South Africa's Voluntary Relinquishment of its Nuclear Arsenal and Accession to the Treaty on the Non-Proliferation of Nuclear Weapons in terms of International Law

Dr Geoffrey Ronald Heald

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et iudicabit gentes et arguet populos multos et conflabunt gladios suos in vomeres et lanceas suas in falces non levabit gens contra gentem gladium nec exercebuntur ultra ad proelium

– Isaiah Chapter 2 Verse 4 – *Latin Vulgate*

Abstract

The subject of this research is “South Africa’s Voluntary Relinquishment of its Nuclear Arsenal and Accession to the Treaty on the Non-Proliferation of Nuclear Weapons in Terms of International Law”. The research found that international law considerations did indeed play an important role in guiding South Africa’s relinquishment of its nuclear arsenal, and in accession to the NPT.

The dissertation was conducted by interviewing an expert sample of the key persons who were actually involved with, and led, South Africa’s relinquishment of its nuclear arsenal and accession to the Treaty on the Non-Proliferation of Nuclear Weapons. The decision to interview the expert respondents was followed in order to understand the respondents’ animus or state of mind, and the *logos* of the decision to relinquish the nuclear weapons and accede to the NPT.

The study sample included:

- Mr FW de Klerk, former President of South Africa, who instructed that the nuclear arsenal should be relinquished, and that South Africa should accede to the NPT;

- Professor Wynand Mouton, whom Mr de Klerk appointed as the Oversight Auditor of South Africa’s nuclear relinquishment and its accession to the NPT;

- Professor Waldo Stumpf, who successfully project-managed the nuclear relinquishment process, and brought accession to the NPT into reality;

- Mr Pik Botha, who was South Africa’s longest-serving Minister of Foreign Affairs, and who later held the portfolio of Minister of Energy. Mr Botha was personally involved in leading many important international negotiations that pertained to South Africa’s nuclear status over some decades; and

- Dr Neil Barnard, who was Director of South Africa’s National Intelligence Service at the time.

An important and new research finding was that all of the respondents indicated that the reason the nuclear weapons were relinquished and South Africa acceded to the NPT was that the relinquishment of these weapons and the accession to the NPT were symbiotically interconnected with the constitutional settlement in South Africa. For the respondents, it was a *causa sine qua non* of the international acceptance and recognition of South Africa’s non-racial constitutional settlement. The respondents were ad idem that it would have been well-nigh impossible to have achieved a peaceful constitutional settlement which was internationally

legitimate without relinquishing these weapons and acceding to the NPT prior to the conclusion of the constitutional negotiations.

Had South Africa held onto this nuclear arsenal, it would have created international mistrust, because it would have begged the question (*petitio principii*): “What is the purpose of their retention?” The perpetuation of the nuclear weapons programme would have created international doubt as to the sincerity of the constitutional transition and contributed to the continued recognition of South Africa as a pariah state.

This finding has not been reported in the literature and is therefore a new contribution to knowledge about South Africa’s constitutional transition. Although not publicly visible, the relinquishment of the nuclear arsenal and South Africa’s accession to the NPT were purposively linked, and indeed synchronised, with the constantly changing status of the constitutional negotiations – *ratione temporis*.

The link between the relinquishment of the nuclear arsenal and the accession to the NPT was purposefully kept secret. This was because it was reasoned that the matter of South Africa’s design of a nuclear arsenal, its possession of these weapons, its dismantlement of these weapons, and its accession to the NPT formed such a potentially contentious matter, both nationally and internationally, that it could easily have thrust the entire constitutional transition into jeopardy. For this reason it was decided (wisely, in the researcher’s view) to address the matter of relinquishment and accession to the NPT in camera. It was conducted in camera because the security of the state was at stake. The testimony of the respondents made it clear that this subject was sufficiently incendiary to have derailed the constitutional negotiations and settlement, and plunged the country into chaos.

The research discovered that the reason the decision was reached to relinquish the nuclear arsenal and accede to the NPT was to ensure that South Africa was recognised as a constitutional democracy and a respected member of the international community of nations. The mission was conducted in order to achieve state succession in a stable framework of constitutional continuity.

The research also discovered that a number of the countries that have relinquished their nuclear weapons and acceded to the Treaty on the Non-Proliferation of Nuclear Weapons did so because of the imperative to create a positive state recognition status amongst the international community. Had South Africa retained the nuclear arsenal during the constitutional negotiations, and afterwards, it would have tainted and jeopardised the state succession and the constitutional continuity of the country. It would have endowed the government-in-waiting with a poisoned chalice and undermined Mr Mandela’s stature as a leader. The decision was made by Mr de Klerk and conducted in good faith insofar as all stakeholders were concerned.

Comity was displayed by the National Party towards the African National Congress – the regime-in-waiting – in order to endow it with the opportunity of becoming a successful government. The research found that Mr de Klerk, together with his team, carefully reconciled and harmonised South African municipal law with international law in order to obviate a conflict of laws. This harmonisation of law was important in establishing respectful relationships and comity with the International Atomic Energy Agency, which is an organ imbued with international legal personality under the United Nations Charter, and with the international inspectors, including those from inter alia the United States, Russia, the United Kingdom, China and France.

The expert respondents were all in consensus that South Africa could never have lawfully deployed the nuclear weapons in any conceivable military conflict, including in the case where the very existence of the South African State might have been at risk. They unanimously expressed the opinion that such usage would have constituted a *mala in se* and been contrary to natural law and peremptory norms of humanity. The principles of *jus cogens* and *erga omnes* permeated their assessment of the legality of any usage of nuclear weapons.

The respondents were also in agreement that any actual use of these weapons would be disproportionate, indiscriminate, escalatory, and would not be able to discern friend from foe, and therefore would be contrary to international humanitarian law. The usage of a nuclear bomb would have been a threat to world peace in terms of the United Nations Charter, which might have justified a United Nations-sanctioned military invasion of South Africa to counteract such a threat to world peace, as was the case when Iraq invaded Kuwait.

The interviewees were in consensus that if the nuclear weapons had been deployed, they would have escalated conflict, and created an international reprisal risk with potentially disastrous consequences for South Africa, the region, and indeed for the world at large. The research sample further indicated that any operational use of these nuclear weapons would have created disproportional consequences, which would, by deduction, have contravened inter alia: the Geneva Conventions, the Hague Regulations Conventions, the Kellogg–Briand Pact (1928), the Martens Clause, and therefore international humanitarian law.

It would have raised the question of state responsibility for wrongful actions, which would also have included contraventions of international environmental law caused by trans-boundary nuclear pollution. Individuals committing wrongful actions could not have pleaded immunity from such wrongfulness by claiming immunity under South African municipal law.

The respondents subscribed to a positive law interpretation of the legality of nuclear deterrence, which is the position that the Nuclear Weapons States have assumed. In its essence, this positive law view subscribes to the principle contained in the *Lotus* case, that what is not prohibited is

permitted. Natural law and positive law have oppositional reasoning as regards the legality of nuclear weapons, and this logical tension was evident in the research. The respondents revealed a difference of opinion as far as their understanding of the legality of the development, possession, testing and deterrence versus actual usage of nuclear weapons is concerned. They were of the view that any military usage or nuclear test would be illegal, but regarded the development, possession and deterrent usage of nuclear weapons as being lawful.

The relinquishment process and accession to the NPT was conducted as a secret set of negotiations contiguous with the constitutional negotiations. It is a fact that the African National Congress was not informed about these negotiations until Mr de Klerk issued his formal announcement about the relinquishment and accession to the NPT on 23 March 1993. Mr Mandela was therefore presented with the reality of relinquishment and accession as a *fait accompli*.

South Africa's rollback is compared with the relinquishment process in Iraq in an attempt to discover whether insight and knowledge from the South African case might be transferred and applied to other countries that are contemplating the same actions. The provisional answer to this question is that partial aspects of the knowledge that was created in South Africa might possibly constitute elements of precedent.

The application and transference of this knowledge would always need to be tailored to the unique context, facts and circumstances that might prevail in the transferee state in question. Most certainly all nuclear relinquishment and accession processes need to be conducted as extremely serious projects and in good faith.

Declaration

I declare that this dissertation is my own, unaided work. It is submitted for the Degree of Master of Laws in the University of Witwatersrand, Johannesburg. South Africa. It has not been submitted before for any other degree or examination in any other University.

Geoffrey Ronald Heald

25 August 2010

Dedication

This Masters Degree in Law is dedicated to the respondents to this research. They consist of a remarkable and small group of men who acted wisely, and for the greater good.

They quietly, with humility and without self-aggrandisement, set about performing an important and intricate duty concomitantly with the constitutional negotiations in South Africa.

They ensured that South Africa was the first country in the world to relinquish its nuclear arsenal voluntarily and accede to the Treaty on the Non-Proliferation of Nuclear Weapons.

This duty was performed to ensure that the constitutional negotiations were concluded successfully so as to set the new, non-racial and democratic constitutional order securely in place.

Had this duty not been performed expertly and quietly, as it was, the path towards a peacefully-negotiated Constitution, which was a very complicated matter in its own right, would have been ever more complex. It was also conducted by Mr de Klerk in compliance with peremptory norms, in fulfilment of perceived legal obligations to the community of nations *erga omnes*.

At the time when this process was conducted, South Africa oscillated on the edge of an incipient civil war.

The respondents assisted in steering South Africa away from this tortured fate.

There was wisdom in the spirit and the means which these men devised to relinquish the nuclear arsenal voluntarily and accede to the Treaty on the Non-Proliferation of Nuclear Weapons.

They have created an exemplar.

I am deeply grateful that these respondents shared their wisdom, experience and knowledge with me.

I dedicate this research to:

Mr FW de Klerk, who had the foresight, bravery and wisdom to instruct that this task should be performed two weeks after he assumed the office of President of South Africa in September 1989. He regarded this duty as a personal priority. No one apart from the relinquishment team was aware that this duty was being conducted, in accordance with an excellently-structured implementation plan.

The researcher's view is that Mr de Klerk, on the merits of this case alone, should probably have been awarded the Nobel Peace Prize for his decision to relinquish the nuclear arsenal voluntarily and ensure that South Africa acceded to the NPT. It was a very important and virtually-unnoticed gesture of international peace.

Professor Waldo Stumpf, who practically project-managed the relinquishment of the nuclear arsenal and accession to the NPT in all its intricacy. Professor Stumpf was extraordinarily generous with his time and energy with the researcher. Professor Stumpf is a brilliant and practical man who is owed a great debt by South Africa.

Professor Wynand Mouton, who was appointed by Mr de Klerk as the 'Oversight Auditor' of the task of relinquishing the nuclear arsenal and acceding to the NPT. It was absolutely imperative that this task should have been overseen by a man of personal and international credibility. Mr de Klerk was insistent that the researcher should meet with Professor Mouton, and he referred to him as a 'scientist of note'. The researcher discovered that this praise was true.

Mr Pik Botha, who served as Minister of Foreign Affairs and later Minister of Energy in South Africa, was on the cutting edge of the negotiations about South Africa's nuclear capabilities for decades. He had to address the fears of the United States and other countries about South Africa's nuclear proclivity in an appropriate manner, and also dampen the internal ardour for nuclear testing amongst the local militarists, who had proliferation ambitions. He shared his valuable time and views with generosity.

Dr Neil Barnard, who was Director of the National Intelligence Service, for his independent, creative, honest and thoughtful view. Dr Barnard understood full well the contradiction between the Nuclear-Weapons-States' and the Non-Nuclear-Weapons-States' differential rights and duties in terms of the Treaty on the Non-Proliferation of Nuclear Weapons. His viewpoint is that this inconsistency is a potentially dangerous international fault line and needs to be urgently reconciled by treaty.

Mr Mike Louw, who succeeded Dr Neil Barnard as Director of the National Intelligence Service and who was a respondent in my doctoral research entitled 'Learning Amongst Enemies – Phenomenological Study of South Africa's Constitutional Negotiations from 1985–1998'. Mr Louw displayed a wisdom and thoughtfulness which I respect.

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Professor **Lamar Reinsch** of Georgetown University inspired this research by posing the challenging question of 'how transferable to other countries is the knowledge that was created during the South African constitutional transition?'

Professor **Donald Shriver** of Columbia University evaluated my doctoral research with incision, and interrogated the question of knowledge creation by incremental precedent.

Professor **Charles Moxley** of Fordham University is a doyen of nuclear weapons and the law, and he shared his insight so generously and unconditionally with me, at the time of the formulation of the research proposal.

Professor **Robert Bordonne** of Harvard University introduced me to the conceptual framework that informed the comparison between South Africa and Iraq's nuclear relinquishment and accession processes.

Adrienne Pretorius edited this research and was consistently and unconditionally supportive.

Ronnie, **Adam**, **Thomas**, **Alistair** and **Catherine** – The conjurers of the next generation. Take up the baton and push the mark.

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Acronyms and Terminology

AEB	Atomic Energy Board
AEC	Atomic Energy Corporation
ANC	African National Congress
ARMSCOR	Armaments Corporation of South Africa
CTBT	Comprehensive Test Ban Treaty
CDA	Combined Development Agency
CIA	Central Intelligence Agency
DOE	Department of Energy – fell under United States' State Department
DU	Depleted Uranium
First Iraq War	Term used by the respondents to describe the Gulf War
HEU	Highly Enriched Uranium
IAEA	International Atomic Energy Agency
ICJ	International Court of Justice
ILC	International Law Commission
Initial Report of the International Atomic Energy Agency	Termed the 'Opening Inventory' in South Africa
LOSC	Law of Sea Convention
LTBT	Limited Test Ban Treaty
NATO	North Atlantic Treaty Organization
NIS	National Intelligence Service
NNWS	Non-Nuclear-Weapons-State
NPT	Treaty on the Non-Proliferation of Nuclear Weapons, also referred to as Non-Proliferation Treaty and Nuclear Non-Proliferation Treaty
NWS	Nuclear-Weapons-State
NWFZ	Nuclear-Weapons-Free Zone
PCIJ	Permanent Court of International Justice (The predecessor of the International Court of Justice)
PIV	Physical Inventory Verification
PNET	Peaceful Nuclear Explosions Treaty
RENAMO	Resistencia Naçional Moçambicana (Mozambique National Resistance Movement)
SABC	South African Broadcasting Corporation
SADF	South African Defence Force
SALT	Strategic Arms Limitation Treaty
Second Iraq War	Term used by the respondents to describe the 2003 invasion of Iraq by the United States and Great Britain
SGA	Safeguarding Agreement
START	Strategic Arms Reduction Treaty

Threshold States	States that are presumed to have developed a nuclear weapons capability but have chosen not to accede to the Treaty on the Non-Proliferation of Nuclear Weapons. They include: India, Israel, North Korea and Pakistan
TBVC States	Transkei, Bophuthatswana, Venda and Ciskei – apartheid states that were recognised only by South Africa
UNGA	United Nations General Assembly
UNSCOM	United Nations Special Commission, responsible only for chemical and biological weapons, and long-range missiles
UNMOVIC	United Nations Monitoring, Verification and Inspection Commission
Vastrap	The English translation of this Afrikaans name of the location of the nuclear test silos in the Kalahari Desert means 'trap'; 'snared'; 'ensnared'; 'trapped'; 'entrapment'; 'beguiled' or 'entrapped', depending upon the context of usage
Y Plant	Produced Highly Enriched Uranium, an integral element of South Africa's nuclear bomb

Chapter One

Research Questions, Aims and Methodology

1.1 Introduction

The aim of this study is to take a single case study of the South African negotiations relating to voluntary relinquishment of its nuclear arsenal and accession to the Treaty on the Non-Proliferation of Nuclear Weapons ('NPT') in terms of international law, and by using phenomenology, to build theory about this process where no such theory exists. To date there is no comprehensive primary research with a participant sample of the decision-makers who relinquished the South African nuclear arsenal and acceded to the NPT in terms of international law. It is intended that the new knowledge uncovered by the research will be applicable to, and of assistance to, legal advisors and decision-makers who are involved in seeking nuclear rollback in other countries around the world.

This chapter is divided into three broad sections. It offers an historical background as to how South Africa came to develop and acquire a nuclear weapons capability, and then it provides an introduction as to what circumstances and factors led to the decision to relinquish these weapons and presents the rationale as to why South Africa acceded to the Treaty on the Non-Proliferation on Nuclear Weapons in terms of international law. The research established that Mr de Klerk instructed that these nuclear weapons should be relinquished in order to ensure that the carefully-crafted, democratically-established constitutional settlement would be internationally recognised. Had South Africa's nuclear arsenal not been relinquished in compliance with standards set by the International Atomic Energy Agency's safeguard inspectorate, and had these nuclear bombs and manufacturing facilities been discovered in the midst of the negotiations to establish a new non-racial democratic constitution, trust in the good faith of the political transition would have been destroyed. One can only speculate about the ramifications that such a disclosure would have had upon South Africa's already then pariah status international

relations. The retention of these nuclear weapons and the maintenance of a nuclear weapons-making capability would have been an impediment to South Africa's gaining international recognition, as it would have undermined national and international trust in the bona fides of the constitutional transition and its substance.

Secondly, this chapter offers an introduction to the relevant law and its context as it pertains to the possession and relinquishment of nuclear weapons.

Thirdly, it sets out the research method and theory. The reader will notice that the research method and theory are presented in more depth and more extensively than is usually the case in a legal thesis. This is because a distinguishing feature of this thesis is that much of the research is primary and sourced from the persons who actually led the relinquishment process and accession to the Treaty on the Non-Proliferation of Nuclear Weapons. The research is addressed to a small set of respondents who were intrinsically involved in the various phases of the nuclear programme, from its development to its relinquishment. A set of questions was posed to each of these respondents, and these questions are outlined in this chapter under the section that addresses the research method and theory.

The list of respondents included Mr FW de Klerk, who was President of the Republic of South Africa and issued the instruction to relinquish these weapons, and set the task of South Africa's accession to the Treaty on the Non-Proliferation of Nuclear Weapons. Professor Wynand Mouton, a nuclear physicist, was placed in charge of the 'oversight auditing' of South Africa's relinquishment of its nuclear weapons and capabilities in accordance with the standards set by the International Atomic Energy Agency (IAEA) and its inspectorate, which is the international nuclear watchdog of the United Nations. Mr de Klerk appointed Professor Mouton into this role of 'oversight auditor'.

Professor Waldo Stumpf was delegated by Mr de Klerk to 'project manage' South Africa's relinquishment of its nuclear weapons capability in accordance with the standards set by the International Atomic Energy Agency. This also required compliance with relevant municipal and international laws. The 'oversight auditor' and the 'project management' of the nuclear weapons and accession process were conducted in harmony with both international law and South African municipal law, so as to forestall a possible conflict of laws.

Dr Neil Barnard, who headed the National Intelligence Service at the time of the development of South Africa's nuclear deterrent capability, was another respondent. Dr Barnard possessed a specialised knowledge of nuclear deterrence, having conducted his doctorate on this subject. He was involved in the inception aspect of the programme under the leadership of President PW Botha. Dr Barnard attended and participated in many crucial meetings relating to South Africa's nuclear weapons policy. The National Intelligence Service was South Africa's official intelligence agency.

Mr Pik Botha was South Africa's longest-serving Minister of Foreign Affairs. His career spanned all the phases of South Africa's nuclear weapons programme, from its inception to its relinquishment. Mr Botha addressed the international relations political edge of the nuclear weapons programme. He was appointed as the Minister of Mining and Energy after the nuclear weapons had been relinquished and South Africa had acceded to the Treaty on the Non-Proliferation of Nuclear Weapons.

Mr Mike Louw, who succeeded Dr Neil Barnard as the leader of the National Intelligence Service, was technically not part of the research sample. He was a primary respondent in the doctoral research conducted by the researcher.[1] Mr Louw's submission during the doctoral research

[1] Heald, Geoffrey Ronald. 2006. 'Learning Amongst Enemies: A Phenomenological Study of the South African Constitutional Negotiations from 1985 to 1998'. PHD submitted to University of Witwatersrand, Johannesburg, South Africa.

provided the lead that made it clear that the relinquishment of the nuclear arsenal and accession to the Treaty on the Non-Proliferation of Nuclear Weapons had a fundamental bearing on the international support and state recognition that South Africa was able to achieve for its constitutional transition. It is for this reason that certain testimony from Mr Louw is included in this research.

The reader should note that the historical background, the relevant law and context, and the research method and theory are not perfectly discrete entities. These themes do overlap and intersect with each other from time to time, and this categorisation is not always as perfect and conceptually neat as one might wish.

It was initially envisioned that this research would explore “South Africa’s Voluntary Relinquishment of its Nuclear Arsenal and Accession to the Treaty on the Non-Proliferation of Nuclear Weapons in Terms of International Humanitarian Law”. The focus on international humanitarian law would have been particularly appropriate had South Africa been at war during the relinquishment and accession period. However, South Africa was not at war during this time; rather, it existed in a rather fragile peace. International humanitarian law is concerned with the norms, obligations and rules which are incumbent upon the conduct of states during times of war. It is the law of war.

International law, on the other hand, has a broader ambit and relates to the rights, duties, and norms that govern the conduct and intercourse between states during times of peace. International private law, otherwise known as the conflict of law, concerns the interrelationship between a country’s municipal law and international law. It was found in this research that the harmonisation and alignment between South African municipal law and international law was a matter of vital importance to understanding both why and how the nuclear arsenal was relinquished and South Africa acceded to the NPT. International environmental law, which is an increasingly important branch of international law, provided a

growing insight into the legality of nuclear testing and the consequential matter of trans-boundary pollution that arises from such tests. International customary law was also important to this research, as all the respondents indicated that the deployment of a nuclear bomb in war would have been contrary to peremptory norms of international law and *jus cogens*, and that there was therefore an obligation – *erga omnes* – to relinquish these weapons in order that South Africa should not come to be regarded as a threat to world peace.

The prohibition on aggression and the use of force is viewed as a cornerstone of the United Nations system and was found by the International Court of Justice in the *Nicaragua* case in 1986 to be a rule of customary law.[2] [3] [4] The Kellogg–Briand Pact (1928) – 'The Great Treaty for the Renunciation of War' – was concluded in an attempt to counteract the horror and slaughter that occurred in the trenches of France during World War I. The NPT was similarly conceived after the catastrophic implications of the humanitarian horror of the detonation of the atomic bombs on Hiroshima and Nagasaki started to dawn on international opinion. It was likewise codified into international law. The omnipresence of the United Nations Charter Article 2(4) would guide the legality of the design, possession, deterrent usage, putative military usage, and relinquishment of nuclear weapons in South Africa.

