): 82-93. Web. 14 May 2015. <<http://mearsheimer.uchicago.edu/pdfs/A0022.pdf>>.

Mearsheimer, John J. "Here We Go Again." *The New York Times*. University of Chicago, May 17, 1998. Web. 17 Oct. 2014. <<http://mearsheimer.uchicago.edu/pdfs/P0006.pdf>>.

Pabian, Frank V. "South Africa's Nuclear Weapon Program: Lessons for U.S. Nonproliferation Policy." *Nonproliferation Review* (1995): 1-19. Web. 29 Apr. 2015. <<http://cns.miis.edu/npr/pdfs/31pabian.pdf>>.

Paul, T. V. *Power versus Prudence: Why Nations Forgo Nuclear Weapons*. Montreal: McGill-Queen's UP, 2000. Print.

Poole, Keith. "To Override the President's Veto of HR 4868, a Bill to Prohibit Loans to, Other Investments in, and Certain Other Activities with Respect to, South Africa (Motion Passed; Two-Thirds of Those Present Voting in Favor)" *Govtrack.us*. 29 Sep. 1986. Web. 30 Apr. 2015. <<https://www.govtrack.us/congress/votes/99-1986/h829>>.

Purkitt, Helen E., and Stephen Franklin. Burgess. *South Africa's Weapons of Mass Destruction*. Bloomington, IN: Indiana UP, 2005. Print.

Reagan, Ronald. "Remarks and a Question-and-Answer Session With Reporters on Signing the Executive Order Prohibiting Trade and Certain Other Transactions Involving South

- Africa." *The Ronald Reagan Presidential Library*. 9 Sep. 1985. Web. 30 Apr. 2015. <<http://www.reagan.utexas.edu/archives/speeches/1985/90985a.htm>>.
- Reiss, Mitchell. *Bridled Ambition: Why Countries Constrain Their Nuclear Capabilities*. Washington, D.C., U.S.A.: Woodrow Wilson Center, 1995. Print.
- Reiss, Mitchell. *Without the Bomb: The Politics of Nuclear Proliferation*. New York: Columbia UP, 1998. Print.
- Ritchie, Nick. *A Nuclear Weapons-free World?: Britain, Trident and the Challenges Ahead*. Basingstoke: Palgrave Macmillan, 2012. Print.
- Ruble, Maria Rost. *Nonproliferation Norms: Why States Choose Nuclear Restraint*. Athens: U of Georgia, 2009. Print.
- Sagan, Scott D. "Why Do States Build Nuclear Weapons?: Three Models in Search of a Bomb." *International Security* 21.3 (1996): 54-86. Web. 19 Oct. 2014. <[http://iis-db.stanford.edu/pubs/20278/Why\\_Do\\_States\\_Build\\_Nuclear\\_Weapons.pdf](http://iis-db.stanford.edu/pubs/20278/Why_Do_States_Build_Nuclear_Weapons.pdf)>.
- Sole, Donald B. "Great Expectations: A Diplomat's Recollections of the Birth and 15 Early Years of the IAEA." International Atomic Energy Agency: Personal Reflections. Vienna: Agency, 1997. 15-26. Print.
- Solingen, Etel. "The Political Economy of Nuclear Restraint." *International Security* 19.2 (1994): 126-169. Web. 29 Apr. 2015. <<http://www.jstor.org/stable/2539198>>.
- Statute of the International Atomic Energy Agency. 23 Feb. 1989. Web. 1 May 2015. <<https://www.iaea.org/sites/default/files/statute.pdf>>.
- Stumpf, Waldo. "South Africa's Nuclear Weapons Program: from Deterrence to Dismantlement" *Arms Control Today* (1995): 3-8. Web. 27 Apr. 2015. <[https://www.armscontrol.org/system/files/ACT\\_South%20Africa\\_9601.pdf](https://www.armscontrol.org/system/files/ACT_South%20Africa_9601.pdf)>.
- Tannenwald, Nina. "Ideas and Explanation: Advancing the Theoretical Agenda." *Journal of Cold War Studies* 7.2 (2005a): 13-42. Web. 14 May 2015. <[https://muse.jhu.edu/login?auth=0&type=summary&url=/journals/journal\\_of\\_cold\\_war\\_studies/v007/7.2tannenwald02.html](https://muse.jhu.edu/login?auth=0&type=summary&url=/journals/journal_of_cold_war_studies/v007/7.2tannenwald02.html)>.
- Tannenwald, Nina. "Stigmatizing the Bomb: Origins of the Nuclear Taboo." *International Security* 29.4 (2005b): 5-49. Web. 29 Apr. 2015. <<http://www.jstor.org/stable/4137496>>.