Maritime law and the law of the sea, together with airspace law, also played a role in understanding the legal status of nuclear weapons[5] in South Africa. International humanitarian law is in itself a branch of international law. All of these branches of law fell under the core mantle of international law and it was for this reason that it was decided to conduct

[2] *Military and Paramilitary Activities in and Against Nicaragua (Nicaragua v USA) Merits*, 1986 ICJ Reports 14 at 98–100.
[3] Dugard, John. 2007. *International Law: A South African Perspective* (with contributions by Bethlehem, Daniel, du Plessis, Max & Katz, Anton). Third Edition. Lansdowne: Juta & Co Ltd. 501–502.
[4] Kellogg–Briand Pact (1928) – 'The Great Treaty for the Renunciation of War'.
[5] Multilateral Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Under Water (Moscow Test Ban Treaty), done 5 August 1963 [1963] 2 UST 1313, T.IA.S. No 5433, 480 UNTS 43 at 889.

this research into the relinquishment of the nuclear arsenal and accession to the NPT[6] in terms of international law, rather than strictly under international humanitarian law. It widened the terms of reference of this research, which might otherwise have been unnecessarily restrictive. Ian Brownlie notes that international law consists of that body of rules and principles that are binding on states and is comprised of specific and general rules.[7]

An example of a specific rule of international law is that genocide is forbidden. The respondents contended that the wars that were being fought in Angola, Namibia and Mozambique, as well as the insurrection in South Africa against apartheid, were entirely the wrong type of conflict for the use of nuclear weapons, and that any such usage would probably have constituted a crime against humanity and been considered genocidal.

Another specific rule of international law is that dum-dum bullets, which cause cruel forms of suffering, are expressly prohibited.[8] The matter of the cruelty of nuclear weapons is raised frequently in the literature on the law

[6] The Treaty on the Non-Proliferation of Nuclear Weapons (usually referred to as the "NPT") is the singular most important codification of international law as it pertains to a country's development and possession of a nuclear weapons capability in international law. The NPT is supportive of peaceful civilian developments of nuclear capability, for example, in the fields of inter alia energy creation and nuclear medicine. The NPT is effectively implemented by the International Atomic Energy Agency (IAEA) and its inspectorate, who are comprised from nuclear physicists and experts from all over the world. The IAEA is a United Nations agency which has its head office in Vienna.

[7] Brownlie, Ian. 2003. *Principles of International Law*. Sixth Edition. Oxford: Oxford University Press. 12–13.

[8] The Hague Convention of 1899 Declaration III prohibits the use in international warfare that easily expand or flatten in the body. This was adopted at the First Peace Conference of 29 July, 1899. It states: "The Undersigned, Plenipotentaries of the Powers represented at the International Peace Conference at the Hague, duly authorized to that effect by their governments, inspired by the sentiments which found expression in the Declaration of St Petersburg of the 29th November (11th December), 1868, Declare as follows: 'The Contracting Parties agree to abstain from the use of bullets which expand or flatten easily in the human body, such as bullets with a hard envelope, which does not entirely cover the core, or is pierced with incisions.' The present Declaration is binding on the Contracting Powers in the case of war between two or more of them. It shall cease to be binding from the time, when, in a war between the Contracting Powers, one of the belligerents is joined by a non-contracting power." (This prohibition expanded upon the Declaration of St Petersburg of 1868, which banned exploding projectiles of a mass less than 400 grams.)

as it pertains to nuclear weapons, but was not specifically alluded to by the respondents.

General rules of war include the requirement that the use of force should be proportionate to the military objectives. It is a law of war that the use of force should discriminate civilians from combatants, and friend from foe. This distinction is of vital importance to the conduct of war, which has only one legal objective: to defeat the enemy. The respondents unanimously contended that any usage in South Africa would have contravened the general rules of war, inasmuch as they would have been indiscriminate and disproportionate. International law can be distinguished from municipal law by the fact that it does not possess a constitutional mechanism to create law. The sources of international law are codified in Article 38 of the Statute of the International Court of Justice.[9] The law of treaties and the sources of international law together contribute towards the regime for international humanitarian law, which can be understood as the law of conduct between enemies in war. It is necessary that the term 'treaty' should be defined at the outset, because this research addresses South Africa's accession to the Treaty on the Non-Proliferation of Nuclear Weapons, which is regarded as a pre-eminent instrument of international law.

The International Law Commission defined a treaty as:

"... any international agreement in written form, whether embodied in a single instrument, or in two or more related instruments, and, whatever its particular designation (treaty, convention, protocol, covenant, charter, statute, act, declaration, concordat, exchanges of notes, agreed minute, memorandum of agreement, *modus vivendi* or any other appellation), concluded between two or more States or other subjects of international law".[10] [11]

The Treaty on the Non-Proliferation of Nuclear Weapons is a law-making treaty that has led to the creation of norms regulating the conduct between

[9] United Nations Charter Articles 92–96 .
[10] *Yearbook*, International Law Commission (1962), ii at 161.
[11] United Nations Charter Article 93(1).

states. Resolutions reached at the General Conference of the International Atomic Energy Agency are binding upon members. The NPT specifies uniform terms and conditions for the parties that have acceded to this treaty. These terms and conditions are subject to constant modification and adaptation in accordance with the development of nuclear innovation. The NPT has created general norms for future conduct between parties in terms of legal propositions.

1.2 Historical Background – The Evolution of South Africa's Nuclear Weapons Capability

The chronology of South Africa's nuclear weapons programme is not controversial, and a detailed explication of it has been presented by Zondi Masiza.[12] There are four time-lines that underpin this research. The first pertained to the beginning phase, when South Africa developed its nuclear arsenal. This period was from 1977 to 1989. It was the time of the wars in Angola, Mozambique and Zimbabwe and turmoil among the Frontline States, where international humanitarian law obtained.

The second time-line was the relinquishment period from September 1989 to 23 March 1993, when the final announcement of South Africa's accession to the NPT was made. This time period was characterised by growing peace in Angola, Namibia, Mozambique and the Frontline States, and international law still obtained. The third time-line is from 23 March 1993 to 8 July 1996, when the International Court of Justice (ICJ) rendered its seminal Advisory Opinion on the Legality of the Threat and Use of Nuclear Weapons. The focus on the ICJ's Advisory Opinion on the Legality of the Use by a State of Nuclear Weapons in Armed Conflict will be used throughout the research to provide a perspective of South Africa's status in terms of international law.

[12] Masiza, Zondi. 1993. 'A Chronology of South Africa's Nuclear Program'. *The Nonproliferation Review*, 35–55, Fall.

The fourth time-line is from 1996 to 2003. 2003 witnessed the Second Iraqi War start with the allied invasion of that country. The following discussion will be devoted to placing the overall timelines into the context of the research as certain phases of the nuclear weapons programme are more relevant to this research than others.

1.2.1 The Development of the Vastrap Nuclear Test Site in the Kalahari Desert until the Decision to Relinquish the Nuclear Arsenal in September 1989

In the beginning phase of the research, Mr Pik Botha was the primary original source of information and authority. The literature review substantiates the entire thrust of his oral feedback. The period leading up to the core focus of the research can be regarded as starting in 1977, when construction commenced on the Koeberg nuclear power station in Melkbosstrand, about twenty kilometres outside Cape Town, and when the Soviet Union located two hitherto unknown South African nuclear test silos situated at Vastrap in the Kalahari Desert.[13]

In 1977 a Soviet satellite identified and photographed South Africa's nuclear test site at Vastrap in the Kalahari Desert. The Russians informed the United States of America about this development in terms of their obligations arising from the Strategic Arms Limitation Treaty, and handed over the photographs of this military nuclear installation to the USA. The USSR requested the US to follow up on this matter because, inter alia, the Soviet Union and South Africa were in a state of war in Angola. This period coincided with the administration of President Jimmy Carter, in the USA. It was also in 1977 that South Africa was denied its seat on the board of the International Atomic Energy Association, and Egypt took its place.

[13] Confirmed during interview with Mr Pik Botha in Pretoria North on 18 February 2008.

1.2.2 The Core Phase of Relinquishment and its Legitimising Function with respect to the Constitutional Negotiations

The core relinquishment phase began in September 1989 and ended on 23 March 1993. It was in September 1989, approximately two weeks after Mr FW de Klerk had assumed the Presidency of South Africa, that he called for a meeting at the Union Buildings in Pretoria. Professors Waldo Stumpf and Wynand Mouton were in attendance, as were Mr Pik Botha, Dr Neil Barnard and others.

Mr de Klerk informed this meeting that he would turn South Africa into a constitutional democracy. He instructed those present that South Africa's nuclear arsenal should be relinquished, and that the country should accede to the Treaty on the Non-Proliferation of Nuclear Weapons. South Africa's 'point of accession' to the Non-Proliferation Treaty was 10 July 1991. Professor Waldo Stumpf revealed that Mr de Klerk withheld the public announcement of accession to the NPT for almost two years (20 months) after the point of accession until 23 March 1993, because he needed to manage two crucial issues. The first was the danger of being sucked into the Iraqi conflict by association and perceptions. Both South Africa and Iraq were regarded as pariah States, but for entirely different reasons. Although South Africa had never breached the NPT as such, the premature announcement of its nuclear capability and intentions could have induced a proliferation panic.[14] It could also have led to the non-recognition of the at that time putative constitutional settlement.

The second issue was that Mr de Klerk needed to manage the equally volatile internal perceptions within South Africa in order to ensure the smooth conclusion of the constitutional transition. There was sufficient

[14] It is the researcher's view that South Africa, although it had not signed the NPT, was probably a party to the NPT by virtue of its conduct. Ian Brownlie op cit (2003) at 13 asserts that treaties like the NPT "are in principle only binding on parties, but the number of parties, the explicit acceptance of rules of law, and, in some cases the declaratory nature of the provisions produce a strong law-creating effect at least as great as the general practice considered sufficient to support a customary rule. By their conduct non-parties may accept the provisions of a multilateral convention as representing general international law: this has been the case with the Hague Convention IV of 1907 and the rules annexed relating to land warfare. Even an unratified treaty may be regarded as evidence of generally accepted rules, at least in the short run".

potential alienation within his own party, the political parties on the far right, the liberal opposition, the African National Congress, the Communist Party, the United Democratic Front and the Pan African Congress to scupper the constitutional negotiations, which would have raised the very real risk of South Africa veering off into a vicious racial civil war.

The reason for Mr de Klerk's instructing the delegates at that September 1989 meeting that South Africa should accede to the NPT was that this was crucial to affording legitimacy and credibility to the constitutional transition that was being negotiated at that time. In short, it was to assist in securing international recognition for the new constitution. South Africa would in so doing regain inter alia its seat on the IAEA. The announcement of South Africa's relinquishment of its nuclear arsenal and accession to the NPT would have the full authority of the Security Council and the General Assembly of the United Nations.[15] The South African expert sample contained in this research was cognisant and respectful of the IAEA's legal personality.[16] [17] South Africa's relinquishment of its nuclear weapons and accession to the NPT would therefore also receive the support of the five Nuclear-Weapons-States (NWS), which are the United States of America, the United Kingdom, the Russian Federation (previously the Soviet Union), China and France. The relinquishment process could be understood as a necessary baptismal ritual of comity that would afford credibility and recognition to the birth of the new constitutional democracy that was being negotiated at the same time as the events contained in this research were unfolding.

It is important to note that Mr Nelson Mandela was informed on 23 March 1993 for the first time as a *fait accompli* that South Africa had developed a

[15] Dugard op cit (2007) at 1 confirms that the ICJ stated: "That is not the same thing as saying that it is a state, which it certainly is not, or that its legal personality and rights and duties are the same as those of a state. Still less is it the same thing as saying that it is a 'super-state' … what it does mean is that it is subject to international law and capable of possessing international rights and duties, and that it has capacity to maintain its rights by bring international claims."
[16] *Reparation for Injuries Suffered in the Service of the United Nations*, 1949 ICJ Report 174 at 179.
[17] *Statute of the International Atomic Energy Agency* (29 July 1957). [Online]. Available: http://www.iaea.org/about/statute.html

nuclear arsenal, relinquished it and acceded to the NPT. This was nearly two years after South Africa had reached the point of accession to the Treaty on the Non-Proliferation of Nuclear Weapons on 10 July 1991.

Mr Mandela was entirely excluded from all aspects of the relinquishment and accession process up to the time of the announcement, as it was considered that his involvement in this process might have intruded upon South Africa's process of achieving international constitutional recognition. This confirms that the relinquishment process and accession to the NPT were conducted quietly by a unilateral decision. The African National Congress, which was effectively the regime-in-waiting, was excluded from this decision from alpha to omega.

1.2.3 The Concluding Phase: Accession to the Treaty of Pelindaba in 1994

In 1994 the Treaty of Pelindaba was signed. This Treaty made the entire African continent a nuclear-weapons-free zone.[18] It articulated the opinion, expressed by the International Court of Justice two years later on 8 July 1996 when it presented its Advisory Opinion on the Legality of the Use or Threat of Nuclear Weapons, that there was a great imperative to turn the entire world into a nuclear-weapons-free zone. The Advisory Opinion of the ICJ is the most authoritative assessment presented to date of the law as it pertains to nuclear weapons.

1.2.4 The Failed Mission to Iraq to Offer Advice on a Possible Methodology to Relinquish their Weapons

The final phase of this research is devoted to a comparative assessment of how South Africa and Iraq set about relinquishing their respective nuclear arsenals and addressed these accession processes. Mr Thabo Mbeki, the then President of South Africa, called a meeting in 2003, about two weeks before the United States of America and Great Britain invaded Iraq. He instructed that a South African team which was expert in the

[18] Op cit Goldblat at 18.

relinquishment of weapons of mass destruction, and which had led the accession to the NPT, should visit Iraq and inform the Iraqis about the methodologies that had been applied in South Africa to relinquish its weapons of mass destruction and accede to the NPT. The purpose of this meeting was to forestall the allied invasion of Iraq.

This attempt at providing a knowledge transfer from South Africa to Iraq failed. A comparative analysis of the relinquishment and accession processes of these two countries was subsequently conducted in order to derive a clearer indication of why this knowledge transfer failed, with the objective of overcoming these weaknesses in approach in possible future instances of a similar nature.[19]

1.2.5 Contextualisation of Historical Background

It is a little known fact that South Africa designed and developed six-and-a-half Hiroshima-strength "nuclear devices that were suitable for testing".[20] These were in a state of 'testing readiness' in the late 1980s, but were not operationally ready.[21] According to Wynand de Villiers, Roger Jardine and Mitchell Reiss: "South Africa is the world's first instance of nuclear rollback, a state which has unilaterally and voluntarily relinquished nuclear weapons."[22]

South Africa did not ever stand in contravention of the NPT because it was not party to this Treaty prior to acceding to it.[23] De Villiers, Jardine and Reiss asserted that South Africa's nuclear programme germinated from

[19] Chapter Seven is dedicated to conducting a comparison of how South Africa and Iraq relinquished their nuclear weapons in terms of their relative compliance with United Nations Security Council Resolutions. The research intention here is to try to discover whether the knowledge developed in one context could be transferred to another context.
[20] Professor Waldo Stumpf offered a comprehensive critique of the researcher's research proposal on 13 December 2007. This statement was contained in that critique.
[21] Op cit Stumpf.
[22] de Villiers, Wynand, Jardine, Roger & Reiss, Mitchell. 1993. 'Why South Africa Gave Up the Bomb'. *Foreign Affairs*, 99–100, November/December.
[23] Shelton, Garth. 2000. 'South Africa and the Nuclear Non-Proliferation Treaty: Bridging the North-South Divide on Nuclear Weapons'. Conference Proceedings on Nuclear Disarmament and Non-Proliferation: The Role of the Nuclear Non-Proliferation Treaty (NPT), Jan Smuts House, University of Witwatersrand, Johannesburg, South Africa. 29 March.

the local availability of large uranium deposits which were coveted by the United States and Britain for use in the Manhattan Project during World War II and in the subsequent Cold War period. South African uranium was sold to the Combined Development Agency, which was essentially a uranium procurement agency established co-operatively between Washington and London with the goal of securing uranium supplies for, inter alia, their nuclear weapons programs.

South Africa established its own indigenous nuclear research and development programme during the 1950s as a result of an informal, and perhaps unintended, knowledge exchange acquired from transacting with the Combined Development Agency in securing uranium supplies for the USA and the UK. The development of an indigenous nuclear and technological capability and competence inspired the South African government to construct a pilot uranium-enrichment plant. It was opened in 1969 and named the Y Plant. It was situated at Valindaba, which is approximately 20 kilometres from Pretoria. After the Y Plant had been constructed, the peaceful industrial remit of South Africa's nuclear programme was supplemented to design nuclear weapons and source, design and construct the associated materials required by such programmes.[24]

The beginnings of the South African nuclear programme were inspired by a peaceful industrial and commercial intention, with an initial focus on potential mining applications. After the peaceful nuclear programme had reached its apex, the scope of the nuclear project gradually crept outwards to include a military and nuclear weapons remit as well. The development of South Africa's military nuclear capability coincided with South Africa's growing involvement in the wars in Angola and Mozambique, the independence struggle in Namibia, the bush war in Rhodesia, and the growing civil unrest in South Africa itself, in protest against apartheid.

[24] Op cit De Villiers et al.

"Two approximately 200-metre-deep test shafts were eventually drilled at Vastrap in the Kalahari Desert. These facilities were prepared for a cold test – that is, one without HEU – carried out in order to check the device's non-nuclear components, logistics and instrumentation. A Soviet satellite's discovery of the Kalahari site in August 1977, with later confirmation from US reconnaissance, aroused vehement international protest."[25]

The tenor of these protests was extremely serious. The Soviet Union and the United States were in consensus that South Africa's nuclear programme could evolve to become a threat to world peace.

Mr Pik Botha, the South African Minister of Foreign Affairs at the time, received the US's formal protest about South Africa having developed this nuclear test site. This vehement international protest against South Africa's nuclear weapons programme came with the full backing of the Soviet Union[26] and occurred concomitantly with the increasingly strident ANZAC protests against the French for conducting nuclear tests in the South Pacific Ocean. Pretoria abandoned the notion of conducting a nuclear test, but they did persist with developing six-and-a-half nuclear bombs. There remained a residue of senior personnel within ARMSCOR and the South African Defence Force (SADF) who maintained the dream of conducting a nuclear test explosion, in spite of the international protests and the negative political consequences that would almost inevitably have ensued.

The reality of mandatory sanctions, intense international protest, approbation, and opposition did not retard the development of the nuclear arsenal in South Africa. It may have even encouraged its development by creating a siege mentality among the South African militarists. The nuclear weapons programme quietly continued in spite of international condemnation.

It is noted that parastatal corporations like ARMSCOR have a form of international legal personality and are in fact able to make arms

[25] Loc cit.
[26] Interview with Mr Pik Botha in Pretoria North on 18 February 2008.

agreements with foreign governments. ARMSCOR sold G5, G6 and other military artillery and hardware to Iraq in the 1980s. These weapons had been battle-tested and were very sophisticated, in their time. The armaments transactions with Iraq did little to engender trust in the integrity of the South African regime. It begged the question – *petitio principii*: If South Africa could transact with Saddam Hussein and sell G5 and G6 artillery to Iraq, surely they could also proliferate nuclear weapons and technology to Iraq, or any other nation, should they so choose?

Although the theory is not generally accepted, some jurists have contended that state corporations such as ARMSCOR should be treated on the international plane. This is because municipal law is often silent on matters of international law, such as weapons transactions. Brownlie makes the point, though, that "[i]n principle, corporations of municipal law do not have international legal personality. Thus a concession or contract between a state and a foreign corporation is not governed by the law of treaties".[27]

In the report on *Reparation for Injuries Suffered in the Service of the United Nations*,[28] it was found that the United Nations and its organs did have international legal personality. Hence the IAEA had international legal personality, which authorised its weapons inspections in South Africa.

De Villiers, Jardine and Reiss confirmed:

"The Y plant yielded its first HEU in January 1978, and the first fully assembled nuclear device was completed the following year. In July 1979 an Action Committee appointed by President PW Botha recommended the manufacture of six additional nuclear devices, for a total of seven, the first of which was designed for a fully instrumented underground test. It also advised that the development and manufacture of nuclear weapons be transferred to ARMSCOR, the South African arms manufacturing corporation. The atomic energy programme would supply the HEU and conduct the necessary nuclear research. It has been estimated that each nuclear device used 50 to 60 kilograms of HEU and had a yield

[27] Op cit Brownlie at 65.
[28] *Reparation for Injuries Suffered in the Service of the United Nations*, 1949 ICJ Reports 174.

of 10 to 18 kilotons. They were never stockpiled in assembled form; the nuclear and non-nuclear components were stored separately in concrete and steel vaults. The assembly and testing of each device required four codes. Three senior officials each held one code and only the head of government knew the fourth code. Consequently, no single person could activate the devices. Some sources have suggested that the explosives could have been dropped from modified Buccaneer bombers by the South African Defence Force."[29]

Dr Neil Barnard, the Director of the National Intelligence Service at that time, confirmed this assertion. He contended that:

"Two Buccaneer bombers were converted to have the capacity to carry nuclear bombs. They were painted underneath with a special paint to protect the crew from fall-out from the bomb once it was dropped.

The same precaution was actually taken with the B29 bombers that carried nuclear bombs during World War II in order to protect the US planes and their crews. There was a plan in the military to develop a viable delivery system. A Buccaneer bomber had paint modifications conducted on its under-belly to cope with an explosion of a nuclear bomb."[30]

Adolf von Baeckmann, Garry Dillon and Demetrius Perricos had expert knowledge about South Africa's nuclear programme because of their involvement in the IAEA's inspection regime in this country.[31] They articulated the contractual responsibilities that existed between ARMSCOR, the AEC and the South African Defence Force under South African municipal law:

"It was in 1979 that the responsibility for the nuclear weapons programme was transferred to ARMSCOR, while the AEC was made responsible for the production and supply of HEU and for the theoretical studies and some development work in nuclear weapons technology. ARMSCOR's principal nuclear weapons activities were carried out in the so-called Circle facilities, located some 15 kilometres away from the AEC's establishment at Pelindaba. The Circle facilities were constructed during 1980, on the basis of designs provided by the AEC and was commissioned in May 1981. The nuclear programme thus established involved:

[29] Op cit De Villiers et al at 100.
[30] Interview with Dr Neil Barnard at the Chameleon Restaurant in Plattekloof, Cape Town on 29 October 2007.
[31] Adolph von Baeckmann was the former Director of Safeguards at the IAEA. Garry Dillon was a senior staff member and later served as a leader of the IAEA's Iraq Action Team, and Demetrius Perricos served as a director of the IAEA on the South African project.

- The development and production of a number of deliverable gun-assembled devices;
- Lithium-6 separation for the production of tritium for possible future use in boosted devices;
- Studies of implosion and thermonuclear technology;
- Research and development for the production and recovery of plutonium and tritium.

In September 1985, the South African Government decided to limit the scope of the programme to the production of seven gun-assembled devices, to stop all work related to possible plutonium devices and to limit the production of lithium-6; however, it allowed further development work on implosion technology and theoretical work on more advanced devices."[32]

The testing device was intended for usage at the facility at Vastrap in the Kalahari Desert, where its contemplated purpose was for deployment in an underground test. The nuclear weapons programme reached its technical apex in 1987. At this time South Africa was subjected to mandatory sanctions by the United Nations and accorded a pariah international recognition status. The decision to relinquish the nuclear weapons programme and accede to the NPT was driven by Mr de Klerk's need to re-frame this pariah recognition status into a positive status by invoking an internationally-credible constitutional transition in South Africa. Mr de Klerk used the opportunity to relinquish the nuclear arsenal and accede to the Treaty on the Non-Proliferation of Nuclear Weapons as part of his 'legal methodology' for achieving constitutional legitimacy.

"The first prototype deliverable device had been completed in December 1982, but it was not until August 1987 that the first qualified production model was completed. The delay was largely due to the implementation of a rigorous engineering qualification programme directed towards safety and security under a wide range of postulated storage, delivery, and accident scenarios. When, in November 1989, the decision was taken by the Government to stop the production of nuclear weapons, four further qualified deliverable gun-assembled devices had been completed and the HEU core and some non-nuclear components for a seventh device had been fabricated. On 26 February 1990, the State President issued a written instruction that, inter alia, all existing nuclear devices were to

[32] von Baeckmann, Adolph, Dillon, Garry & Perricos, Demetrius. 1995. 'Nuclear Verification in South Africa'. *IAEA Bulletin*, 1:47.

be dismantled and the nuclear weapons were to be melted down and returned to the AEC in preparation for South Africa's accession to the NPT."[33]

South Africa's policy of nuclear deterrence provided the reason for justifying the development and construction of six-and-a-half nuclear weapons. The policy of deterrence was rationalised by South Africa's ever-intensifying involvement in the war in Angola, which was regarded as a proxy war with the Soviet Union.[34] [35] For this reason, South Africa's conventional approach to armaments escalated into a nuclear deterrent approach. It coincided with a deteriorating regional military scenario and a consequent increase in insecurity.

The United States of America withdrew all 'formal military support' to South Africa after the Clark Amendment (US 1975, 1976) was passed.[36] South Africa discovered that it was fighting a war with massive asymmetries in weapons capability. It was pitted against the military might of the Soviet Union, which was a military superpower.[37] [38] A deep sense of insecurity inspired the creation of the indigenous nuclear weapons programme.[39] The programme was also pursued because it was associated with international scientific prestige.[40]

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[33] Op cit Von Baeckmann.
[34] This type of rationalisation is explored in York, Herbert. 1987. *Does Strategic Defence Breed Offence?* Centre for Science and International Affairs. Lanham: Harvard University, University Press of America.
[35] Shubin, Vladimir. 2008. *The Hot "Cold War": The USSR in Southern Africa*. London: Pluto Press.
[36] Richard (Dick) Clark authored the Clark Amendment. This was actually an amendment to the US Arms Control Act of 1976. This Act affords the President of the United States the authority to control the import and export of defence articles and services. It requires governments that receive weapons from the United States to use them for legitimate self-defence. The Clark Amendment barred aid to groups engaged in military or paramilitary operations in Angola.
[37] Pabian, Frank. 1995. 'South Africa's Nuclear Weapons Program: Lessons for U.S. Nonproliferation Policy'. *The Nonproliferation Review*, Fall.
[38] Reiss, Mitchell. 1996. 'Nuclear Rollback Decisions: Future Lessons?' Proquest International Academic Research Library. *Arms Control Today*, 25(6):10–16, July.
[39] Liberman, Peter. 2001. 'The Rise and Fall of the South African Bomb'. *International Security*, 26(2), Autumn.
[40] The matter of scientific prestige in inspiring the development of South Africa's military capability is explored by Seegers, Annette. 1996. *The Military in the Making of Modern South Africa*. London: I.B. Taurus.

General Magnus Malan's autobiography shows that protocols were set in place by the Witvlei Ministers Committee, for the operational deployment of nuclear weapons as well. This is at variance with the testimony of the respondents. The Witvlei Ministers Committee consisted of a security committee whose Ministerial members were vested with oversight responsibility for the nuclear programme.[41]

General Malan maintained that:

"In order to co-operate in the matter of responsibility for and management of the nuclear weapons question and the NPT, the so-called *Witvlei Committee* was created in 1978 under the chairmanship of the Prime Minister at the time, PW Botha.

The committee officially approved the continued development of a nuclear bomb, and indicated that its use as a weapon should be avoided. *However, if it had to be used in exceptional circumstances, the Head of State, together with his most senior ministers, would have the final say in the matter* [researcher's italics]. The committee was, however, unanimous that this technological and scientific feat should be used mainly to place South Africa in a position of power and authority, particularly in any future political or other major international negotiations."[42]

A careful reading of Malan's language is that '*exceptional circumstances*' may possibly have justified military usage, that is, if it was deemed by this committee that the very existence of the South African state was at risk. It should be evident from General Malan's reasoning contained in the above citation that although the Witvlei Ministerial Committee viewed deterrence as the most desirable option to be pursued, they also put into place an operational nuclear option which could escalate into action should the political deterrent scenario fail. The Witvlei Committee developed the official government nuclear weapons strategy.

Waldo Stumpf confirmed that the three-phase nuclear weapons strategy stated:

[41] Malan, Magnus (General). 2006. *My Life with the SA Defence Force*. Pretoria: Protea Book House. 216.
[42] Loc cit Malan.

- "Step 1: Policy of uncertainty – not inform anyone that we had a nuclear capability.
- Step 2: If the world did not help get the Cubans out of Southern Africa when they amassed in Angola, we would inform selected friendly countries, for example, the US and UK, about our nuclear capability.
- Step 3: If that did not work, then we would conduct an underground test to demonstrate this capability to the world.[43] [44]

There was no fourth step.[45] People have often said to me: 'Surely there was a fourth step?'

You should also understand that these nuclear devices were very crude. They were large. They were not designed as deliverable weapons. Although there were some people in ARMSCOR who were starting to make designs on these crude weapons to make them deliverable.

They were really crude devices. They were meant for underground testing. If you wanted to use them, you would have literally had to kick them out of the door of an aircraft." [46]

Step 1 was the only phase that was ever enacted. Steps 2 and 3 remained latent. The three-phase nuclear weapons strategy should be understood as official policy, and falling under the ambit of South African municipal law.

1.3 Mr FW de Klerk's Instruction to Relinquish the Nuclear Arsenal

Professor Waldo Stumpf was requested to attend the crucial September 1989 meeting in the Union Buildings in Pretoria only two weeks after Mr FW de Klerk had assumed the office of the President of South Africa. Stumpf confirmed that Mr de Klerk's actual instruction at the meeting was to:

[43] The matter of nuclear testing scenarios is explored by Ball, Desmond & Richelson, Jeffrey (eds.). 1986. *Strategic Nuclear Targeting*. Ithaca and London: Cornell University Press.
[44] The logic underlying the strategic and tactical use of conflict is explored by the Nobel Prize Laureate in Schelling, Thomas. 1960. *The Strategy of Conflict*. Cambridge, MA: Harvard University.
[45] This commentary by Stumpf was collaborated by the feedback from Mr Pik Botha.
[46] Interview with Professor Waldo Stumpf at the University of Pretoria, Minerals Science Building, Pretoria on 18 October 2007.

"... [d]ismantle the six devices, re-melt the HEU and return it to the AEC, and advise Government on the timing of accession to the NPT as a full Non-Nuclear-Weapon State (NNWS). On 26 February 1990 President de Klerk issued a written directive instructing that the nuclear weapons should be dismantled and that the programme should be terminated. The devices had been fully dismantled and the HEU re-molten into small ingots about two weeks before I advised the Government that accession to the NPT could then occur, as South Africa was now fully an NNWS. During the entire exercise, our brief from Mr de Klerk had been to follow the legal principles of the NPT to the letter and to not put a foot wrong. This was my brief and I followed it to the letter. The last HEU was only transported from ADVENA to the AEC on 5 and 6 September 1991. The location where the re-molten HEU was stored at the time of accession to the NPT on 10 July 1991 had no bearing on the NPT. What mattered was that the devices had been fully dismantled. The Safe-Guarding Agreement (SGA) is the instrument that the IAEA uses to ascertain and ensure compliance with the NPT. Signing an SGA does not in itself mean that compliance has been achieved. That only comes later, in our case in September 1993 at the General Conference of the IAEA and in November 1993 at the General Assembly of the United Nations, where South Africa was declared fully compliant with all the terms and conditions of the NPT".[47]

The relinquishment of the nuclear arsenal was conducted over a very short period of time. The essential task was performed over approximately 18 very important and little-appreciated months.

This process of nuclear roll-back was conducted in relative secrecy and most certainly by unilateral decision. The unilateral decision to disarm the nuclear programme was reached by President de Klerk at the same time that he reached the decision and enacted the multi-party and multilateral constitutional negotiation process by consensus.

Stumpf recollected:

"At his first meeting in September 1989 where I was asked to be present (only two weeks after he had taken office), Mr de Klerk stated that his Government would do two major things to make South Africa a respected member of the international community again. Firstly, the political process would be reversed to a full democracy and secondly, the

[47] Op cit Stumpf.

nuclear weapons programme would be reversed so that South Africa could accede to the NPT as an NNWS.'"[48]

Mr de Klerk succeeded in achieving these goals. The relinquishment process was initiated in dangerous and fragile times. It was just over two years later, on 24 March 1993, that President FW de Klerk, for the first time, publicly confirmed that South Africa had possessed a self-created nuclear capability, which he had instructed should be relinquished. He stated that this nuclear programme was intended to be of a limited deterrent capability.

1.3.1 South Africa's Recognition Crisis

The essential motive underlying Mr de Klerk's decision to relinquish the nuclear weapons and accede to the NPT was to secure international recognition of South Africa's constitutional transition, and to reverse its pariah status. At this juncture the reader needs to be presented with a brief exposition on the doctrine of non-recognition of states. South Africa had a recognition problem that existed at at least four levels. The first three were explicit recognition problems. The fourth was an implicit and potential recognition problem that might have arisen from the nuclear weapons and their capability. This exposition is predicated on the notion that a wrongdoer cannot derive legal rights from acts conducted in contravention of international law. South Africa's recognition crisis stemmed from certain acts which were invalid and therefore contrary to international law, and in contravention of the United Nation's four peremptory norms that permit for the non-recognition of a state.

John Dugard offered a useful exposition which clarifies these four peremptory norms alluded to above and offers coherence to the argument presented here:

"It is accepted that there are certain basic norms upon which the international order is founded and that these are peremptory and may not be derogated from under any

[48] Loc cit Stumpf.

circumstances. The modern law on non-recognition takes cognisance of this development. An act in violation of a norm having the character of *jus cogens* is illegal, and is therefore null and void. This applies to the creation of states and to the acquisition of territory. States are under a duty not to recognise such acts under customary international law, and in accordance with the general principles of law. Resolutions of the Security Council are, from a jurisprudential perspective, declaratory in the sense that they confirm an already existing duty on states not to recognise such situations. In practical terms such resolutions are essential as they provide certainty by substituting for the decision of an individual state a collective determination of illegality and nullity."[49]

- Firstly, the TBVC or Bantustan states were not recognised by any other states in the world other than South Africa. The TBVC states were established to deprive black South Africans of their South African citizenship. The justification for non-recognition of a state had its genesis in the invasion of Manchuria by the Japanese in 1932, which saw the Japanese establish a puppet state called Manchukuo in China. The United States declined to recognise this puppet state under the justification that it was achieved in violation of the Kellogg–Briand Pact (1928) ('The Great Treaty for the Renunciation of War'}. The League of Nations called upon all its members not to recognise this puppet state. The TBVC states were in an analogous position as regards international law. Because the TBVC states were established to deny black South Africans self-determination and their citizenship, they contravened two of the United Nations peremptory norms which have been accepted by the United Nations for the purposes of non-recognition, in Clauses (c) and (d): "[t]he prohibition of systematic racial discrimination and the suppression of human rights" as well as "[t]he prohibition of the denial of self-determination".[50] Dugard noted that "[j]urisprudentially, the doctrine of non-recognition is founded on the principle of *ex-injuria non oritur jus* – the principle that no benefit can be derived from an illegal act".[51]

[49] Op cit Dugard (2007) at 99–100.
[50] Loc cit.
[51] Ibid.

- Secondly, as a corollary to the above, the policy of apartheid that rendered the black citizens alien in the land of their birth afforded it a pariah status. The benefit of positive recognition would not be afforded to this illegal act. John Dugard pointed out that:

  "In 1977, the Security Council imposed a mandatory arms embargo on South Africa as punishment for its discrimination and repressive laws and practices and its acts of aggression against neighbouring states. Repeated recommendations of the General Assembly in support of wider economic sanctions[52] prompted states, individually and collectively, to isolate South Africa in the fields of trade, finance, sport, and culture. Although the effects of sanctions were not immediate, they undoubtedly contributed to State President FW de Klerk's decision to abandon apartheid in February 1990."[53]

- Dugard's paragraph cited above provides a distilled code or formulaic, for understanding why the matter of achieving international recognition for the constitutional settlement was so important to Mr de Klerk.
- Thirdly, South Africa's mandate to administer Namibia was not internationally recognised.
- Fourthly, its nuclear weapons status rendered it a threshold nuclear power. Had this nuclear status been generally known among the international public at the time of South Africa's transition to a constitutional democracy, this would have significantly complicated its pariah international recognition status. More specifically, had South Africa proceeded to enact Step 3 of its nuclear strategy and conducted an underground nuclear explosion, to both test and demonstrate to the world that it had a nuclear weapons capability, such a test and demonstration would probably have been construed to be contrary to Clause (a) of the peremptory norms recognised by the United Nations for the purpose of non-recognition namely; "(a) The [t]he prohibition of aggression".[54] One could furthermore contend that the use of territory to conduct nuclear tests which

[52] Resolutions 232 (1966), 235 (1968), 418 (1977).
[53] Op cit Dugard (2007) at 7.
[54] Op cit Dugard (2007) at 99–100.

renders such territory toxic, blighted and unusable for human habitation and agriculture for thousands of years into the future could be construed as contravening Clause (b) of the United Nation's peremptory norms pertaining to the non-recognition of states as the nuclear test would arguably have been in contravention of "[t]he prohibition of the acquisition of territory by means of force"[55] This argument would probably not have been valid had such tests been conducted in South African territory, but might have been applicable had they been conducted in the Namib Desert or another part of Namibia, or on the high seas, for example.

These four matters interacted to create a serious pariah recognition status dilemma for South Africa. If South Africa had retained its nuclear arsenal, it is conceivable that the doctrine of non-recognition with respect to the newly-negotiated Constitution might have come into effect.

With respect to the question of the Responsibilities of States for Internationally Wrongful Acts, John Dugard asserts:

"The above doctrine of non-recognition is indorsed by the International Law Commission's 2001 draft articles on the Responsibilities of States for Internationally Wrongful Acts. Articles 40 and 41 provide that no state shall recognise as lawful a situation created by a serious breach of an obligation arising under a peremptory norm of international law."[56]

Dugard pointed out South Africa's international recognition status during the apartheid years was also signified by a wide range of economic sanctions about this racial policy. Dugard's assertion is collaborated by the testimony of the respondents, and is cited in the relevant chapters of this research.

[55] Ibid.
[56] Ibid.

1.4 South Africa's Purposeful Delay of Accession to the NPT

Mr de Klerk was cognisant of the need for meticulous timing and synchronising of South Africa's accession to the NPT harmoniously with world events, and particularly the events that were associated with the position of Iraq in the Gulf War. During the course of 1991 to 1993, the Gulf War in Iraq created a very serious problem that could have impeded or even perhaps negated South Africa's pursuit of international recognition, which would have legitimated the constitutional transition. The Security Council's authorisation of the allied invasion of Iraq was legitimated by the fact that Saddam Hussein had used weapons of mass destruction against the Kurds in the Iran–Iraq war and that he did have a nuclear weapons programme at that time.[57] Both Iraq and South Africa had pariah international recognition status.

South Africa did possess weapons of mass destruction and specifically held a nuclear arsenal and nuclear bomb-making facility. These were not widely known. Mr de Klerk's deep fear was that the fact of nuclear possession could be conveyed to the international media in a manner that would create a chaotic situation along the lines of that which played itself out in Iraq.[58] With this disclosure, South Africa could easily have been perceived in the media as a threat to world peace. Apartheid and the racial conflict were internal affairs, but if it became known that South Africa possessed nuclear weapons in those fragile times, it could conceivably have become a very public international affair. South Africa had confirmed violations of international law relating to apartheid and restricting the right to self-determination. Disclosure of this nuclear weapons status would

[57] See for example Resolution 687 (1991) of the United Nations adopted by the Security Council at its 2981st Meeting on 3 April 1991: "Concerned by reports of Member States that Iraq has attempted to acquire materials for a nuclear weapons programme contrary to its obligations under the Treaty on the Non-Proliferation of Nuclear Weapons of 1 July 1968. Recalling the objective of the establishment of a nuclear-weapons-free zone in the region of the Middle East. Conscious of the threat that all weapons of mass destruction pose threats to peace and security in the area and of the need to work towards the establishment in the Middle East of a zone free of such weapons. Conscious also of the objective of achieving balanced and comprehensive control of armaments in the region."

[58] Aristotle in *Rhetoric* referred to the concept of "syzygy" as a source of influence. It pertained to how one is yoked to cosmic circumstances. Iraq could have exerted an extremely dangerous syzygy upon South Africa, because its conflict could have expanded across borders.

have provided the media with a plausible but incorrect case that South Africa was acting in breach of the NPT. It would have placed the country in a 'gallery of rogues'. In addition, Mr de Klerk was at that time in a tenuous situation with respect to his own political party. Members of the far right were deeply opposed to these constitutional negotiations, as they sought the retention of apartheid and political power. Had the decision to relinquish the nuclear arsenal and accede to the NPT been prematurely or inappropriately disclosed, the right wing might have used this as 'grist to the mill' and might have subverted the constitutional transition. The situation was so precarious that Mr de Klerk called for the last whites only general election to gain a mandate from his constituency to proceed with the constitutional negotiations. There was no assurance that he would receive this mandate from his party. The delays in acceding to the NPT therefore arose from international events and the internal status of South African politics. It was for this reason that Mr de Klerk purposefully delayed South Africa's accession to the NPT on various occasions, because his judgment was that the timing was not correct.

Stumpf clarified that:

"The reason for the delay between acceding to the NPT in July 1991 and the public announcement of the relinquishment of the nuclear weapons and accession to the NPT until 23 March 1993 resided in two serious concerns:

- It was at that time that the First Iraqi War (the Gulf War) was raging. The South Africans were concerned that the international news media would tar them with the same brush as Iraq because both were pariah states. The South Africans feared that they would unfairly be portrayed as having broken the NPT in spite of the fact that they had not acceded to it at that stage and were thus not party to it. The worry was that the 'international public' would not have understood this legal difference and would have branded South Africa as 'another Iraq';
- The internal political transformation process was at a very delicate stage (it was before Mr de Klerk got the overwhelming mandate from the white electorate in a referendum to proceed with his political reforms) and he was uncertain about how the news would be accepted."[59]

[59] Op cit Stumpf.

The United Nations Security Council had authorised the Gulf War under international law because of Iraq's illegal invasion and occupation of Kuwait.[60] It was reasoned that if South Africa had retained the nuclear weapons and the associated capabilities, in the context of deteriorating internal stability and international proliferation fears, South Africa might have been deemed by the Security Council to constitute a threat to world peace. It is clear that a quite compelling argument and a credible scenario could be composed from this, legitimating a United Nations Security Council authorised military intervention in South Africa.

An important concern was that the factual issues that pertained to the negative case of Iraq would be incorrectly imputed to South Africa in the world media. South Africa might in this way have been severely compromised by this incorrect understanding of international law.

1.5 The Broader Historical Context of Nuclear Relinquishment and Accession to the Treaty on the Non-Proliferation of Nuclear Weapons – Nuclear Rollback in Argentina, Brazil, South Korea, Taiwan, Libya, Byelorussia, Kazakhstan and Ukraine – A Brief Exposition on Similarities and Differences

In this analysis it will be shown that the nuclear relinquishment process and accession to the Treaty on the Non-Proliferation of Nuclear Weapons processes in South Africa, Argentina, Brazil, South Korea, Taiwan, Libya, Byelorussia, Kazakhstan, and the Ukraine converged around the general themes of state recognition, constitutional continuity of states, deterrence, and seeking of both material and intangible concessions as quid pro quo for relinquishment and accession to the NPT from the Nuclear-Weapons-States. The relinquishment and accession processes and the subsequent formation of nuclear-weapon-free zones can all be regarded as part of a consensus focused multilateral international law making process.

[60] United Nations Security Council Resolution 678 authorised Member States of the United Nations to use all necessary means after 15 January 1991 to uphold and implement all relevant Security Council Resolutions and to restore international peace and security in the area.

Individual sovereignty was sublimated to the good of a greater international globalised statehood. Old laws were abrogated and new international law was codified by various and complex consensus-seeking methods.

Arjun Makhijan and Nicole Deller asserted that:

"One of the most extraordinary accomplishments of the NPT has been its role as the legal instrument through which several states' announced the rollback and termination of their nuclear programmes. Once they had done that, they acceded to the NPT as non-nuclear-weapons states. The NPT is also the only legal instrument which requires its parties, including nuclear weapons parties, to act to achieve complete disarmament."[61]

Makhijan and Deller's praise for the accomplishments of the NPT in achieving nuclear rollback and accession is generally confirmed in this analysis. The motives underpinning the decision to relinquish these nuclear weapons and accede to the NPT was that these states benefited far more from relinquishment and accession to the NPT than they would have from retaining these weapons. This discussion alludes to some of those costs and benefits.

This comparative international analysis of nuclear relinquishment and accession reveals that there is a 'pattern' between nuclear weapons acquisition, relinquishment and accession to the Treaty on the Non-Proliferation of Nuclear Weapons, and constitutional recognition. The change from competitive and conflictive interaction in the sphere of nuclear weapons research into co-operation and collaboration was one of the symptoms of this 'pattern', manifested in the painful transition to constitutional democracy in the countries alluded to here.

In the cases cited in respect of each country, one can generally, but not always, equate competitive and conflictive interaction in the realm of

[61] Mahijana, Arjun & Deller, Nicole. 2003. 'NATO and Nuclear Disarmament: An Analysis of the Obligations of NATO Allies of the United States Under the Nuclear Non-Proliferation Treaty (NPT) and the Comprehensive Test Band Treaty'. Institute for Energy and Environmental Research (IEER) Report/NATO and Nuclear Disarmament. 1–2. October. [Online]. Available: http://www.ieer.org/reports/nato/ch1.html

nuclear weapons with high levels of militarism and the suspension of civil liberties. South Africa, Argentina, Brazil, North Korea, and Libya seem to have fallen prey to this trend at the time that they attempted to develop their nuclear weapons capabilities.

Co-operative and collaborative interaction in the realm of nuclear weapons, particularly as they pertain to their relinquishment and accession to the NPT, can generally, but not always, be equated with an affirmation of constitutional recognition and endorsement of human rights. The motion of a state towards constituting democracy via nuclear relinquishment and accession to the NPT is almost always (if not always) a unique case, usually the motion is irregular, and the entire process may be understood under a broader ambit of transitional justice. There would appear to be an incremental and pendular pattern around the discovery of the theme of constituting democracy, via nuclear relinquishment and accession to the Treaty on the Non-Proliferation of Nuclear Weapons. A significant finding was that the theme of 'constituting democracy' was a clear motif associated with relinquishment and accession to the NPT in all of these countries. South Africa's constitutional rationale for acceding to the Treaty on the Non-Proliferation of Nuclear Weapons shared some parallels with the other states mentioned above.[62]

1.5.1 The Comparative Cases of South Africa, Argentina and Brazil

South Africa itself was a unique case in the development and relinquishment of nuclear weapons, as it is the only country in the world to have developed an indigenous capacity to manufacture nuclear weapons, and then to have rid itself of them in their entirety. South Africa went further than a research scenario of latently developing a nuclear weapons capability, as was the case with Argentina and Brazil. It developed and manufactured six-and-a-half nuclear bombs.