Tannenwald, Nina. *The Nuclear Taboo: The United States and the Non-use of Nuclear Weapons since 1945*. Cambridge: Cambridge UP, 2007. Print.

Treaty on the Non-Proliferation of Nuclear Weapons. 1968. Web. 29 Apr. 2015.  
<<http://www.un.org/disarmament/wmd/nuclear/npttext.shtml>>.

Truth and Reconciliation Commission. "Special Investigation Chemical and Biological Warfare." *Truth and Reconciliation Commission of South Africa Report*. Cape Town: Truth and Reconciliation Commission, 1999. 508-517. Print.

Ullman, Owen and Ken Fireman. "Reagan Vetoes South Africa Sanctions." *News of Delray Beach*. 27 Sep. 1986. Web. 30 Apr. 2015.  
<<https://news.google.com/newspapers?id=8ggyAAAIBAJ&sjid=E40DAAAIBAJ&dq=anti-apartheid%20act%20senate&pg=5957%2C66917950>>.

De Klerk, Frederik Willem. *Speech by the State President, Mr. F.W. De Klerk, to a Joint Session of Parliament*. United Nations Disarmament Commission. 24 Mar. 1993. Web. 29 Apr. 2015. <[https://disarmament-library.un.org/UNODA/Library.nsf/0bb8a163b66d627f85256beb0073f596/cd8570ead7d79c5c8525786b0053e5cf/\\$FILE/A-CN10-179.pdf](https://disarmament-library.un.org/UNODA/Library.nsf/0bb8a163b66d627f85256beb0073f596/cd8570ead7d79c5c8525786b0053e5cf/$FILE/A-CN10-179.pdf)>.

United Nations General Assembly A/RES/37/69. "Policies of Apartheid of the Government of South Africa." 9 Dec. 1982. Web. 1 May 2015.  
<[http://www.un.org/en/ga/search/view\\_doc.asp?symbol=A/RES/37/69](http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/37/69)>.

United States. "Nuclear Regulatory Legislation" *Office of the General Counsel, U.S. Nuclear Regulatory Commission*. Vol. 2, No. 10. 2013. Web.  
<<http://pbadupws.nrc.gov/docs/ML1327/ML13274A492.pdf#page=19>>.

Villiers, J.W. De, Roger Jardine, and Mitchell Reiss. "Why South Africa Gave Up the Bomb." *Foreign Affairs* 72.5 (1993): 98-109. Web. 29 Apr. 2015.  
<[https://www.foreignaffairs.com/modal\\_forms/nojs/link-form/pdf/1109859](https://www.foreignaffairs.com/modal_forms/nojs/link-form/pdf/1109859)>.

Waltz, Kenneth N. "The Spread of Nuclear Weapons: More May Be Better: Introduction." *The Adelphi Papers* 21.171 (1981): n. pag. Web. 19 Oct. 2014.  
<<https://www.mtholyoke.edu/acad/intrel/waltz1.htm>>.

Wendt, Alexander. "Anarchy Is What States Make of It: The Social Construction of Power Politics." *International Organization* 46.2 (1992): 391-425. Web. 14 May 2015. <[www.jstor.org/stable/2706858](http://www.jstor.org/stable/2706858)>.

Wendt, Alexander. "Collective Identity Formation and the International State." *The American Political Science Review* 88.2 (1994): 384-396. Web. 15 May 2015. <<http://www.jstor.org/stable/2944711>>.

Wendt, Alexander. "Constructing International Politics." *International Security* 20.1 (1995): 71-81. Web. 14 May 2015. <[www.jstor.org/stable/2539217](http://www.jstor.org/stable/2539217)>.

Wendt, Alexander. *Social Theory of International Politics*. Cambridge, UK: Cambridge UP, 1999. Print.

Wyk, Jo-Ansie Van. "Nuclear Diplomacy as Niche Diplomacy: South Africa's Post-apartheid Relations with the International Atomic Energy Agency." *South African Journal of International Affairs* 19.2 (2012): 179-200. Web. 29 Apr. 2015. <[doi.org/10.1080/10220461.2012.706492](http://doi.org/10.1080/10220461.2012.706492)>.