[62] Sung-Juo, Cho. 2005. 'Giving-Up to Survive: Domestic Conditions Under Which States Renounce Nuclear Weapons'. Prepared for delivery at the 2005 Annual Meeting of the American Political Science Association, Washington DC. 1–4 September.

South Africa is also the only state in the world which, having achieved this nuclear arsenal and capability, then unilaterally set about totally relinquishing this capability and concomitantly acceding to the Treaty on the Non-Proliferation of Nuclear Weapons. The nuclear weapons themselves, and all ancillary matters (including all the intellectual property) related thereto, together with the entire relinquishment process itself, was scrupulously verified and audited by the inspectorate of the International Atomic Energy Agency. All this material was relinquished. This verification procedure was undertaken by the IAEA in strict compliance with international law.

In substantiation, David Albright observed that:

"South Africa is the only country to voluntarily give up its nuclear weapons. Many other states, such as South Korea, Taiwan, Argentina, and Brazil, abandoned their nuclear programmes before they developed a weapons capability. However, South Africa's abandonment of its twenty-to thirty-year-old nuclear weapons programme remains unique."[63]

This discussion about the nuclear rollback in these countries is intended to provide the reader with an overview of the international pattern of nuclear relinquishment and accession to the NPT. This will assist in placing South Africa's nuclear relinquishment and accession to the NPT into an international context. The countries that have rolled back their nuclear weapons programmes are: Australia, Argentina, Byelorussia, Brazil, Egypt, Indonesia, Italy, Kazakhstan, Libya, Norway, Ukraine, Romania, South Africa, Sweden, Switzerland, Taiwan and Yugoslavia.[64]

The cases of Brazil and Argentina differed from that of South Africa because these countries did not develop any nuclear weapons, but they

[63] Albright, David. 2001. 'South Africa's Nuclear Weapons Programme'. Institute for Science and International Security, Washington DC. 14 March. [Online]. Available: http://web.mit.edu/sspseminars/wed_archives-01spring/albright.htm

[64] Report to the Committee of Foreign Relations, United States Senate. 2008. 'Chain Reaction: Avoiding a Nuclear Arms Race in the Middle East'. One Hundred and Tenth Congress, Second Session, Washington DC. 18. February.

did conduct research into the development of nuclear weapons.[65] During the 1970s Brazil and Argentina were both engaged in a Dirty War. South Africa, too, was engaged in a Dirty War at approximately the same time. In all of these countries (South Africa, Brazil and Argentina) the military complex had an extremely powerful hold on the government. While Brazil and Argentina were run by military juntas, South Africa was run by a highly-circumscribed and limited democracy where parliament was regularly bypassed by the State Security Council. Brazil and Argentina were similarly estranged regimes engaged in complex transitions from military ascendancy to civilian constitutionalism. They all shared the common theme of groping for an internally and internationally legitimate constitutional solution to their problems. South Africa, Argentina and Brazil were developing countries which were all ex-colonies struggling with serious Cold War ideological conflicts.

Although these countries were endowed with considerable natural wealth, their economies had been ruined by the subscription of their leadership to failed ideological formulae, ruinous economic policies and undermining of the judiciary by the executive. International relations were complicated by the fact that relationships between Argentina and Brazil were very mistrustful and competitive during this period as each competed for South American continental hegemony. This competition for dominance resulted in both Argentina and Brazil developing nuclear weapons research programmes, in a regional arms race. South Africa, by way of contrast, was not involved in an African arms race. It was, however, involved in a very real proxy war with the Soviet Union in Angola. This war was seen to be escalating, and the arms embargo encouraged an internal process of self-sufficiency with regard to weapons. This process of weaponisation became increasingly sophisticated in all branches of the military. One of the little-known areas where it reached very high levels of advancement was in the nuclear weapons programme, which was intended to act as a

[65] Doyle, James. 1999. 'Nuclear Rapprochement in Argentina and Brazil'. Workshop Summary, Los Alamos National Laboratory, Los Alamos, New Mexico. October.

deterrent to Soviet expansionism in Southern Africa and as a negotiation tool.

Both Brazil and Argentina were situated in a pre-weaponisation phase of nuclear development. They abandoned their respective nuclear weapons programme as their relations with one another gradually began to thaw in the 1980s. The thaw in the relationships between Argentina and Brazil occurred simultaneously with the waning of the power of the military regimes, and the return to civilian constitutional rule. On the basis of this initial very limited sample of what happened in these three countries, it would seem reasonable to conclude that militarily-inclined regimes would be more supportive of nuclear weapons programmes than civilian regimes would be. Perhaps this is because a military junta ultimately derives its 'legitimacy' from the threat of military force. It is the state defining itself as state. A civilian constitutional formulation typically seeks a more complicated and subtle source of legitimacy and authority- from the people. This authority also derives from the reciprocal goodwill and understanding of other states. In contrast to South Africa, Brazil and Argentina's nuclear weapons programmes were very elementary and not nearly as advanced as South Africa's.

The change of political leadership in all three countries (to De Klerk in South Africa, Neves in Argentina and Alfonsin in Brazil) saw the nuclear programmes in all of these countries being rolled back. One may therefore deduce that the decision to engage in developing a nuclear weapons programme and, alternatively, the decision to roll back and relinquish an already established nuclear weapons programme is largely a leadership decision based on support of the military or support of the civilians in a society.

Kevin Kieran offers a supportive synopsis of the reasoning contained in the argument developed above:

"The key factor in the two countries' (Brazil and Argentina) decisions to abandon their nuclear-weapons programmes was their eventual political rapprochement with one another. As in the South Africa case, leadership played a key role. In the mid-1980s, both countries elected civilian leaders for whom reconciliation was a priority. At the first meeting of the Argentine president-elect Neves and Brazilian president Alfonsin in 1983, the two agreed that nuclear co-operation would be given special priority. These visits enabled the governments to see that both nuclear programmes were in shambles … Bolstered by this new knowledge, the governments' pursuit of militarised nuclear technology was replaced by genuine co-operation. Mutual economic engagement further spurred the improvement of relations. In 1990, both countries announced they would implement full-scope IAEA safeguards, followed by the signing of the Treaty of Tlatelolco and subsequent accession to the NPT."[66]

Both Argentina and Brazil had been run by military juntas at the time of the development of their nuclear weapons programmes. These juntas became engaged in a competitive and potentially conflictive nuclear arms race with one another.

1.5.2 The Comparative Cases of South Africa, South Korea and Taiwan

South Africa's nuclear relinquishment process and accession to the Treaty on the Non-Proliferation of Nuclear Weapons bears comparison with South Korea's. South Korea was very concerned about United States 'disengagement' from the region and was insecure in its relationship with the People's Republic of China, not to mention North Korea. It was for this reason that South Korea embarked upon its nuclear weapons programme. Their reason for embarking upon a nuclear weapons programme was therefore analogous to South Africa's. The United States through inter alia the Clark Amendment made it clear that they would not officially support South Africa in conflict with the Soviet Union in Angola. Both South Africa and South Korea embarked upon this programme because of the United State's recalibration of their importance. For South Korea, it was both the People's Republic of China and North Korea that posed a threat and might

[66] Kiernan, Kevin. 2008. 'Why Do Some States Give up Nuclear Arsenals? Proliferation as Economic Bargaining'. *Bologna Center Journal of International Affairs*, 11, Spring. [Online]. Available: http://bcjournal.org/2008/why-do-some-states-give-up-nuclear arsenals/

fill the vacuum created by the withdrawal of US interests in the region. For South Africa, the fear was that the Soviet Union would fill this vacuum. This resulted in the logic underpinning the development of South Africa's nuclear capabilities.

The case of the accession to the NPT of South Korea and Taiwan is much more complicated than the case of Brazil and Argentina. While there was never any dispute about recognition between Brazil and Argentina, the People's Republic of China did not recognise the constitutional independence of Taiwan and regarded it as a renegade province of China itself. Taiwan constituted a clear case of nuclear weapons being used as a trade-off for state recognition. The recognition issue that pertained to Taiwan was similar to, but also very different from, that which pertained to South Africa. The common point is that both South Africa and Taiwan endured a recognition crisis. The history and reasoning underpinning these crises were totally different, but the symptoms were present in both.

In addition, South Korea and North Korea are constitutionally divided as a product of the Cold War, with significant yearnings for reintegration as a single state. South Korea itself is constitutionally stable and can be seen as having a similar economic power to that West Germany had in relation to East Germany prior to their reunification. The impoverishment of North Korea lends itself to comparisons with East Germany. The matter of the putative constitutional integration of South Korea and North Korea therefore pivoted on the question of nuclear weapons held by North Korea. It is military regime with a very weak economic base. Free association is not a feature of this state, which is bound by military force. North Korea represents a case of a military junta with a proven nuclear capability. The split between South and North Korea represents a geographically analogous, but politically and legally dissimilar, schism to the tensions that existed between Argentina and Brazil, which were subsequently dissipated by the conclusion of the Treaty of Tlatelolco, and later reinforced by the establishment of the MERCOSUR (Argentina)/MERCOSUL (Brazil)

regional trade agreement in Latin America.[67] Argentina and Brazil did not ever develop nuclear weapons, while North Korea has apparently done so. It is noted that Argentina and Brazil, North Korea, South Korea and the People's Republic of China are all in close regional proximity to one another, and it is asserted that this geographical proximity increased the tension associated with the development of nuclear weapons programmes.

Rebecca Hersman and Robert Peters conducted a comparative analysis of the South Korean and Taiwanese nuclear relinquishment processes. These authors contended:

"The decisions to abandon the pursuit of nuclear weapons by South Korea and Taiwan represent two of the most important cases of nuclear rollback during the Cold War. The cases differ in significant ways: While Taiwan's rollback emphasised capability reductions, South Korea's nuclear rollback mainly reflected changes in intent. One similarity was that despite their precarious security environments, both reversed their nuclear programs in the face of tremendous US pressure. The United States is likely to remain central to these states' future nuclear narratives to ensure that they do not restart their programs."[68]

It will be shown in the testimony of Mr Pik Botha, Professor Stumpf and Dr Neil Barnard that South Africa, too, was placed under extreme pressure by the United States to reverse its nuclear weapons programme.

Taiwan and South Korea developed their nuclear weapons capability because of the brooding omnipresence of China, which detonated its first nuclear weapon in 1964. South Korea's programme was developed competitively in conjunction with the mutually conflictive relations with North Korea. South Korea, North Korea, Taiwan and South Africa's nuclear programme can all be regarded as being rooted in a Cold War context. South Africa's insecurity arose from the military presence and capability of the USSR in the Angolan war. South Africa's relinquishment

[67] Dalton, Toby. 1998. 'Towards Nuclear Rollback in South Asia'. Proquest International Academic Research Library. *Current History*, 97:623, December.
[68] Hersman, Rebecca & Peters, Robert. 2006. 'Nuclear U-Turns: Learning from South Korean and Taiwanese Rollback'. *Non-Proliferation Review*, 13(3):1, November.

did not consist only of a capability reduction, as was the case with Taiwan; it involved the total dismantlement and destruction of the nuclear weapons capability. South Africa's nuclear relinquishment process was somewhat similar to South Korea's. South Africa sought United States support with respect to its involvement in the Angolan war, which pitted it against the military prowess of the Soviet Union, and South Korea, too, sought United States support against perceived threats arising from the People's Republic of China and a potential military involvement in North Korea.

South Africa and South Korea both displayed a fundamental reassessment in the calculation of the strategic value and costs associated with pursuing their respective nuclear weapons programme. The changed intention was signified in the pursuit of a non-racial and inclusive constitutional settlement and the termination of the regional war in Angola. Internal security concerns within South Africa did not justify a nuclear weapons capability. For South Korea, the economic growth and industrialisation within the People's Republic of China itself created opportunities for co-operation and collaboration between the two and diminished the perception of threat.

South Africa, South Korea and Taiwan all developed their nuclear programmes over similar time-spans, which coincided with Cold War tensions. One could assert that these nuclear weapons capabilities developed as mimicry of the superpower tensions that prevailed during the Cold War. Interestingly, all three countries intensified the development of their nuclear programmes in response to the perception and experience of the withdrawal of the umbrella of US military support.

The withdrawal of US support to South Africa via the Clark Amendment, which banned military aid during the Angolan war, created a sense of crisis with the political and military leadership of the country. The local line of thought that prevailed at the time was that this crisis could best be overcome by developing nuclear weapons as a major strategic deterrent, together with a high level of conventional military capability. The National

Party leadership decided to develop a nuclear deterrent capability with respect to the USSR. Taiwan reached a similar conclusion when it was marginalised by the United States of America's rapprochement with the People's Republic of China. Similar reasoning underpinned the development of South Korea's nuclear weapons policy, but in this case the driving force arose from North Korea's development of a nuclear arsenal.

Rebecca Hersman and Robert Peters asserted:

"In 1970, the United States began negotiating with the authoritarian South Korean government for the withdrawal of some US forces from Korean soil. Over the next few years, the United States withdrew 24 000 American troops from South Korea. This reduction, followed by the 1972 US rapprochement with the People's Republic of China cemented Seoul's view that it would soon be responsible for its own security and fueled support for a covert nuclear weapons program."[69]

The United States of America initially encouraged South Africa's peaceful nuclear programme and assured it of its support in the war in Angola, where the Soviet Union were the most important and powerful counterparts. South Africa's deteriorating internal circumstances which arose from the growing revolt against apartheid made it politically untenable for the US to continue supporting South Africa in the war in Angola. South Africa, like South Korea and Taiwan, felt abandoned, and hence developed an internal nuclear capability.

Rebecca Hersman and Robert Peters observed:

"The rollback of Taiwan's nuclear weapons program unfolded during a time of dramatic change in US relations with China – Taiwan's principle security concern. Despite its long-standing commitment to the island state, initially made manifest in a formal security guarantee, the United States regarded Taiwan's potential nuclear program as a major threat to regional security and US interests".[70]

[69] Op cit Hersman & Peters at 3.
[70] Op cit Hersman & Peters at 9–10.

There was a parallel change, and improvement in, the US–Soviet Union relationship with the collapse of the Berlin Wall, which rendered the South African nuclear weapons programme obsolete.

Rebecca Hersman and Robert Peters posed the questions:

"Why specifically did leaders in Seoul and Taipei forgo weapons programs? How important was Washington's role in fomenting rollback? Not surprisingly, the experts identified US security guarantees and foreign pressure as overwhelmingly important factors influencing rollback decision making in both Taiwan and South Korea; with the latter, the US guarantee was overwhelming important. Notably, with Taiwan, foreign pressure was the overwhelming factor, the US security guarantee taking second place. This outcome probably reflects the changing status of the US security guarantee for Taiwan during the rollback experience. Three other factors – impediment to development, net loss of security and international standing – were either influential or very influential in both cases. Most of the other factors were of limited or negligible importance. These outcomes drive home the importance of the United States in both Taiwan's and South Korea's rollback decision making".[71]

Mr Pik Botha concurred with the argument offered by Rebecca Hersman and Robert Peters. He asserted that Washington was very important in South Africa's relinquishment process, as were, to a lesser extent, Great Britain and Russia (the Soviet Union). The imperative to improve South Africa's international standing dramatically was in the researcher's view the most important single reason that underscored the relinquishment and accession process, as this improvement could encourage economic development, political stability, and international constitutional recognition.

1.5.3 The Cases of Byelorussia, Kazakhstan and Ukraine

The cases of Byelorussia, Kazakhstan and Ukraine are very different from South Africa and a comparison is therefore tendentious. This section will therefore be devoted to assessing these cases which arise from their unique historical and constitutional circumstances. They do share one common theme with South Africa and the previous comparative international cases that have been cited. They too suffered from deep

[71] Op cit Hersman & Peters at 10–11.

concerns about their international recognition status in the aftermath of the break-up of the Soviet Union and their reconstitution as states in their own right.

The nuclear weapons in Byelorussia, Kazakhstan and Ukraine were returned to Russia when these countries acceded to the NPT. The break-up of the former Soviet Union created a major nuclear proliferation threat which was obviated by the co-ordinated efforts of the International Atomic Energy Agency with the active support of the United Nations Security Council. These countries inherited nuclear weapons at the point of their birth as independent constitutional states. Hence, they are sometimes referred to as 'born-nuclear states'. It was reasoned that the inheritance of these nuclear weapons from the former USSR would intrude on and perhaps obviate their quest for constitutional sovereignty and international recognition as newly-independent states. The theme of constitutional recognition was a significant reason for accession to the NPT by South Africa, Taiwan, South Korea, Byelorussia, Kazakhstan and Ukraine. The researcher could not establish whether the matter of state recognition played any role in the case of Brazil and Argentina's accession to the NPT.[72]

Unlike in the case of South Africa, material economic incentives were offered to Byelorussia, Kazakhstan and Ukraine to relinquish their nuclear weapons inherited from the Soviet Union and accede to the NPT.[73] [74]

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[72] It would appear as though they pursued the nuclear weapons research because of competitive tensions that existed between them.

[73] According to Kevin Kiernan op cit: "The economic rewards of disarmament are particularly striking: in 1993 alone, economic subsidies to the Ukraine totaled $5 billion. Mitchell Reiss noted, 'For weapons that Ukraine did not control and had not built, it received (twice) American, Russian, and British security assurances, one hundred tons of nuclear fuel, forgiveness of its multibillion-dollar oil and gas debt to Russia, and a commitment of $900 million in U.S. financial assistance.' The other 'born-nuclear' weapons states were not as successful as the Ukraine in extracting compensation for dismantling their nuclear arsenals. Belarus was eager to dismantle simply to convince Russia to withdraw military personnel from its borders. Kazakhstan, too, was less successful because the Russians had been secretly 'rotating' the warheads in its SS-18 missiles leaving the Kazaks mainly with tactical nuclear weapons. Nonetheless, President Nazarbayev managed to obtain $84 million in dismantlement assistance, $200 million in economic investment over the period 1993–1996, and the promise of a tripling of US foreign aid in exchange for ratifying the NPT. Moreover, these opportunity costs represent a low estimate of the true amount of security, wealth, prestige the born nuclear states would have forgone failing disarmament:

There was also a natural humanitarian law aspect to the accession process in Byelorussia, Kazakhstan and Ukraine. Kazakhstan relinquished its nuclear arsenal because it had been used by the Soviet Union as a nuclear test ground. It is known that thousands of Kazakhs developed radiation illness, various cancers and dread-diseases and died as a result of these tests. The extent of these casualties is not yet clearly understood. Kazakhstan therefore relinquished its nuclear arsenal because it had brought misery and illness on its people.

In closing this discussion, it is noted that India, Israel and Pakistan have never acceded to the Treaty on the Non-Proliferation of Nuclear Weapons. Iraq and Libya have similarly tried to remain outside the scope of the NPT but have been unsuccessful in their attempt.

The point that needs to be made here is that the accession to the Treaty on the Non-Proliferation of Nuclear Weapons and exclusion from accession have not been addressed uniformly by the International Atomic Energy Agency and the Nuclear-Weapons-States. There are important contradictions that need to be noted. Why are Pakistan, India, Israel and North Korea entitled to develop nuclear weapons capabilities outside of the framework of the NPT? It is obvious that international politics influence this process of accession and exclusion. It is foreseen that this inconsistency in the rules could undermine the integrity of the NPT and potentially lead to very serious nuclear weapons proliferation threats. Pakistan, for example, is at the time of writing undergoing a period of severe instability with Taliban and Al Qaeda terror attacks being regular occurrences. The researcher's view is that the nuclear tensions between India and Pakistan are sublimated constitutional tensions arising from the partition of the countries, and are therefore comparable to the cases of North Korea, South Korea, Argentina and Brazil, and Taiwan and China. It is submitted further that Israel has an international recognition crisis and

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foreign aid and investment, not captured in the above analysis, would have been considerably lower."

[74] Op cit Kiernan at 6–7.

its nuclear programme can be regarded as a military manifestation of its constitutional dilemma.

In 2003, Libya succeeded in gaining recognition from the United States of America and Great Britain as a trade-off for relinquishing its nuclear weapons programme and acceding to the NPT.[75] Libya's development of nuclear weapons capabilities and subsequent relinquishment resulted in a material and intangible benefit for that country.

1.6 The Legal Status of South Africa's Nuclear Weapons

The corpus of international law pertained to the discrete phases associated with:

- South Africa's creation of a nuclear arsenal;
- possession of nuclear weapons;
- contemplation of conducting nuclear tests;
- its deterrent policy;
- the hypothetical scenario of its having elected to deploy these weapons in the Angolan war or elsewhere;
- its decision to relinquish its nuclear arsenal and accede to the NPT;
- its accession to the Treaty of Pelindaba, which converted the continent of Africa into a nuclear-weapon-free zone; and
- South Africa's failed relinquishment knowledge exchange attempt, on the eve of the Second Iraqi War in 2003.

South Africa's nuclear weapons programme was classified as a top secret project. It was always kept under the strict control of the President of the country, and subject to South African municipal law. This authority was never delegated, or allowed to become defused or opaque. It was carefully managed and controlled both at an inter- and intra-ministerial level. The transition of the strategic intention of the nuclear programme from peaceful civilian energy usage to military intent synchronised closely with South

[75] Bourestan, Jack & Feldman, Yana. 2004. 'Verifying Libya's Nuclear Disarmament' in *Disarmament Yearbook 2004*, 87–105. [Online]. Available: http://www.firstwatchint.org

Africa's deteriorating security situation in the 1970s and 1980s. This deterioration was manifested internally as a constitutional crisis of internal state legitimacy and international recognition, and an escalating involvement in the Southern African regional conflicts.

1.7 The Evolving Legal Clarity on the Status of Nuclear Weapons

The relinquishment of the nuclear weapons signified the transition from war to peace. International humanitarian law regulates a state's conduct in times of war while international law regulates its conduct in times of peace. Charles Moxley puts it thus:

"The rules of international humanitarian law are not concerned with the regulating of the conduct of States in time of peace. They specifically relate to warfare and times of armed conflict, and are designed to regulate the conduct of belligerents, against one another or against some neutral State."[76]

Marco Sassòli offers further clarity on the interrelationship between international law and international humanitarian law:

"Public international law can be described as being composed of two layers: the first is the traditional layer consisting of the law regulating coexistence and co-operation between members of international society, essentially the States; and the second is a new layer consisting of the community of six billion human beings. Although international humanitarian law came into being as part of the traditional layer i.e. as a law regulating belligerent inter-state relations, it has today become nearly irrelevant unless understood as a law protecting war against states and all others, who wage war. The implementation of international humanitarian law may therefore be understood from the viewpoint of both layers. For a branch of law that applies to a fundamentally anarchic, illegal and often lawless situation such as armed conflicts, the focus of implementing mechanisms must always be on prevention."[77]

In 1996, the seminal advisory judicial opinion on the *Legality of the Use by a State of Nuclear Weapons in Armed Conflict* was delivered by the

[76] Moxley, Charles. 2001. 'Unlawfulness of the United Kingdom's Policy of Nuclear Deterrence – Invalidity of the Scots High Court's Decision in Zelter'. *Disarmament Diplomacy*, 58:3, June. (Moxley is citing Ronald King Murray, former Lord Advocate of Scotland.)
[77] Sassòli, Marco. 2002. 'State Responsibility for Violations of International Law'. *International Review of the Red Cross*, 8(846):401, June.

International Court of Justice.[78] This opinion clarified and updated the accumulated post-World War II legal status of nuclear weapons.[79]

Dugard indicated that the ICJ found that:

"The threat or use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict, and in particular the principles and rules of humanitarian law.

However, in view of the current state of international law, and of the elements of fact at its disposal, the Court cannot conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in extreme circumstances of self-defence, in which the very survival of a State is at stake ... There exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all aspects under strict and effective international control."[80]

This research explores why and how South Africa pursued good faith negotiations with the International Atomic Energy Agency (and other parties) to disarm itself of its nuclear capability and to bring its nuclear programme under strict international control.

The formal legal conclusions contained in what is known as the *Dispositif* are cited in full because of their relevance to the study:

"A. Unanimously:

There is in neither customary nor conventional law any specific authorisation of the threat or use of nuclear weapons;

B. By eleven votes to three:

There is in neither customary nor conventional international law any comprehensive and universal prohibition of the threat or use of nuclear weapons as such;

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[78] *Legality of the Threat or Use by a State of Nuclear Weapons in Armed Conflict*, 1996 ICJ Reports 66.
[79] Loc cit Dugard at 5. (In this regard, John Dugard confirmed that the International Court of Justice is "competent to offer advisory opinions to the United Nations at the request of the United Nations. These opinions carry considerable weight as statements of law … However significant such opinions might be ... they remain advisory".)
[80] International Court of Justice Case Summaries. '*Legality of the Use by a State of Nuclear Weapons in Armed Conflict*'. The International Court of Justice. The Hague. Advisory Opinion of 8 July 1996. [Online]. Available: http://www.icj-cij.org at 2.

In favour: President Bedjaoui; Vice-President Schwebel; Judges Oda, Guillaume, Ranjeva, Herczegh, Shi, Fleischhauer, Vereshchetin, Ferrari Bravo, Higgins;
Against: Judges Shahabuddeen, Weeramantry, Koroma.

C. Unanimously:

A threat or use of force by means of nuclear weapons that is contrary to Article 2, paragraph 4, of the United Nations Charter and that fails to meet all the requirements of Article 51, is unlawful;

D. Unanimously:

A threat or use of nuclear weapons should also be compatible with the requirements of the international law applicable in armed conflict, particularly those of the principles and rules of international humanitarian law, as well as with specific obligations under treaties and their undertakings which expressly deal with nuclear weapons;

E. By seven votes to seven, by the President's casting vote:

It follows from the above-mentioned requirements that the threat or use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict, and in particular the principles and rules of humanitarian law;

However, in view of the current state of international law, and of the elements of fact at its disposal, the Court cannot conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defence, in which the very survival of a State would be at stake;

In Favour: President Bedjaoui, Judges Ranjeva, Herczegh, Shi, Fleischhauer, Vereshchetin, Ferrari Bravo;
Against: Vice President Schwebel; Judges Oda, Guillaume, Shahabuddeen, Weeramantry, Koroma, Higgins.

F. Unanimously:

There exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control."[81] [82]

[81] Op cit ICJ Case Summaries at 2–3. Also corroborated by Burroughs, John. 1997. *The (Il)legality of Threat or Use of Nuclear Weapons: A Guide to the Historic Opinion of the International Court of Justice*. Munster, Amsterdam: Die Deutsche Bilbliothek.
[82] Nuclear Weapons Advisory Opinion, para 105(2).

Francis Boyle asserts that they constitute peremptory norms of law and are therefore part of a *jus cogens*.

The Court agreed with the submission:

"In general, international humanitarian law bears on the threat of nuclear weapons as it does of other weapons. International humanitarian law has evolved to meet contemporary circumstances, and is not limited in its application to weaponry of an earlier time. The fundamental principles of this law endure; to mitigate and circumscribe the cruelty of war for humanitarian reason." [83]

This research focuses in particular on the issues covered by the ICJ in Paragraphs C, D, E, and F of the formal legal *Dispositif*. The remainder of this section will present a detailed discussion of each of these four paragraphs.

Paragraph C pertains to the fact that the United Nations Charter was the final authority on the lawfulness of South Africa's nuclear weapons programme. South Africa refrained from threatening to use nuclear weapons, although there were elements within the South African Defence Force and ARMSCOR who strongly advocated that a nuclear test explosion should be conducted.[84] Had such a test explosion been conducted, it might well have been conducted contrary to Paragraph C of the United Nation's Charter. In addition, it would almost certainly have been conducted contrary to international environmental law.[85]

Paragraph D read together with Paragraph E confirms the correctness of this research being conducted in terms of international law. In this regard the respondents were in consensus that there were no conceivable circumstances in which South Africa could have threatened or used

[83] Boyle, Francis. 1996. 'The Criminality of Nuclear Deterrence'. Humanitarian Law and War Tribunals, College of Law, University of Illinois at Urbana-Champaign. 30–31, 17 October. [Online]. Available: http://www.derechos.org/koaga/v/boyle.html (see also Boyle, Francis. 1989. *The Future of International Law and American Foreign Policy*. New York: Transnational Publishers Inc.).
[84] Confirmed during interview with Mr Pik Botha in Pretoria North on 18 February 2008.
[85] Op cit Dugard (2007) at 391.

nuclear weapons that would have been compliant with international law, even in the case when South Africa's very survival as a state was at risk.

Paragraph E justifies an exploration and interrogation of the legality of South Africa's development and use of nuclear weapons as a political deterrent capability. The respondents were in consensus that the deterrent threat of nuclear weapons was permitted under positive law. In this regard their reasoning was compliant with the reasoning and authority of the *Lotus* case, which averred that that which is not expressly prohibited its permitted.[86]

South Africa represented an extreme circumstance, possibly envisaged in Paragraph E, where its very survival as a state was indeed threatened owing to the Angolan war and its own insurrection crisis. It was pitted against the military might of the Soviet Union, East Germany, Cuba and the MPLA. The respondents could offer no justification for the military use of nuclear weapons even though the survival of the South African State was threatened by an escalation of the Angolan war.

Paragraph F provided the authority for the research exploring how and why the nuclear relinquishment process in South Africa was conducted in terms of its accession to the Treaty on the Non-Proliferation of Nuclear Weapons. South Africa acceded to the Treaty on the Non-Proliferation of Nuclear Weapons by entering into good faith negotiations with the International Atomic Energy Agency, which itself falls under the Charter of the United Nations, and the remit of the Security Council, which is the highest body governing international law in the world. Paragraph F is also clearly linked to the research question: "Why was the decision reached to roll back the nuclear arsenal in South Africa?"

[86] *Lotus* Case, 1927 PCIJ Reports, Series A, No 10.

1.8 The Treaty on the Non-Proliferation of Nuclear Weapons

The NPT is by far the most important treaty in the world concerning nuclear weapons. It has already been noted that the membership of the NPT consists of five Nuclear-Weapons-States (NWS) and 182 countries which are non-NWS (NNWS) members of the NPT. The NWS possess nuclear weapons, while the non-NWS do not. The non-NWS are obligated not to proliferate nuclear weapons under international law. The non-NWS have abided by this obligation. The NWS are permitted to possess nuclear weapons under international law, but are obliged under international law to negotiate with other NWS to reduce these weapons. The NPT therefore represents a Faustian bargain between the NWS and non-NWS. The formula which covers this bargain is contained in Article VI of the NPT, which is its key element. Article VI of the NPT is a crucial and much-debated clause. The Article obligation states that:

"Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to the cessation of the nuclear arms race at an early date and to disarmament under strict and effective international control."[87]

Datan expounds on this as follows:

" 'Each of the parties' suggests that this obligation goes beyond the bilateral START (Strategic Arms Reduction Treaties) process and requires multilateral negotiations. This obligation is backed up by numerous resolutions of the UN General Assembly, dating back to the very first resolution."[88]

Article VI reads as a rather strange, inconsistent and asymmetrical agreement between those countries that possess nuclear weapons and those countries that deemed it wise and in the interests of international peace not to possess these weapons of mass destruction. Article VI would appear to be predicated on an unbalanced reciprocity of the NWS selfishly possessing and retaining possession of nuclear weapons and the non-NWS selflessly relinquishing possession of weapons of mass destruction.

[87] Article VI of the NPT.
[88] Datan, Merav. 2003. 'Nuclear Weapons and International Law'; *IEER: Science for Democratic Action*, 9(3)/Energy and Security Law 17 of 2003, 1–2. [Online]. Available: http://www.ieer.org/sdafiles/vol_9/9-3/law.html

It is inconsistent in the sense that one set of rules and norms applies to those NWS that possess nuclear weapons, while another set of rules pertain to those countries that are NWS. Although the logic that binds the NPT together and makes it work is opaque, the practical and fortunate reality is that the Treaty on the Non-Proliferation of Nuclear Weapons has actually, despite its inelegance, worked well since it opened for signature in 1968 and entered into force in 1970. Its operation begs many questions including: Why should the NWS be accorded the privilege of being NWS in the first place? Why should they be permitted to breach the NPT itself by engaging in nuclear proliferation, while the NNWS are not permitted to do so? Why should the NNWS subject themselves passively to the beneficence of the NWS?

There are many more questions that can be posed criticising the NPT, but the researcher's view is that these questions are not helpful at this stage. The reason for that is that there are profound humanitarian dangers associated with winning a consistency- and reciprocity-based argument on this matter.

The NPT should be read together with Article 2(4) and Article 51 of the United Nations Charter because it provides the framework for international law. Article 2(4) has already been alluded to in a previous section of this research and states: "All members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any manner inconsistent with the purpose of the United Nations."[89] Article 51 reads:

"Nothing in the present Charter shall impair the inherent right of the individual or collective self-defence if an armed attack against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security." [90]

Datan continues his argument:

[89] United Nations Charter, Article 2(4).
[90] United Nations Charter, Article 51.

"The combination of these two provisions means that a State may engage in the threat or use of force only in collective or individual self-defence, if an armed attack occurs, and only when the Security Council has not exerted control.

Of course, the result has been, in part, that States claim their own threat or use of force as an act of self-defence, and see aggression on the part of others who act and speak similarly in the name of self-defence. Nuclear weapons raise this irony to the level of absurdity.

But implicit in these principles of law is the aspiration for a just and effective international legal order. That it does not function smoothly, is due largely to the psychological mindset of human mistrust, and the ways that fear, greed, and the drive for power have been infused into political structures. At the same time, these structures are being challenged today in ways that do not necessarily promise, but do allow for the possibility of a transition to a more just world order based on the force of law rather than the law of force."[91]

South Africa prepared and presented its case for accession to the NPT in terms of the Safeguards system. Charles Ferguson defines safeguards as comprising "a set of nuclear material accountancy and surveillance tools and techniques that are supposed to help that a country's civilian nuclear programme remains peaceful".[92]

According to James Lovett:

"Safeguards is a collective term that comprises those measures designed to guard against the diversion of material such as source and special nuclear material from uses permitted by law or treaty and to give timely indication of possible diversion or credible assurances that no diversion has occurred. The measures designed refer to:

- Containment measures, which means lock it in a safe or vault;
- Surveillance measures, which means using a camera or using a guard to watch over it;
- Nuclear material accounting – this entails data capturing, recording, reporting and verification activities.

[91] Op cit.Datan.
[92] Ferguson, Charles. 2007. 'Nuclear Safeguards for a New Nuclear Age'. *Bulletin of the Atomic Scientist*, 1, 18 December.

The security is also associated with safeguards and not only the safety of the people working with the material."[93]

South Africa needed to meet all the terms and conditions specified by that system. All variances had to be perfectly reconciled, and no unjustified exceptions were acceptable. These inspections are authorised by the IAEA, with the sanction of the United Nations General Assembly and Security Council. Nuclear inspections of all relevant facilities are sanctioned by the IAEA. The inspectors carefully investigate all the data, intellectual knowledge, and physical facilities and synthesise this knowledge into a coherent diagnosis and prognosis of the nuclear integrity of a country. These assessments have to be justified by the presentation of all records of the entire programme, both written and oral.

Thomas Cochran presented an insight into the precision and exactitude of the applied nuclear physics methodologies that are used by the inspectors to conduct nuclear audits in terms of safeguards agreements. The inspections are subjected to:

- exacting and scientifically precise nuclear physics calculations;
- rigorous physical visual inspection on site, with state of the art technology and measurement instruments; and
- cross-examination of all persons associated with or connected to the programme in any way.

These calculations are effectively peer-reviewed by the inspectors, who are themselves expert nuclear physicists.[94] The Safeguards system provides a verifiable auditing system of a State's nuclear programme and ensures that all materials, installations and facilities are used for peaceful purposes. These rights are contained in the Treaty on the Non-Proliferation of Nuclear-Weapons and the Statute of the IAEA. It was the credible application of the Safeguards system by the IAEA that conferred

[93] Lovett, James, E. 1974. *Nuclear Materials: Accountability*. Hindsdale, Illinois: American Nuclear Society.
[94] Cochran, Thomas. 1994. 'Highly Enriched Uranium Production for South Africa's Nuclear Weapons'. *Science and Global Security*, 4:161–176.

trust in the integrity of South Africa's relinquishment and accession process and by extension, the credibility of the constitutional transition. South Africa's compliance with the IAEA's Safeguards system was an imperative step that needed to be taken and complied with in order for the country to accede to the NPT.

The Safeguards system is therefore a vitally important nuclear audit, which, as has been outlined above, leads to international trust building. A clearance from the Safeguards system effectively means that a country will not suddenly use nuclear weapons for military purposes, and create a threat to world peace. The nuclear inspectors are pivotally important to achieving this audit.

It is of particular relevance to this study that the NPT is pre-eminently a trust-creating treaty. Mr de Klerk appreciated this fact fully. As this dissertation will show, he used the relinquishment and accession process as a platform to create international trust in the new constitution and non-racial political dispensation. This dissolved the recognition of South Africa as a pariah apartheid state. The trust which is implicit in the NPT as part of international governance was therefore linked to reversing South Africa's international recognition status.

Hans Blix argued that this treaty has imperfectly but significantly contributed towards the globalisation of law. He acknowledged that the relinquishment and accession to the NPT has been uneven.[95] Dr Blix asserted:

"Even though growing détente is generally reducing the relevance of nuclear weapons, there is still a justifiable concern about the threat that they pose, and there is a difficult distance to go before nuclear disarmament is accomplished and non-proliferation commitments universal. There is also increased concern about the reliability of certain commitments, about the possible clandestine development, or retention of a nuclear weapons capacity. Just as a reliable renunciation of nuclear weapons is mutually reinforcing between neighbours and within regions, doubts about the genuineness of

[95] Op cit Blix (2007) at 2.

such renunciations will mutually undermine such commitments. Continued international vigilance and efforts to maintain and expand détente globally, and regionally, strengthened international co-operation and effective international verification are required to ensure reliability and confidence".[96]

Nonetheless, it is his view that this globalisation of the law contributed to the decision by some states to relinquish their nuclear weapons and to accede to the NPT, by virtue of *jus cogens* and *erga omnes* obligations in terms of peremptory norms of international law.

1.9 The Legal Status of the International Atomic Energy Agency and the Issue of South African Membership

The International Atomic Energy Agency is the world's premier nuclear agency and was responsible for conducting the inspection regime on South Africa's nuclear programme. The legal obligations of the International Atomic Energy Agency (IAEA) are contained in its Statute,[97] and these obligations should be read together with the Treaty on the Non-Proliferation of Nuclear Weapons. The IAEA's Statute, when read together with the Charter of the United Nations, provides it with its authority in terms of international law. This authority is quite often derived from Resolutions of the Security Council, which jurisprudentially confirm an obligation on members of the IAEA to enact these Resolutions. The Resolutions arising inter alia from the General Conference of the IAEA are in turn conveyed (where and when relevant) to the Security Council, who convert these into United Nations Security Council Resolutions.

The IAEA is therefore both an administrative organ and (by delegation from the Security Council) an instrument of international law. It has an international law-making function and this is achieved by means of inter alia its General Conference. An example of how the IAEA General Conference makes international law is illustrated by the Convention on Nuclear Safety, which opened for signature simultaneously with the 38th

[96] Blix, Hans. 1995a. 'Statement by Dr Hans Blix: Director General of the International Atomic Energy Agency'. Summary Records, Document No. NPT/conf.1995/SR.1. New York, 17 April.
[97] *Statute of the International Atomic Energy Agency*. [Online]. Available: http://www.iaea.org

regular session of the IAEA on 20 September 1994. Odette Jankowitsch-Prevor pointed out that this Convention was adopted without a vote and therefore by consensus on 17 June 1994 by the emissaries of 84 countries at the Diplomatic Conference convened at the head office of the IAEA in Vienna from 14 to 17 June 1994.

"This Convention entered into force after the deposit with the Director General of the IAEA of the 22nd instrument of ratification, including the instruments of 17 states 'each having at least one nuclear installation which has achieved criticality in a reactor core'. The large number of countries involved in this treaty-making process reflects the intense international interest for all matters regarding nuclear safety and the willingness of countries both with and without nuclear power programmes to actively contribute to the safety of nuclear power plants wherever they might be situated."[98]

Ms. Jankowitsch- Prevor makes the point that there are complex and variable quorums that are required to convert a Resolution of the IAEA into a Convention in international law.

It has been found in the case of the *Reparation for Injuries Suffered in the Service of the United Nations*[99] that the United Nations and its organs did have international legal personality. This case provides a legal authority for adducing that the IAEA had international legal personality which authorised its weapons inspections in South Africa. Dr Blix maintained that:

"Acceptance of IAEA Safeguards by non-nuclear-weapon states party to the NPT is required under the Treaty because there is a need for credible assurances that nuclear material and installations are used exclusively for peaceful purposes. In order to provide such assurances, Safeguards must be effective. Ineffective Safeguards may be worse than none, because they might inspire misplaced confidence – with serious consequences. However, we must recognise that while States want the Safeguards system to give a high degree of assurance, they often want a minimum degree of intrusion when they themselves are subject to the Safeguards. States are no different

[98] Jankowitsch-Prevor, Odette. 1994. 'International Nuclear Law in the Post-Chernobyl Period: The Convention on Nuclear Safety'. *Nuclear Law Bulletin*, 54:155. Ms Jankowitsch-Prevor was the Secretary to the Group of Experts on the Convention on Nuclear Safety.
[99] *Reparation for Injuries Suffered in the Service of the United Nations*, 1949 ICJ Reports 174.

from individuals in this regard: we want maximum protection but we don't want to give the authorities unrestricted access to our homes".[100]

Dr Blix added:

"The International Atomic Energy Agency, which I represent, is given an important role in the implementation and fulfillment of the Non-Proliferation Treaty. First, it is responsible under Article III of the Treaty to verify that non-nuclear-weapon States parties to the Treaty are not diverting nuclear material from peaceful uses to nuclear weapons or other explosive devices.

Second, under Article IV of the Treaty, the Agency provides the main multilateral channel for expanding the application of nuclear energy for peaceful purposes. Further, it is providing the verification systems for nuclear-weapon-free zones envisaged in Article VII and is contributing also to the verification of activities relevant to Article VI."[101]

The International Atomic Energy Agency does have legal personality. It has rights and it possesses the legal personality to maintain those rights by bringing claims against a State (and in the case of the research, South Africa), if need be.

Article II of the IAEA Statute sets out its objectives:

"The Agency shall seek to accelerate and enlarge the contribution of atomic energy to peace, health, and prosperity throughout the world. It shall ensure, so far as it is able that assistance provided by it, or at its request or under its supervision or control is not used in such a way as to further any military usage."[102]

The IAEA's functions are laid out in Article III, A.5 of the Statute. These include, inter alia:

"To establish and administer safeguards designed to ensure that special fissionable and other materials, services, equipment, facilities, and information made available by the Agency or at its request or under its supervision or control are not used in such a way as to further any military purpose; and to apply safeguards, at the request of the parties, to

[100] Blix, Hans. 1991. 'Inspections in Iraq'. Statement to the US Senate Foreign Relations Committee, Washington DC. 23 October.
Blix, Hans. 1995b. 'Statement by Dr Hans Blix to the Review and Extension Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons'. New York. 17 April.
[101] Op cit Blix (1995b) at 2.
[102] *Statute of the International Atomic Energy Agency*. [Online]. Available: http://www.iaea.org at 1.

any bilateral or multilateral arrangement, or at the request of a State, to any of that State's activities in the filed of atomic energy."[103]

The Agency Safeguards are presented in Article XII of the Statute. Clause 7 of this Article is particularly relevant to the case of South Africa. It reads:

"In the event of non-compliance and failure by the recipient State or States to take requested corrective steps within a reasonable time, to suspend or terminate assistance and withdraw any materials and equipment made available by the Agency or a member in furtherance of the project; ...

C. The Board shall call upon the recipient State or States to remedy forthwith any non-compliance which it finds to have occurred. The Board shall report the non-compliance to al members and to the Security Council and General Assembly of the United Nations."[104]

These are some of the more important Articles which give the IAEA its authority. The latter clause gives the IAEA authority under international law, which may be applied to sanction a military intervention and war. [105] The Statute of the IAEA is therefore designed to fulfil its obligations to the Treaty on the Non-Proliferation of Nuclear Weapons.

John Dugard provides further insight into the legal personality of United Nations organs:

"Since 1949, it has been accepted that international organisations, such as the United Nations and its specialised agencies enjoy international legal personality. The recognition of the legal personality of international organisations was as a result of an advisory opinion of the International Court of Justice in response to the question whether the United Nations could sue Israel for the death of Count Bernadotte of Sweden, a UN mediator assassinated while on duty in Palestine. The International Court held that the United Nations had the necessary legal personality to bring action against a state in such circumstances. The Court stated 'That is not the same thing as saying that it is a state, which it certainly is not, or that its legal personality and rights and duties are the same as a state. Still less is it the same thing as saying that it is a super-state … what it does mean is that it is a subject of international law and capable of possessing international

[103] Op cit Statute of the IAEA at 2.
[104] Op cit Statute of the IAEA at 11.
[105] See, for example, Scribner, Richard, Ralston, Theodore & Metz, William. 1985. *The Verification Challenge – Problems and Promise of Strategic Nuclear Arms Control Verification*. In co-operation with the Centre for International Security and Arms Control, Stanford University: Birkhauser, Boston, Basel, Stuttgart.

rights and duties, and that it has capacity to maintain its rights by bringing international claims'[106] ."[107]

The IAEA's legal personality and enforcements were illustrated in its denial in 1977 of South Africa's seat to participate in the General Conference of the International Atomic Energy Agency.[108] This sanction prohibited South Africa from participating in the creation of international law on nuclear weapons which arises from the ratification of United Nations conference resolutions.

Dugard offered insight into the implications of these United Nations enforcement mechanisms. The sanctions which were imposed against South Africa were comprehensive and mandatory, and were reflected in South Africa's pariah recognition status. He contended that:

"Exclusion from membership in international organisations is another sanction that was effectively employed against South Africa for violating its obligations under the UN Charter. In the 1960s, South Africa was excluded from membership of a number of specialised agencies of the United Nations – such as the International Labour Organization (ILO) and the World Health Organization (WHO) – and in 1974 the General Assembly of the United Nations excluded South Africa from participation in the debates and work of the General Assembly. In 1994 South Africa resumed its membership of these bodies."[109]

South Africa's nuclear weapons capability, together with its capability of proliferating these weapons and its apartheid policy, afforded it pariah status. It is highly unlikely that the Members would have permitted it to resume its participation in the work of the General Assembly of the United Nations had it retained possession of these weapons.

Part of South Africa's recognition crisis was encapsulated in its struggle to regain its membership of the international organisations after having being excluded from them, and sanctioned by them. Recognition of its reformed

[106] *Reparation for Injuries Suffered in the Service of the United Nations*, 1949 ICJ Report 174 at 179.
[107] Op cit Dugard (2007) at 1.
[108] Corroborated in interviews with Mr Pik Botha and Professor Waldo Stumpf.
[109] Op cit Dugard (2007) at 8.

status was both a legal and a political process. It will be shown in subsequent chapters that this recognition crisis was one of the most important incentives informing the decision to relinquish the nuclear weapons and to accede to the NPT.

Mr de Klerk resolved this crisis. His solution was to develop an internationally-recognised non-racial constitution that dissolved the imperative for the imposition of UN Security Council and General Assembly sanctions of all types.

The legality of possession of nuclear weapons has not in the researcher's view advanced as significantly as has the development of legal clarity on usage, testing and the proliferation of nuclear weapons. In addition, the law as it pertains to the threat of use of nuclear weapons and the policy of nuclear deterrence remains unclear.

1.10 Research Method and Theory

1.10.1 Overview of Analysis

This discussion will provide the reader with a brief holistic overview of the analysis of the research method and theory so as to enable a clear understanding of this third contribution to the introduction.

When research is conducted using a critical literature review, the researcher is required to access a wide and deep cross-section of relevant, credible legal cases and literature on the matters pertinent to the research. The researcher is then required to synthesise this reading into high-quality coherence, appropriate argumentation, discovery of principles, and findings.

Primary research involving an expert sample requires a deeper justification than research conducted on a secondary basis using a literature review only. Primary research obviously does require a literature review and study of relevant cases as outlined above. But it also requires

an integrated and coherent justification of the research methodology and theory employed. This necessitates conducting a second literature review to justify the research methodology and a third literature review to authorise the selection of the theoretical base. In addition, the primary research data that emerges from the inquiry needs to be carefully deconstructed into meaningful findings. The literature review and synthesis of relevant cases will require an additional methodological and theoretical justification. For example, there needs to be a uniform thrust to the questions that are posed to the respondents. The questions that are proffered need to be wisely considered and posed. They should be derived from the appropriate literature and consistent with the research objectives.

For this reason, each respondent was furnished with a copy of the research proposal that was submitted to Wits Law School, and approved by the School before interviewing was commenced. The interviews were conducted using the research proposal as a basic agenda for discussion with the respondents. The respondents were all senior and very experienced men, having held among others the highest office in the land. Each addressed the topic according to his unique perspective and understanding of the nuclear relinquishment and accession process, and often disregarded the research proposal.

The approved research proposal was later subjected to a far-reaching criticism by Professor Waldo Stumpf, who was interviewed first. Professor Stumpf kindly identified various weaknesses in the original research proposal and offered wise guidance as to how these weaknesses might best be obviated and rectified so as not to detract from the research.[110] On that basis, the research proposal was largely re-written after it had been approved by the Law School. It was Professor Stumpf's critique of the researcher's proposal that was used as the 'base document' for

[110] It should be noted that Professor Stumpf's critique of the research proposal was brought to the attention of Professor Jonathan Klaaren and it was agreed that this expert knowledge needed to be practically incorporated into the research methodology and theory component of this research as well as to the practical knowledge creation aspects of the thesis.

interviewing the primary respondents. This base research proposal was then distributed to each of the respondents. Some of the respondents chose to follow the base document and others simply responded as they deemed appropriate.

This third section of the chapter explores various themes of the research. It contends that this thesis is compliant with the fundamental requirement that research should offer a substantial and original contribution to knowledge. It presents this pursuit for an original contribution to knowledge to the reader as a research commitment. The time period and schedule of events relative to this research is also discussed, and was derived from the earlier discussions on that matter contained in the historical background. This provided the cut-off dates for the various phases of the research.

The research questions which are presented are founded in the contextual reality and historical background to the study. These questions and their rationale are offered to the reader in a separate exposition that forms part of this section of the chapter.

The delimitations and limitations of this research are then presented to the reader in order to ensure that the expectations with regard to this research are circumscribed and remain grounded in reality. In essence, the research was delimited to nuclear weapons and excluded other weapons of mass destruction, including chemical and biological weapons. A key limitation of the research is that a comparative analysis of South Africa and Iraq's nuclear relinquishment process was offered in order to ascertain whether a guideline or generalised methodology might be derived for other countries to relinquish their nuclear arsenals and accede to the Treaty on the Non-Proliferation of Nuclear Weapons. It is uncertain whether this knowledge is transferable and, if indeed it is transferable, the degree to which it is transferable, and the limitations of that transferability.

This research was conducted as a single case study, and a brief exposition is presented on the authority for using a single case study method. The phenomenological method was applied in order to identify convergences and divergences in the respondents' viewpoints. A detailed rationale is offered as to the justification of the small expert sample of respondents. Finally, a brief exposition is offered as to how the research themes that are discovered relate to the question of constituting democracy.

1.10.2 Why was the Decision Reached to Roll Back the Nuclear Arsenal in South Africa?

As explained below, this question as presented in the heading above was posed to the set of respondents. Charles Moxley posed five questions that are strongly supported by international humanitarian law and underpin the "why" question contained above.

1. "Rule of proportionality;
2. Rule of neutrality;
3. Rule of necessity;
4. Rule of discrimination; (and)
5. The role of deterrence."[111]

The researcher needed to keep an open mind and to listen carefully to the respondents in order to discover the important reasons that informed the decision to relinquish the nuclear arsenal and accede to the Treaty on the Non-Proliferation of Nuclear Weapons. It will be shown that the key concerns of international humanitarian law, as depicted by Charles Moxley above, and the terms and conditions associated with accession to the Treaty on the Non-Proliferation of Nuclear Weapons, permeated all the interviewees' responses. This result was not surprising. However, there was another central legal consideration that influenced the decision to relinquish the nuclear arsenal. This was a new finding and it was the

[111] Moxley, Charles J. 2000. *Nuclear Weapons and International Law in the Post Cold War World*. Lanham, MD: Austin & Winfield.

theme of achieving international recognition for the new constitution. The expert respondents reported this as being a prime motive behind why the decision to relinquish the nuclear arsenal was taken. This response was communicated in various ways, and with different nuances, by all of the respondents.[112]

1.10.3 What Impact, if any, did International Law have on the Decision to Relinquish the Nuclear Arsenal?

This 'what' question was connected to the 'why' question posed above. It was intended to offer the respondents the opportunity of affirming that the decision was pursued because of the need to comply with the Treaty on the Non-Proliferation of Nuclear Weapons and international law, or to disaffirm this.

All of the respondents had a deep sense of the natural law associated with the questionable legality and utility of nuclear weapons.[113] Although none of the respondents claimed to be expert in the area of international law, their analyses often spontaneously gravitated around Moxley's criteria mentioned above. The respondents also could have chosen to repudiate the role of international law in their decision to relinquish the nuclear arsenal and accede to the Treaty on the Non-Proliferation of Nuclear Weapons, but did not do so.

It was expected that the respondents would outline how they had addressed the nuclear inspection regimens instituted by the International Atomic Energy Agency with respect to accession to the NPT. Accession to the NPT and relinquishment of the nuclear arsenal can be viewed as a search for compliance with international law.

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[112] Professor Klaaren posed the question of whether this view might have been a post hoc rationalisation imputed by the researcher to the respondents' testimony. This is a really good question, requiring serious moral reflection. The researcher's view is that the feedback from the expert respondents speaks for itself, and the reader should decide on the interpretation on the basis of the primary data. The researcher holds the view that this surprising finding is a new contribution to knowledge. To the best of his knowledge, this notion has never yet been formally proffered as a contributing feature towards South Africa's constitutional transition towards democracy.

[113] These themes are raised by Roberts, Adam & Guelff, Richard (eds.). 1982. *Documents on the Laws of War*. Oxford: Clarendon Press.

Mr de Klerk reiterated that he had placed great store on this process being conducted in private, accompanied by the most careful human and political discretion. The relinquishment and accession also necessitated that it should be conducted according to the precise standards specified by the inspectorate of the International Atomic Energy Agency. Professor Mouton was acutely aware of his responsibilities in performing his role required as the 'oversight auditor'. He regarded his appointment in this role by Mr de Klerk as a personal honour. Professor Stumpf had a similar focus to Professor Mouton, but was involved in 'project managing' the detail of the relinquishment and accession process to the letter.

Mr Botha's response was generally inclined more towards addressing the political dimension of the relinquishment and accession than the detail.
He focused on the 'bigger picture' issues.

Dr Barnard's exposition was inclined towards deriving the maximum possible quid pro quo that South Africa might obtain in exchange for the relinquishment and accession. He expressed the view that South Africa could have obtained a significantly better quid pro quo for this. The reader should note that Dr Barnard's apex of involvement in the nuclear project was during the development of the nuclear arsenal and that he worked very closely with President PW Botha in this regard.

Dr Barnard explained during his interview that Mr de Klerk had appointed Professor Mouton above him into the role of 'oversight auditor'. Dr Barnard's involvement in the nuclear relinquishment and accession process was not as significant as his involvement in the development of the policy of nuclear deterrence under President PW Botha.

1.10.4 How Did South Africa Set About Acceding to the Treaty on the Non-Proliferation of Nuclear Weapons and Relinquish its Nuclear Weapons?

The respondents' explanation of 'how' the nuclear arsenal was relinquished, and how South Africa acceded to the NPT, provided the opportunity to indicate the perspective in which the respondents regarded accession to the NPT and as a corollary, the implicit import or lack thereof of international law in this process. The 'how' question was very important, because South Africa's nuclear relinquishment process was conducted successfully, inasmuch as it was achieved in a manner that was compliant with the standards set by the International Atomic Energy Agency, the General Assembly and Security Council of the United Nations, and the inspection standards of the five Nuclear-Weapons-States.

The matter of how compliance was achieved with international inspection standards was regarded from two perspectives. The first perspective was that of a narrow technical compliance of how this was achieved with the international law standards set by the above bodies in terms of the Treaty on the Non-Proliferation of Nuclear Weapons. That was compliance per se. The second perspective on how compliance was achieved was a broader and less clearly defined matter. It related to how compliance was achieved, and used politically, in order to enhance South Africa's international political recognition status. This had been severely curtailed by its human rights abuses under the policy of apartheid, which led to its pariah international recognition status, and included inter alia mandatory United Nations sanctions. In other words, there was cognisance of the question of whether and to what extent the relinquishment of the nuclear arsenal and accession to the Treaty on the Non-Proliferation of Nuclear Weapons could be used to assist in reversing the mandatory international sanctions that had been enacted against South Africa, and in enhancing South Africa's international recognition status.[114]

[114] It will be contended that the 'how' question in Iraq was not satisfactorily answered and led directly to the Second Iraqi War. This reader is referred to Chapter Seven of this thesis, entitled "A

There is a further matter that needs to be briefly alluded to relating to the matter of compliance. The first matter of compliance was achieved with the IAEA inspectorate and did not include the acknowledgement that South Africa had developed a nuclear weapons capability. Had South Africa admitted this, they would have immediately been in breach of the NPT because of the manner in which it was formulated at that time. (This formulation has since been corrected.) The second matter of compliance related to the creation of an extended and enlarged committee which included the IAEA inspectors as well as ad hoc nuclear inspectors from the United States, Russia, Germany, Great Britain and France.

1.10.5 Is the Knowledge Experience of South Africa's Relinquishment of its Nuclear Arsenal and Accession to the NPT Transferable?

This question is a general integrative question that was intended to assist in 'binding' the research into coherent themes as well as exploring perceptions of the value of the historical event of a relinquishment. A comparison of South Africa's nuclear relinquishment process with that which was conducted in Iraq is presented in pursuance of this research. The criteria for the comparison are contained in the notion developed by the Harvard Negotiation Project and expanded by the researcher that negotiations need to take place in four domains if they are to be successful.[115]

These four domains are:

1. The substantive legal domain;
2. Legal process and procedure matters;

Comparison of How South Africa and Iraq Relinquished their Nuclear Weapons in terms of International Law", where the matter is addressed.

[115] The researcher visited the Harvard Negotiation Project in 2006 at the invitation of the Director Professor Roger Fisher. While the researcher was in Boston, Professor Robert Bordonne kindly presented the construct of substance, process and relationship which is used in Chapter Seven to assist in structuring the comparison between the South African and Iraqi relinquishment and accession processes.

3. The legal relationship matters;
4. The time-line.[116]

These four domains were valuable to the study because they provided an holistic and quite simple framework for understanding and presenting very complex information about the reality of the relinquishment of nuclear weapons and accession to the Treaty on the Non-Proliferation of Nuclear Weapons in two divergent cases; one case being successful and the other being a failure. The framework allowed for meaningful, systematic, logically congruent and pin-pointing comparisons, which might easily be improved with further expert involvement. It therefore served both a diagnostic and prognostic purpose. The reader should note that this comparison counterposed the primary research data from the South African case with a literature review of the Iraq case.

1.10.6 Delimitations

The main body of this research was delimited to investigating South Africa's relinquishment of its nuclear arsenal in terms of international law. This delimitation was extended to conduct a comparative analysis of the South African and Iraq's relinquishment processes in terms of the knowledge transference comparability. As mentioned previously, the terms of reference of this research specifically do not pertain to other weapons of mass destruction, including those of a chemical and biological kind.

The second delimitation was contained in the research sample, which consisted of a small expert group delimited to include only President FW de Klerk, Professor Wynand Mouton, Professor Waldo Stumpf, Mr Pik Botha, and Dr Neil Barnard. These respondents were the core decision-makers associated with South Africa's nuclear relinquishment programme. There were, of course, many other persons who were involved in the relinquishment and accession process who were not interviewed, because they were not privy to the core reasoning behind this decision. It was

[116] The Harvard Negotiation Project refers only to the matters of substance, relationship and process. The researcher regarded "time" as an important exclusion from their useful framework.

decided to restrict the sample to South African subjects because it was they who reached, and implemented, the decision to relinquish the nuclear arsenal and to accede to the Treaty on the Non-Proliferation on Nuclear Weapons. It was further decided that the South African research sample should be afforded primacy.

The dependence of this research upon a literature review to derive and present the Iraqi case in terms of the substance, relationship, process and time framework is most certainly a delimitation of the study. The South African component of this comparison can be expected to be more robust and have higher research integrity than the Iraqi component of this comparison. The researcher was unable to access an expert Iraqi research sample. The inclusion of a sample of Iraqi nuclear experts would have assured that the information provided for Iraq was first-hand and would also have assured greater research elegance, but was unfortunately not possible.

Ian Brownlie offered a caution that is relevant to this discussion. He makes the point that "at this stage it is perhaps necessary to stress that over-simplification of the problems, and too much reliance on general propositions about objective responsibility, *culpa*, and intention, can result in a lack of finesse in approaching particular issues".[117] Brownlie's caution can be regarded as a critique of the researcher's interpretation of the veracity of the questions at hand.

1.10.7 Limitations

South Africa's relinquishment of its nuclear arsenal and accession to the NPT was a unique process, driven and determined by a set of highly specific legal, technical and political concerns. One of the consequential challenges of this research was to assess whether, and to what extent, the insight of the knowledge and experience that arose from this research might be generalised to other countries that might intend following an

[117] Op cit Brownlie at 427.

analogous route of relinquishing their nuclear weapons and acceding to the NPT. An analysis has been conducted of the comparability of the South African and Iraqi relinquishment and accession processes, and it is uncertain whether these findings may be plausibly transferred. This is a limitation of the research. The researcher's view is that it may be difficult to transfer this knowledge to a country that is placed under extreme pressure to relinquish its nuclear weapons and accede to the NPT. The reason for this assertion is that nuclear relinquishment and accession can be very complicated matters. The more complicated the political circumstances within a society, the more difficult this task will be. The researcher is also not sure as to how easily and appropriately this research would translate into other languages and be acceptable to other cultures. Nevertheless, the framework offered here is rational and could be applicable.

A second limitation of the research is contained in the selection of the research sample itself. This study would have been enhanced and its scope increased if the researcher had been able to secure an international expert sample, which included inter alia the inspectors from the International Atomic Energy Agency, the Americans and the British experts, and others who were party to the relinquishment and accession process.

The researcher was not able to interview Dr Hans Blix, who played pivotal roles in both the South African and Iraqi cases. This failure to access Dr Blix should be regarded as a limitation on the research. This limitation was partially offset by conducting an appropriate review of Dr Blix's statements to the United Nations General Assembly and Security Council, and other authoritative documents, which are contained in the extensive literature that is available on this matter. While the South African data was derived from the respondents who conducted the relinquishment process and

acceded to the NPT, the Iraqi research was conducted via a literature review only.[118]

1.10.8 Justification for the Use of the Single Case Study Method

The decision to carry out this research as a single case study was informed by the fact that the South African decision to relinquish its nuclear arsenal was without precedent. It was therefore a unique process, informed by specific legal and political considerations. It was a singular case requiring a single case study. A single case study was deemed to be appropriate for this type of applied legal research.

Robert Yin offered indicators of when it is appropriate to use the case study method as a research strategy. These are, inter alia:

- "the complex causal links within the primary data that could not be processed or measured through survey or experimental strategies;
- the need to describe interventions in the real-life situation in which they occurred;
- the fact that the situation in which interventions are being evaluated has no single set of outcomes; and
- the possibility that the study could involve meta-evaluation". [119]

Yin posited that case studies are the preferred research strategy when 'how' or 'why' questions are being investigated, when the boundaries between phenomena and their context are not clear and "when the researcher has little control over events, and when the focus is on a contemporary phenomenon with-in some real life context".[120] The reader is reminded that the research questions are in fact predominantly 'why' and 'how' questions, namely:

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[118] See, for example, Watson, Bruce (ed.) (with George, Bruce, Tsouras, Peter & Cyr, BL). 1993. *Military Lessons of the Gulf War*. London: Greenhill Books.
[119] Yin, Robert K. 1994. *Case Study Research Design and Methods*. Second Edition. Thousand Oaks: Sage Publications. 15.
[120] Op cit Yin at 1.

- Why was the decision reached to roll back the nuclear arsenal and accede to the NPT?
- How did South Africa set about acceding to the Treaty on the Non-Proliferation of Nuclear Weapons and relinquish its nuclear weapons?
- How did South Africa set about acceding to the Treaty on the Non-Proliferation of Nuclear Weapons and relinquish its nuclear weapons?
- How did South Africa's relinquishment and accession process compare with Iraq's?
- How transferable is the experience of South Africa's accession to NPT?

Only one 'what' question was posed, namely: What impact, if any, did international law have on the South African (FW de Klerk's) decision to relinquish South Africa's nuclear arsenal?

These favourable research conditions for applying the case study method have an obvious and direct application to conducting applied legal research studies in general.

Primary interviews were conducted on a small but snowballing expert sample of persons who were involved with the relinquishment of the nuclear programme and accession to the NPT. One of the important benefits of this research is that it attempted to understand the lived experience of the persons who decided upon South Africa's nuclear rollback and accession to the NPT in terms of international law. This lived experience was articulated in the five testimonies of the expert sample.

These interviews were firstly subjected to the traditional process of triangulating the law with the testimonies of the respondents. This was the predominant method of data analysis. The data from these interviews was also, where appropriate, and at the discretion of the researcher, subjected to the structured methodology and method of phenomenological reduction.

The information was also analysed by subjecting the data to the phenomenological research method. The method of phenomenological reduction assisted in clarifying, systematising and enriching the understanding of the data. It was particularly helpful in identifying convergences and divergences in the information provided between the respondents, and within the respondents' own testimony, in a structured and systematic manner.

Kate Caelli pointed out that in phenomenological research, the terms 'methodology' and 'method' are viewed separately. The former refers to the philosophical framework that must be assimilated so that that the researcher is clear about the assumptions of the particular approach he or she has selected, whereas the latter refers to the procedure used to carry out the research.[121]

1.10.9 The Phenomenological Method

The central features of the phenomenological method are outlined below.

The first step in the phenomenological method is the so-called phenomenon of reduction, or 'epoch'. Here, the mental acts that took place during the course of the relinquishment process were described in a manner that was free of theories and presuppositions, either about those acts themselves, or about the existence of objects in the world. This pertained specifically to the primary research data that was discovered from the interviews with those who were entrusted with the relinquishment decision. [122]

The second step involved the eidetic reduction, which was an important theory building aspect of the phenomenological method. Here, by reflecting on a particular act or sets of actions that occurred during the relinquishment process, the research questions were addressed. This

[121] Caelli, Kate. 2001. 'Engaging with Phenomenology: Is it More of a Challenge than it Needs Be?' *Qualitative Health Research*, 11(2):273–281, March.
[122] Op cit Caelli at 276.

included the search for the discovery of a comparison between the legal dimensions of South Africa and Iraq's relinquishment processes.[123]

1.10.10 The Layout of the Research

The researcher obtained valuable verbatim testimony from the small expert sample against which the legal analysis is triangulated. The researcher's view was that this testimony should be placed in the commons. For this reason some fairly lengthy quotations offered by the respondents have been included.

The layout of this dissertation is similar to the format offered by Professor John Burroughs in his incisive analysis of *The (Il)legality of Threat or Use of Nuclear Weapons: A Guide to the Historic Opinion of the International Court of Justice*.[124] In this book, Burroughs cited verbatim testimonies of the proponents and opponents of the legality of the threat and use of nuclear weapons in a focused and useful fashion. Professor Charles Moxley in his book *Nuclear Weapons and International Law in the Post Cold War World*[125] offered a similar data presentation structure to that afforded by Professor Burroughs. The researcher was specifically inclined to follow the formatting approach of Burroughs and Moxley, because it was logically congruent with the type of data that was being analysed here.

Leslie Paik[126] and Austin Sarat & William Felstiner[127] conducted legal research involving testimony from respondents, and the researcher was kindly referred by Professor Jonathan Klaaren to these studies as a general guideline in laying out this research.

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[123] Loc cit.
[124] Op cit Burroughs (1997).
[125] Op cit Moxley (2000).
[126] Paik, Leslie. 2006. 'Organizational Interpretations of Drug Test Results'. Proquest International Academic Research Library. *Law & Society Review*, 40(4):931, December.
[127] Sarat, Austin & Felstiner, W. 1986. 'Law and Strategy in the Divorce Lawyer's Office'. *Law & Society Review*, 20(1).

1.10.11 The Study Sample

This dissertation consisted of a small but uniquely experienced and relevant expert sample of five persons who were directly involved in conceiving, leading and project-managing the nuclear relinquishment process, and South Africa's successful accession to the NPT. The sample included:

- President FW de Klerk, who presided over the relinquishment of the nuclear weapons. Mr de Klerk was interviewed at the offices of the FW de Klerk Foundation in Plattekloof, Cape Town on 4 October 2007.
- Mr Pik Botha, who was the South African Minister of Foreign Affairs at the time. Mr Pik Botha was interviewed in Pretoria North on 18 February 2008.
- Professor Wynand Mouton, whom Mr de Klerk placed in charge of the oversight process associated with the relinquishment programme and accession to the NPT. Professor Wynand Mouton was interviewed at Gordon's Bay in the Strand on 30 October 2007.
- Professor Waldo Stumpf, who was in charge of the programme dismantlement which started in September 1989. Professor Waldo Stumpf was interviewed in his offices at the University of Pretoria, Minerals Science Building, Pretoria on 18 October 2007.[128] [129]
- Dr Neil Barnard, who was the Director of South Africa's National Intelligence Service (NIS). Dr Neil Barnard was interviewed at the Chameleon Restaurant in Plattekloof, Cape Town on 29 October 2007.

Ian Brownlie points out:

"There is a serious problem involved in finding reliable evidence on points of international law in the absence of formal proof and resort to expert witnesses. Secondly, issues of

[128] Stumpf, Waldo. 1995a. 'South Africa's Nuclear Weapons Program: From Deterrence to Dismantlement'. Proquest International Academic Research Library. *Arms Control Today*, 25(10):3–8, December 1995/January 1996.
[129] Stumpf, Waldo: 1995b. 'Birth and Death of the South African Nuclear Weapons Programme'. Presentation given at the Conference '50 Years After Hiroshima' organised by UPID (*Unione Scienziati per il Disarmo*), held in Castiglioncello, Italy. 28 September to 2 October.

public policy and difficulties of obtaining evidence of the larger issues of state relations combine to produce the procedure whereby the executive is consulted on questions of mixed law and fact, for example, the existence of a state of war or the status of an entity claiming sovereign immunity."[130]

It is for this precise reason that the researcher decided to assume the risk of securing a truly expert sample in pursuance of the research. The research was guided by a search for an expert sample and formal proof.

The term animus denotes an intention or state of mind. The researcher's intention was to interview these expert respondents in order to clarify how this animus and *logos* related to the decision to relinquish the nuclear arsenal and accede to the Treaty on the Non-Proliferation of Nuclear Weapons.

1.11 The Globalisation of the Law – Klug's Notion of Constituting Democracy, as Read with Kuhn

Heinz Klug offered an interesting and useful notion of what he terms 'constituting democracy'. Klug extemporised on a theory about the growth and development of the law in the context of political change that recognises the emergence and impact of global dynamics. He puts it thus:

"Central to these, I will argue, is the emergence of a thin, yet significant, international political culture, which is shaping the outer parameters of feasible modes of governance. Although we may debate the effectiveness of law as a mechanism for social change and even wonder whether changes in the law merely reflects new social patterns it is generally acknowledged that rules, whether established through statute or as administrative regulations within the powers granted by legislation, are the primary means available to a democratic state to intervene in society. While constitutional amendment is in one sense merely a more complex form of legislation – in the requirement of increased majorities or special procedures- processes of state reconstruction, in which the fundamental structures of power are reorganised, are moments of fluidity and uncertainty quite distinct from normal politics and lawmaking." [131] [132]

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[130] Op cit Brownlie at 40.
[131] Klug, Heinz. 2000. *Constituting Democracy, Law, Globalism and South Africa's Political Reconstruction*. Cambridge, UK: Cambridge University Press. 7.
[132] It was Resolution 1653 (XVI) when the General Assembly of the United Nations:
"1. Declared inter alia that:

Klug's notion of constituting democracy is compatible with the theory of the pattern of how Thomas Kuhn posited scientific knowledge is created. Kuhn offered a paradigmatic notion of the manner in which scientific knowledge is created. He reflected:

"History, if viewed as a repository for more than anecdote or chronology, could produce a decisive transformation in the image of science by which we are now possessed. That image has previously been drawn, even by scientists themselves, mainly from the study of finished scientific achievements as these are recorded in the classics and, more recently, in the textbooks from which each new scientific generation learns to practise its trade."[133]

The logic contained in this passage presented by Kuhn is, I would argue, analogous to that contained in Article 38 of the ICJ pertaining to how international law is created. Assuming this point, this dissertation uses this consistency to structure its understanding of laws role in the events discussed.

While Kuhn provides the authority for understanding how scientific knowledge is created, Article 38, when read together with Klug and Brownlie, provides a useful framework for understanding how the incremental development of international law is created. In my reading, Klug offers a similar but legally-constituted thesis that attempts to understand the patterns and development of legal knowledge creation suggested by Thomas Kuhn in the case of the creation of scientific

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(a) The use of thermonuclear weapons is contrary to the spirit, letter and aims of the United Nations and as such a direct violation of the Charter of the United Nations;
(b) Is contrary to the rules of international law and to the laws of humanity;
(d) Any State using nuclear or thermonuclear weapons is to be considered as violating the Charter of the United Nations, as acting contrary to the laws of humanity and as committing a crime against mankind and civilisation."

United Nations Yearbook, 1961, at 30–31, cited in Hunt, Gaillard T. 'The Judgment of the Jurists: The Law of Nations and Nuclear Weapons'. 8909 Grant Street, Bethesda, MD. 14–15. [Online]. Available: http://www.gthunt.com/backg.htm

This Resolution was adopted by the General Assembly on 24 November 1961, by a vote of 55 to 20, with 26 abstentions. The Soviet Union and other Communist countries supported it. The United States and the NATO countries opposed it. The US delegate, Mr Dean, said, "It is simply not true that the use of nuclear weapons is contrary to the Charter and to International Law." Sourced in Hunt loc cit.

[133] Kuhn, Thomas. 1996. *The Structure of Scientific Revolutions*. Third Edition. Chicago and London: The University of Chicago Press. 1.

knowledge. In Kuhnian terms, an accepted and conventional legal view would constitute a legal paradigm. For Klug, the growth of law arises from a legal challenge which arises from the process of constituting democracy. That process of contesting the law seems to develop by a pattern of *Conjecture and Refutations*.[134]

Indeed, the value of the approach I propose is reflected in the contemporaneous observations of one of the principal actors, Hans Blix. Blix interrogated the theme of the development and globalisation of law and offered a view which converged with that articulated by Brownlie and Klug, on the incremental growth of international humanitarian law. Blix commented that:

"Whilst international law has grown and developed exponentially over the centuries, the rules of war that regulate the use of armed force have grown irregularly: has been tardy and remains shaky." 135

He observed that this law has developed unevenly.[136] Blix hypothesised that "if the monopoly or near-monopoly on the possession and use of arms is one of the premises of a peaceful community -– whether national or global – law is a second, and institutions for the settlement of differences are a third".[137]

[134] Popper, Karl. 1996. *Conjectures and Refutations: The Growth of Scientific Knowledge*. Fifth Edition. London: Routledge. (Karl Popper contended that "[t]he way in which knowledge progresses, and especially our scientific knowledge, is by unjustified (and unjustifiable) anticipations, by guesses, by tentative solutions to our problems by conjectures. These conjectures are controlled by criticism: that is by attempted refutations, which may include severely critical tests".)
[135] Blix, Hans, Dr. 2007. 'The Globalization of Peace'. Speech made on receiving Sydney Peace Prize Award. University of Sydney, Sydney Town Hall, Sydney, Australia. 3. November. [Online]. Available: http://www.usyd.au/news/84.html
[136] Op cit Blix (2007).
[137] Loc cit.

Blix continues:

"I am not suggesting that law invariably leads to durable social or international peace. Unfair or unjust rules may indeed lead to conflict. However, law generally reduces the potential for conflict between states as well as individuals, and it gives guidance for the settlement of conflicts when they arise. The rules of international law grew over the centuries, and during the last hundred years they have expanded exponentially, through treaties international tribunals and various mechanisms for supervision and dispute settlement have grown in number, but most rules are respected routinely and without access to court.

We must note, however, that in the crucial area of rules regulating the use of armed force in the international community development has been tardy and remains shaky.

It does not take much research to see that clear-cut legal restrictions on the use of armed force in the international community have been asserted only from the 20th century."[138]

1.12 Conclusion: The Chapter Outline

The research was presented in the format offered below. The chapter structure developed from the natural flow of the data provided by the expert sample. The research was guided by the discovery of the central themes that were contained in the data itself. Phenomenology was used to present the data in a clear, logical sequence.

- *Chapter One*: Research Questions, Aims and Methodology
- *Chapter Two*: An Emerging International Consensus on the Possession, Legality and Use by a State of Nuclear Weapons in Armed Conflict: The Period from 1945 to 1995
- *Chapter Three*: The International Court of Justice's Advisory Opinion as to the Legality of the Threat or Use by a State of Nuclear Weapons in Armed Conflict (8 July 1996)
- *Chapter Four*: Interpreting the Respondents' Understanding of the Legality of South Africa's Nuclear Weapons Policy
- *Chapter Five*: The Logic Underlying the Decision to Relinquish the Nuclear Arsenal and Accede to the Treaty on the Non-Proliferation of Nuclear Weapons

[138] Loc cit.

- *Chapter Six*: How the Nuclear Arsenal was Relinquished and Accession to the Treaty on the Non-Proliferation of Nuclear Weapons and Compliance with International Law was Achieved
- *Chapter Seven*: A Comparison of How South Africa and Iraq Relinquished their Nuclear Weapons in Terms of International Law
- *Chapter Eigh*t: Conclusion
- *Chapter Nine*: Bibliography

Chapter Two

An Emerging International Consensus on the Possession, Legality and Use by a State of Nuclear Weapons in Armed Conflict: The Period from 1945 to 1995

2.1 Introduction

This chapter reviews the growing global consensus on the status of international law as it applies to the legality of the possession and use of nuclear weapons. The period covered by this analysis is from 1945, when the atomic bombs were dropped on Hiroshima and Nagasaki, up until 1995, which was the year prior to the International Court of Justice issuing its Advisory Opinion on the Legality of the Use of Nuclear Weapons in Armed Conflict. The period from 1945 to 1995 is important because South Africa's development and relinquishment of its nuclear arsenal was deeply influenced by the evolution of the law as it pertained to the threat and use of nuclear weapons over this time-span. This period coincided with the conception, birth, controversial life, and death of South Africa's nuclear weapons programme. South Africa's nuclear status was influenced by both the evolution of the law and the state of the law up to the time its nuclear weapons were relinquished and the country acceded to the NPT.

2.1.1 An Overview of How the Law Evolved from 1945 to 1999

The following paragraphs are devoted to offering the reader a brief overview of the chapter. It is intended that the selection of legal principles, cases and events which are analysed in this chapter will provide the reader with an appreciation of how international law on nuclear weapons gradually developed, albeit often irregularly and erratically, over the years. The cases and events cited here reveal that the law usually developed as a retrospective normative response to a sequence of complex, and often very dangerous, sometimes nearly catastrophic, atomic events. The chapter will proceed with an analysis of Article 38 of the Statute of the

International Court of Justice, which defines the sources of international law.

Thereafter the chapter will explore the concepts of *jus cogens* and obligations *erga omnes*. *Jus cogens* consists of peremptory norms of international law accepted by all civilised nations and from which no deviation is permitted. The timeline which is followed from 1945 to 1995 is intended to be sequential, but the reader should forgive the fact that it is not always perfectly neat and sequential and that there is some spillage both before and after these cut-off dates. Sometimes, events which led to the development of the law on nuclear weapons occurred sequentially; and sometimes they occurred non-sequentially. Sometimes they occurred together and simultaneously, and sometimes the events occurred disparately and non-simultaneously. At times they were separated by lapses of time of years, and on other occasions they were compressed into rapid events over a few days or months. There were thus often variable lapses in time between the nuclear event and its distillation into international law.

A cause–effect relationship between nuclear event and the codification into international law was sometimes evident and sometimes tenuous. Odette Jankowitsch-Prevor makes the following observation:

"International law-making is rarely attributable to a single factor but, frequently enough, the decision to prepare a binding instrument is triggered off by major events, often a catastrophe – perceived ex post [facto] as having been potentially avoidable by the enactment and enforcement of proper legal norms … As to the nuclear field, it is recalled that in May 1986 the Board of Governors of the IAEA having 'considered the recent reactor accident at the Chernobyl Nuclear Power Station and other accidents of the past and noting the evident need for greater cooperation in nuclear safety …' decided on the setting up of groups of government experts ' to draft on an urgent basis international agreements' regarding early notification and information about nuclear accidents as well as the co-ordination of emergency response and assistance in the event of a nuclear accident. The Convention on Assistance in the Case of a Nuclear Accident or

Radiological Emergency was therefore prepared, adopted and signed within a few months only."[139]

This cameo offered by Jankowitsch-Prevor demonstrates the pattern of intersection between nuclear calamity and Convention that has often repeated itself. South Africa is party to the Convention on the Early Notification of a Nuclear Accident of 1986[140] and the Convention on Assistance in Case of a Nuclear Accident or Radiological Emergency of 1986.[141] I interpret South Africa's accession to these two Conventions as being almost anticipatory to its accession to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). Why otherwise would the decision have been made to become signatories to treaties that are non-proliferation-orientated in their essence? It would have been logically inconsistent to subscribe to these treaties and then decline accession to the NPT.

It is interesting that South Africa expressed two reservations with respect to the Convention on the Early Notification of a Nuclear Accident of 1986. The most pertinent to this research is the second reservation relating to non-recognition by South Africa of the authority of the United Nations Council on Namibia and its competence to act on behalf of South Africa. This reservation provides a fortuitous indication of South Africa's real concerns underpinning its development of a nuclear arsenal. The issue is clearly one of recognition. South Africa's authority to administer Namibia was not recognised,

[139] Jankowitsch-Prevor, Odette. 1994. 'International Nuclear Law in the Post-Chernobyl Period: The Convention on Nuclear Safety'. *Nuclear Law Bulletin*, 54:155.
[140] Signed and ratified on 10 August 1987. South Africa expressed and registered reservations upon its consent to be bound by this Convention:
"(a) The government of the Republic of South Africa does not consider it bound by either of the dispute settlement procedures provided for in Article II, paragraph 2 of the Convention.
(b) The signature of this Convention by South Africa in no ways implies recognition by South Africa of the United Nations Council for Namibia or its competence to act on behalf of South Africa."
(Cited from the convention itself.)
[141] The date of signature was 10 August 1987 and it was ratified on the same day.

One aspect of the development of international law as it pertains to the legality of nuclear weapons has most certainly been to mimic in an approximate manner the rather turbulent pattern of crisis and catastrophe described by Ms Jankowitsch-Prevor. It was a decade after the Chernobyl catastrophe had occurred, in 1996, that the Protocol on Civil Liability for Nuclear Damage and the Convention on Supplementary Compensation were ratified. A related convention, the Joint Convention on the Safety of Spent Fuels and Waste Management, was also concluded in 1996.

The response from the legal profession to the question of the legality of the possession and usage of nuclear weapons, in the immediate post-Hiroshima–Nagasaki period after 1945, was a silence that endured for approximately five years. Atomic bombs were dropped on Hiroshima and Nagasaki in 1945, and the world had to wait until 1950 before the first legal opinion was proffered on the legality of deployment of atomic bombs on those cities. The silence from the legal profession might have been attributable to the fact that nuclear programmes in the United States of America and elsewhere were usually dominated by nuclear physicists, scientists and engineers, and that international lawyers were not involved in its early phases of development and usage. The silence could perhaps have been attributed to shock at the enormity of events. Other reasons might have been an all too human delay in understanding caused by the slow, unclear and erratic manifestation of the deadly and various forms of cancer and other dread diseases that arise from toxic radiation exposure.

It needs also to be noted that there were high degrees of confusion in the immediate post-World War II period. Japan, for example, had much ’mopping up’ to do to restore to the chaos left by the war. Tokyo had been burnt and bombed to rubble, and the country’s infrastructure was in a mess. There were other matters that retarded the development of clarity on the legal status of nuclear weapons, and these included the post-World War II diplomatic reconciliation between the United States of America and Japan, which probably disinclined Japan from seeking legal redress against the USA for dropping the atomic bombs. This possibly encouraged

political compromise rather than deep-seated legal solutions. This silence about the legality of nuclear weapons was eventually broken by Alexander Sack, an American lawyer, who offered the first comprehensive analysis of the legality of the threat and use of nuclear weapons in 1950 in an article which he submitted to the *Lawyers' Guild Review*.[142] Sack's article on the legality of atomic, biological and chemical weapons was well crafted, and its findings are as relevant today as they were at the time of their articulation.

It was four years after Sack had written his paper, in 1954, that the *Lucky Dragon* incident took place. A fishing trawler called the *Daigo Fukuryu Maru* (translation: the *Lucky Dragon*) was fishing off the Bikini Islands when the United States Navy detonated a nuclear test blast at the atoll. All the crew of the *Lucky Dragon* suffered from radiation illness, and one died from this affliction. The cargo of fish which had been caught by the fishermen on the *Lucky Dragon* was subsequently sold at a central fish market in Japan. At this time it was not known that the fish had been severely contaminated by radioactivity during the course of the test blast. It was only after the fish had been sold and consumed unwittingly by the general public that it was discovered that all these fish had, like the crew, been severely radioactively contaminated.

The *Lucky Dragon* incident created the first international outcry against nuclear testing. The matter was settled out of court, and the United States made a without prejudice to rights settlement payment, with no admission of legal liability, of US$2 million to the Japanese government. In addition, each crew member received a once-off payment of US$5000 in full and final settlement of the incident, with no acknowledgment of legal liability forthcoming from the United States. This offer was accepted. The *Lucky Dragon* incident gained international coverage and drew the matter of the environmental and human hazards of peace-time nuclear testing into the realms of popular discourse. Subsequent protests and legal action against

[142] Sack, Alexander N. 1950. 'ABC – Atomic, Biological, Chemical Warfare in International Law'. HeinOnLine. *Lawyers' Guild Review*, 10:161–179.

nuclear testing in the South Pacific can be seen to have germinated from this important event. This incident showed that a nuclear explosion, whether conducted as a test in peace or used offensively in war, could cause untold damage.

The international environmental law ramifications of nuclear testing slowly started to become concretised into environmental protests against nuclear testing. The *Lucky Dragon* incident also raised the question of the freedom to fish in international maritime waters and to make unmolested passage over the high seas. Thereafter, nuclear testing would become an increasingly controversial and legally contested matter, particularly in the West. It was four years after that incident, in 1958, that the Geneva Convention on Fishing and Conservation of the Living Resources of the High Seas was concluded. The researcher could not definitively establish a clear cause–effect relationship between the *Lucky Dragon* incident and this Convention, but the timing was apposite.

To the best of the researcher's knowledge, there were few or no protests or legal contestation in the Eastern Communist bloc against nuclear tests and the transport of hazardous nuclear waste, because of limitations on civil liberties and the right to protest.

The growing mood of public concern about the dangers of nuclear usage, whether deployed in war or tested in peace, resulted in the first failed attempt to create a nuclear-weapon-free zone in Central Europe. This unsuccessful proposal was made in 1958 by the Polish Foreign Minister, Mr Rapacki, and was designated the 'Rapacki Plan'. Although the Rapacki Plan was unsuccessful (largely because of the intensity of conflict between the West and the East arising from the Cold War), it was prescient in the sense that it heralded the subsequent establishment of various multilateral nuclear-weapon-free zones in other parts of the world.

The next event that will be alluded to is the McCloy-Zorin agreement. It is the researcher's view that the McCloy-Zorin agreement was in both its

contents and process an anticipation, or heralding, of the Treaty on the Non-Proliferation of Nuclear Weapons, which came into being seven years later.

On 25 September 1961, John J McCloy on behalf of the United States and Valerian A Zorin, on behalf of the Soviet Union submitted to the United Nations (UN) General Assembly a 'Joint Statement of Agreed Principles for Disarmament Negotiations'. This joint statement, which was popularly known as the McCloy-Zorin Agreement, was adopted unanimously by the General Assembly. The Treaty on the Non-Proliferation of Nuclear Weapons, which opened for signature in 1968 and came into force in 1970, was inspired by this little-known joint statement. The NPT resembles an approximate codification of the McCloy-Zorin Agreement.

During the course of 1960, Cuba allied itself with the Soviet Union and its policies. This resulted in a deterioration in relationships with the United States of America. On 3 January 1961, America terminated its diplomatic and consular relationship with Cuba because of this new alliance with the USSR. The Bay of Pigs invasion in Cuba on 17 April 1961 was an abortive US-supported attempt to unseat Fidel Castro by fomenting an anti-Castro revolution. Tensions between the United States and Cuba increased and Fidel Castro claimed that he had the military support of the USSR, and that any invasion of Cuba by the United States would trigger a third world war. Medium Range Ballistic Missiles (MRBMs) and Intermediate Range Ballistic Missiles (IRBMs) were discovered in various sites on Cuba, aimed in the direction of the USA. The United States defence force was placed on high alert during October 1962, which was the time when the Cuban Missile Crisis reached its apex. There was fierce diplomacy between the United States and the Soviet Union. Fortunately, reason won the day, and no nuclear weapons were deployed.

One of the legal consequences of the Cuban Missile Crisis was the conclusion of the Treaty of Tlatelolco. which was an agreement to form a Latin American nuclear-weapon-free zone. The previously mentioned

Rapacki Plan represented the key conceptual framework that resulted in the establishment of all subsequent nuclear-weapon-free zones in the world. These are generally multilateral regional or continental agreements between proximate sovereign states to eschew the development of nuclear weapons and prohibit nuclear proliferation. The Cuban Missile Crisis also gave impetus to the conclusion of the Treaty on the Non-Proliferation of Nuclear Weapons. This nearly-catastrophic event frightened the US, the USSR and the rest of the world into a form of sanity that was codified into the NPT.

The *Shimoda* case is the first ever instance of a court having been tasked with the matter of assessing the legality of deploying nuclear weapons as an act of war. The *Shimoda* case was brought before a municipal court in Japan in 1965. This was a full twenty years after the nuclear bombs had been dropped on Hiroshima and Nagasaki. The case was raised by Mr Shimoda, who had lost various family members as a result of the atomic bombs. The findings of this court case are discussed, and they are supportive and converge with the opinion offered by Alexander Sack fifteen years previously.

New Zealand, Australian and the South Pacific Islanders were initially mute about nuclear tests being conducted in their region and space. It is suspected that they initially submitted to an arrogation of the right to nuclear deterrence and use by the nuclear-weapons-states (NWS). The initial disinclination by New Zealand, France and the South Pacific Islanders to contest this arrogation of their rights was probably attributable to the political and economic power of the NWS; the Cold War dynamics which split the world between East and West; and strong post-World War II allied loyalty. The *Lucky Dragon* incident and its subsequent resonance with the New Zealand, Australian and South Pacific Islanders protests about the hazards of nuclear testing indicated that it took some time before there was a clear scientific understanding of the trans-border and trans-generational environmental consequences that the testing and use of nuclear weapons implied.

There was an initial period of acquiescence, forbearance, and passivity displayed by New Zealand and Australia towards France with regard to nuclear testing and the transportation of nuclear waste, because these countries were long-term allies. The condoning attitude towards the atmospheric nuclear tests conducted by France and the United States gradually changed into strong and focused political opposition and legal protest. From 1970 until 1995 there was an increasing number of protests against nuclear testing in the South Pacific. These protests arose from New Zealand, Australia and the South Pacific Islanders, who became increasingly vociferous and outraged in their protests against France for conducting nuclear tests in the South Pacific. They took France to the International Court of Justice in 1973 in order to gain an Advisory Opinion on the legality of these nuclear tests. New Zealand, Australia and the South Pacific Islanders had in the past permitted their allies to transport nuclear materials or weapons in their territorial waters, but this concession was later revoked. New Zealand, Australia and the South Pacific Islanders gradually developed a united opposition towards nuclear testing in general and the transportation of hazardous nuclear weapons and waste through their territorial waters and in their geographical proximity. It is noted that the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was reached in 1989 and that this Convention coincided with the outcry, protest and municipal legislation promulgated in these countries, which prohibited the transport of nuclear material in their territorial waters. A study of the contents of treaties concluded over the post-World War II period shows an increasing trend of environmental concern from the 1970s. This would appear to be related to the realisation of the dangerous environmental impact of nuclear weapons, and for this reason it is submitted that environmental concerns about the hazards of nuclear weapons and the associated waste disposal concerns have energised the development of international environmental law.

In 1972 the treaty between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile

Systems (ABM Treaty) was concluded in Moscow. It was five years later in August 1977 that the two nuclear weapons silos were discovered by the USSR at Vastrap in the Kalahari Desert. The Americans and the Soviets were obliged in terms of the ABM Treaty to co-operate on the limitation of anti-ballistic missile systems. It is submitted that this Treaty set the tone for smooth co-operation in the domain of South Africa's acquisition of nuclear weapons between these two staunch Cold War rivals.

The Three Mile Island nuclear meltdown occurred in the United States of America over the period 30 March to 31 March 1979. In 1980 two important treaties were concluded relating to nuclear weapons. They were the Convention on the Physical Protection of Nuclear Material (1980) and the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be deemed Excessively Injurious or have Indiscriminate Effects (1980). It is difficult to impute any causal relationship between the Three Mile Island incident and the conclusion of the Convention on the Physical Protection of Nuclear Material (1980) although the events were sequential. In 1996 the Comprehensive Nuclear Test Ban Treaty came into being and vindicated all the years of protest from New Zealand, Australia and the South Pacific Islanders. But at the time of writing, 14 years later, it still had not come into effect.

2.2 Article 38 of the Statute of the International Court of Justice

The International Court of Justice (ICJ) is the authoritative judicial organ of the United Nations. Its remit is to help parties to resolve international disputes peacefully and determine international law. The ICJ was intended by its founders to be an ongoing dispute-resolution mechanism as opposed to shaping the law. Article 38 of the Statute of the ICJ sets out the sources of law which may be sought out and used by the Court to resolve disputes in international law. In this regard, the ICJ offers disputants advisory opinions and decisions. Its decisions do not have the authority of binding enforcement, and for this reason not all disputants have implemented the advisory opinions and complied with the decisions

that have emanated from the ICJ. Lawyers place a high regard on the authority of the advisory opinions and the integrity of the decisions reached by the ICJ, which therefore have high international credibility within the legal opinion, as they are regarded as an authoritative interpretation of the law. Decisions of the ICJ do not create a binding precedent. Article 38 of the Statute of the ICJ provides the Court with the authoritative statement as to the sources of international law. It affords various methods that can be followed which will assist in determining the principles of international law. The headings contained in Article 38 implicitly encapsulate core questions and explicitly denote core themes relating to the legality of nuclear weapons. The reader will notice that these Article 38 themes and questions are recurrent to the research.

"*Article 38(1)*: The Court, whose function is to decide in accordance with international law such disputes as are submitted to it, shall apply:

(a) international conventions, whether general or particular, establishing rules expressly recognized by contesting states;
(b) international custom, as evidence of a general practice accepted as law;
(c) the general principles of law recognized by civilized nations;
(d) subject to the provisions of Article 59, judicial decisions and the teachings of the most highly qualified publicists, of the various nations, as subsidiary means for the determination of rules of law."[143]

It is important to note that the Statute of the ICJ is actually annexed to and forms an integrated component of the United Nations Charter.[144] The Statute's purpose is to arrange the functioning and composition of the court.[145] Article 38(1) assures that conventions such as the Geneva Convention, the Hague Convention and the Treaty on the Non-Proliferation of Nuclear Weapons[146] played a prominent role in influencing

[143] Statute of the International Court of Justice, Article 38(1) at 4. [Online]. Available: http://www.icj-cij.org/documents/index
[144] The United Nations Charter has affixed to it the Statute of the International Court of Justice. It consists of five Chapters, namely: Organization of the Court; Competence of the Court; Procedure; Advisory Opinions; and Amendment.
[145] Loc cit.
[146] The Treaty on the Non-Proliferation of Nuclear Weapons:
Signed at Washington, London and Moscow 1 July 1968.
Ratification advised by the US Senate, 13 March 1969.

the development of the law as it pertains to the legality of nuclear weapons. Article 38(1)a, b and c are viewed as primary sources of international law. Article 38(1)d is viewed as a secondary source of international law, as it is evidence based.

The synoptic analysis which is presented below is broadly illustrative of how Article 38 has led to an increasing clarity on the legality of nuclear testing, possession, and deterrence during the period from 1945 to 1995. The researcher conducted a literature review in order to clarify how this law has gradually developed. The law evolved incrementally as it accompanied the reality of the experience of the development of nuclear weapons, deployment in war of nuclear weapons, testing of atomic weapons, the policy of nuclear deterrence, the proliferation of nuclear weapons, and nuclear calamities like the Chernobyl incident. Over the years there has been an accumulation of diplomatic protests, policy statements, press reportage, opinions of legal advisors,[147] and other actions that have gradually led to the law as it pertains to nuclear weapons becoming more coherent. In 1945, the Japanese ineffectively used diplomatic protests about the nuclear bombings of Hiroshima and Nagasaki,[148] which they sent to the US via the Swiss Embassy.[149]

US ratification deposited at Washington, London, and Moscow 5 March 1970.
Proclaimed by the US President 5 March 1970.
Entered into force 5 March 1970.
(It was opened for signature during the course of 1968 and entered into force in 1970. It was intended inter alia to create a bargain between the five Nuclear-Weapons-States (NWS) and the one hundred and eighty-two non-NWS that the non-NWS would not acquire a nuclear weapons capability as a quid pro quo for the NWS negotiating nuclear disarmament.)

[147] Article 38(1)d.

[148] Hunt, Gaillard T. 2003. 'The Judgment of the Jurists: The Law of Nations and Nuclear Weapons'. 8909 Grant Street, Bethesda, MD. 807. [Online]. Available: http://www.gthunt.com/backg.htm. Hunt mentioned that "[i]t was of course the nuclear bombs that were dropped on Hiroshima and Nagasaki that brought the full immensity of the unfocused destructive power of nuclear weapons to the world's attention. The power was so enormous that it was only some time later that calm legal minds were able to articulate its coherence. It is a little known and appreciated fact that within days after Hiroshima, the Japanese foreign office put together a protest which the Swiss embassy transmitted to Washington on 11 August 1945. ... 'There is involved a bomb having the most cruel effects humanity has ever known, not only as far as the extensive and immense damage is concerned, but also for reasons of suffering endured by each victim, since the beginning of the present war, the American Government has declared on various occasions that the use of gas or other inhumane means of combat were considered in the public opinion of civilized human society and that it would not avail itself of these means before enemy countries resorted to them. The bombs in question, used by the

Diplomatic protests were again made by the Government of Japan to the United States of America after the US had conducted a nuclear bombing test which caused a large amount of radioactive fallout to contaminate the crew and cargo of fresh fish aboard the *Lucky Dragon* fishing trawler on 1 March 1954, as a consequence of an atomic bomb test.[150] Similarly, New Zealand, Australia and the Pacific Islanders initially used diplomatic means to protest against the many atmospheric nuclear tests and the resultant nuclear fallout. These tests were conducted by France in the South Pacific Ocean during the period extending from 1966 to 1973.

New Zealand again used formal diplomatic channels to protest against the French military intelligence's mining and sinking of the *Rainbow Warrior* in Auckland Harbour on 10 July 1985.[151] [152] Policy statements made by the French Ministry of Defence were used by the International Court of Justice in 1974 to declare the cases petitioned by Australia and New Zealand against France to be moot. Press reportage was also used (rather controversially) as substantiating evidence by the ICJ to declare the above case moot. [153] The opinions of legal luminaries including inter alia: Judges Lauterpacht, Oppenheim, and Weeramantry, and legal scholars including (among many others) Brownlie, Dugard, Moxley, Burroughs, Meyrowitz, Fried, and Falk have exerted a deep influence on the development of international law as it pertains to nuclear weapons. Richard Falk demonstrated with eloquence how the Japanese municipal legislation was used in the *Shimoda* case in 1963, and harmonised with international law.[154]

Americans, by their cruelty and by their terrorizing effects, surpass by far gas or any other armament, the use of which is prohibited by the treaties for reasons of their characteristics' "

[149] Op cit Sack.

[150] Lapp, Ralph E. 1958. *The Voyage of the* Lucky Dragon. New York: Harper & Brothers Publishers. 126. Cited in 'The *Lucky Dragon* Radiation Incident'. [Online]. Available: http://american.edu/ted/LUCKY.htm

[151] Hoadley, Stephen. 2005. 'New Zealand and France – Politics, Diplomacy and Dispute Management'. Wellington: New Zealand Institute of International Affairs.

[152] Scobbie, Iain. 1992. 'Discontinuance in the International Court: The Enigma of the Nuclear Test Cases'. *International and Comparative Law Quarterly*, 41(4).

[153] Ibid.

[154] Falk, Richard. 1965. 'The *Shimoda* Case: A Legal Appraisal of the Atomic Attacks upon Hiroshima and Nagasaki'.*American Journal of International Law*. 59(4):759–794. [Online]. Available: http://www.jstor.org/view/0029300/di981738/9802212/0.

The development of international law can be closely correlated with the development of international environmental law. Both bodies of law have developed dramatically since 1945. Arguably one of the common denominators in this development lies in the legal response to the threat and usage of weapons of mass destruction on humans and the environment. One of the more important conventions on pollution is the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (1989).[155]

Alyn Ware made the point:

"Environmental law is one of the fastest growing areas of international law, with the development of provisions such as the precautionary principle and intergenerational equity which could apply to DU[156] weapons. The precautionary principle, which is making its way into international environmental law, provides that when there is reason to believe a particular practice could generate trans-border environmental damage, the onus is on the practising party to prove its safety.

Intergenerational equity holds that subsequent generations should not be threatened by current practices. The use of DU weapons threatens particularly the latter of these principles, in which the radiation released affects subsequent generations both in terms of genetic damaged to offspring, and the extremely long periods over which uranium is radioactive."[157]

Ware's research leads to the deduction that there is an incrementally developing notion of *jus cogens* and *erga omnes* manifesting itself in international environmental law. One of the contributory reasons for this gradual development of peremptory norms is the impact of nuclear weapons and other weapons of mass destruction upon the environment.[158] Nuclear testing has contributed very significantly to this development.

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[155] (1989) 28 ILM at 657.
[156] DU – Depleted Uranium.
[157] Ware, Alyn. 1997. 'Depleted Uranium Weapons and International Law'. International Action Center, New York. 6.
[158] Barboza, J.1994. 'International Liability for Injurious Consequences of Acts not Prohibited by International Law and the Protection of the Environment (1994-III). *Hague Recuel*, 291.

International law is often made by a number of diverse multilateral processes and with the aid of law-making processes which may be traditional or non-traditional. The United Nations, with particular reference to Article 38 of the Statute of the International Court of Justice, other international organisations, diplomatic conferences, codification bodies, NGOs and the courts are some of the instruments which abrogate the old rules and create new rules of international law.[159] The establishment of regional nuclear-weapon-free zones which create an enlarged international community and are accompanied by a consensus-driven lawmaking process is no longer the exclusive domain of individual states, and law may be made through a majority vote or by consensus. As mentioned previously, Article 38 of the Statute of the International Court of Justice defines the sources of international law. These sources of international law are an appropriate lens through which to consider the development of the law as it pertains to the legality of nuclear weapons. The Hague Peace Conferences of 1898 and 1907 were important agreements in creating international co-operation. They were also the first major international 'law-making' conferences.

As a general pattern, it is asserted that Treaties have probably become the most important source of international law since 1945 as far as the legality of nuclear weapons is concerned. Because multilateral treaties include multi-state parties, they are arguably more efficient and effective sources of international law creation than bilateral treaties, which by definition would be constrained to only two parties. Multilateral treaties extend the law to more countries and people more efficiently than bilateral agreements. There are obviously instances where the opposite logic will apply. A bilateral agreement on nuclear proliferation between the United States and Russia on a precedent might be of greater practical value in the pursuit of international peace than an elegant but impractical multilateral treaty. Because multilateral agreements involve multiple

[159] Boyle, Alan & Chinkin, Christine, 2007. *The Making of International Law*. Oxford: Oxford University Press. ix.

parties, they can by definition be expected to be more time consuming, costly and intellectually complex to conclude than bilateral agreements. It is difficult to argue in an absolute sense that there is a rigid hierarchy of interpretation of the sources of international law. But it is quite clear that in relation to the matter of nuclear weapons and international law, multilateral treaties have been very important in the post-World War II period. The regional multilateral nuclear-weapon-free zone treaties are perhaps the most conspicuous examples of the law-making role of Article 38 in terms of the international legality of nuclear weapons.

The tribunal role of the International Court of Justice has played an important role in clarifying important issues pertaining to the legality or illegality of nuclear weapons via its Advisory Opinions. The ICJ has clarified and developed legal principles including rules for interpreting treaties. The regional nuclear-weapon-free zone can be regarded as a product of globalisation, and Article 38 provides the principles for harmonising increasingly complex multilateral interaction. This has resulted in the simplification and codification of rules governing the interaction between states. Globalisation has also created an increased need to codify the rules that pertain between states. The Treaty on the Non-Proliferation of Nuclear Weapons presents international rules and a normative treaty governing the conduct of both NWS and non-NWS as far as their responsibilities not to proliferate nuclear weapons are concerned. Bilateral agreements such as SALT[160] and START,[161] which were concluded between the US and the former USSR, were also very important instruments of international law. Treaties are applied on a day-

[160] The Strategic Arms Limitation Talks (SALT) began in November 1969 and continued until May 1972. They were bilateral negotiations between the USA and USSR intended to limit the nuclear arms race. The two most important agreements which arose from SALT were the Anti Ballistic Missile Treaty (ABM Treaty) and the Interim Agreement on the Limitation of Strategic Offensive Arms, both of which were signed on 26 May 1972. These agreements were intended to freeze the number and proliferation of nuclear arsenals.

[161] The Strategic Arms Reduction Treaty (START) was concluded and signed on 31 July 1991 and expired on 5 December 2009. As was the case with SALT, it was a bilateral arrangement between the USA and USSR. Its goal was to reduce and limit strategic arms. It did result in the mutual reduction of nuclear warheads in both the USA and USSR.

to-day basis, governing relationships between states and setting the standards for normative conduct between them.

Judicial decisions and the teachings of the most highly-qualified publicists may be a compelling source of international law. International custom may at times be a difficult source of international law to assert because customs vary from one country to the next and are often not codified. Indeed, it will be shown later in this chapter that New Zealand and Australia were unsuccessful in the argument that they brought before the International Court of Justice in 1973, submitting that France had violated international customary law by conducting atmospheric nuclear testing in the South Pacific Ocean. The applicants and respondents disagreed on whether atmospheric nuclear testing was prohibited by international customary law.

2.3 Peremptory Norms of International Law – *Jus Cogens* and *Erga Omnes*

The testimony of the respondents showed that the notion of *jus cogens* (compelling law) as peremptory norms of international law and obligations *erga omnes,* (toward all) offered an important rationale as to why the South African nuclear arsenal was relinquished and the decision was reached to accede to the Treaty on the Non-Proliferation of Nuclear Weapons. If South Africa had dropped an atomic bomb on one of its townships, which were seething with unrest at the time, this would have constituted a *jus cogens* crime. Slavery, genocide, piracy and torture are examples of *jus cogens* crimes. A *jus cogens* crime is a higher level crime, which is regarded as being in contravention of peremptory norms accepted by all civilised societies. A *jus cogens* crime accordingly creates a reciprocal obligation *erga omnes* to rectify the higher wrong. Ian Brownlie cites *the Genocide Convention* case *(Bosnia and Herzegovina v Yugoslavia*)[162] in order to elucidate the notion of *erga omnes*.

[162] *Genocide Convention, Provisional Measures (Bosnia & Herzegovina v Yugoslavia (Serbia & Montenegro))*, 1993 ICJ Reports 3.

"The International Court adopted the view that territorial restrictions do not apply to rights and obligations that are *erga omnes*. In the words of the court: '[A]s to the territorial problems linked to the application of the Convention, the court would point out that the only provision relevant to this, Article VI, merely provides for persons accused of one of the acts prohibited by the Convention to be tried by a competent tribunal of the State in the territory where the act was committed' …".

A few examples of these reciprocal obligations *erga omnes* include the following:

- the duty to extradite persons who perpetrated such *jus cogens* crimes;
- the inapplicability of states using municipal law to institute a statute of limitations on such crimes;
- the inapplicability of any immunity being claimed by any person who perpetrated such crimes, including heads of state;
- members of the military and intelligence establishments are subject to the non-applicability of the defence to senior or higher military commands;
- *erga omnes* obligations are universally applicable, whether in war or in peace [whether a nuclear bomb were exploded in war or tested in peace];
- perpetrators of *jus cogens* crimes cannot claim a defence arising from the existence of a state of emergency, although they may claim the existence of a state of emergency, or political context in pleas in mitigation of sentence.[163]

There is in essence universal jurisdiction over *jus cogens* and a resultant *erga omnes* obligation to prosecute such crimes, whether in war or in peace.

The obligations *erga omnes* provide insight as to why and how the nuclear arms were relinquished and South Africa acceded to the NPT. The

[163] Cherif Bassiouni, M. 1996. 'International Crimes: "*Jus Cogens*" and "*Obligatio Erga Omnes*" '. *Law and Contemporary Problems*, 59(4): 63–75, Autumn, at 63n. Duke University School of Law.

meaning underlying these two terms will be briefly discussed, because the themes recurrently permeated the responses from the expert sample, and provided an indication as to the motives for relinquishing the nuclear weapons and acceding to the NPT. The motives were two-fold. The concept of *jus cogens* meant that a nuclear weapon could never be deployed in a war in which South Africa was engaged. *Erga omnes* meant that there was therefore a resultant reciprocal obligation to get rid of the weapons and accede to the NPT. The much sought-after international recognition for the new constitution would have been in tatters had such a weapon been deployed.

John Dugard submits that:

"*Jus cogens* refers to peremptory norms from which no derogation from international law is permitted. The notion of *jus cogens* has its origins in the Vienna Convention on the Law of Treaties of 1969, which in article 53 provides:

'A treaty is void if, at the time of its conclusion, it conflicts with a peremptory norm of general international law. For the purpose of the present Convention, a peremptory norm of general international law is a norm accepted and recognised by the international community of states as a whole from which no derogation is permitted and which can be modified only by a subsequent norm of general international law having the same character'."[164]

Genocide, apartheid, piracy and slavery are contrary to *jus cogens* and peremptory norms of humanity. The deployment of a nuclear bomb during the war in Angola or the insurrections in South Africa would have been contrary to *jus cogens* because such action would have been wholly disproportionate, would not have distinguished friend from foe, and would have been indiscriminate; and perhaps genocidal. The Court noted that the obligation of each State is therefore to prevent and to punish the crime of genocide.[165] It is contended, therefore, that the South African state had an obligation *erga omnes* to prevent by all means the deployment of a

[164] Dugard, John. 2007. *International Law: A South African Perspective* (with contributions by Bethlehem, Daniel, du Plessis, Max & Katz, Anton). Third Edition. Lansdowne: Juta & Co Ltd. 43.
[165] Brownlie, Ian. 2003. *Principles of International Law*. Sixth Edition. Oxford: Oxford University Press. 568.

nuclear bomb in the Angolan war, or anywhere else in which it was militarily or politically engaged.

2.4 Alexander Sack's Opinion on the Legality of Atomic Weapons

Alexander Sack was the first person to write a comprehensive analysis of the legality of the threat and use of nuclear weapons. He did this in 1950 – five years after the nuclear bombs had been dropped on Hiroshima and Nagasaki. Sack was neither an unheralded prophet, nor a forgotten voice. He was a lawyer who dutifully followed his professional calling. His opinion was not radical or extraordinary in any way. It simply provided a carefully-reasoned analysis of the law in a vitally important domain of war – that of the legality of atomic, chemical and biological weapons – which, perhaps because of the turbulence of the times then, had not yet been the subject of a comprehensive legal opinion.

Alexander Sack wrote his classic opinion entitled 'ABC – Atomic, Biological, Chemical Warfare in International Law' for the *Lawyers' Guild Review*.[166] He opened his analysis with compelling ethical rhetoric:

> "International law is neither a collection of platitudinous prescriptions of good behavior, nor a miraculous means of protecting right against wrong. It is a body of principles grounded on basic needs of civilized humanity and tested by historical experience. It provides standards of conduct for nations, required as much in the interest of the community as a whole, as of every one of its members … The first and only legitimate object of warfare is to overcome the military forces of the enemy. The object of warfare is thus at its maximum, to break down armed resistance of the enemy, not to destroy or permanently weaken the enemy's people or resources. The second principle is that, even within the scope of the legitimate object of warfare, the right of belligerents to adopt means of injuring the enemy is not unlimited."[167] [168]

The deployment of a nuclear weapon therefore by definition often exceeds the primary objective of warfare of defeating enemy. It tends to destroy

[166] Op cit Sack.
[167] Corroborated by Hunt op cit at 11–12.
[168] This principle is supported by Stumpf in Chapter Four, which analyses inter alia "Reprisal and Escalatory Risks". It is also explored under the 'theme' of "The Use of Nuclear Weapons and the Illegality of Not Distinguishing Friend from Foe".

rather than to defeat the enemy. It goes further than destroying the enemy. It destroys all who stand in its path whether they be friend or foe, combatants or non-combatants. Furthermore, the destruction is not limited to humans only. It extends to all biological genetic structures and to the broader natural environment.[169]

These laws and rules of limitation were derived from previous codifications, treaties and resolutions on international law which are deemed to be binding on all nations, compendium of those which were applicable during the 1950s. Alexander Sack asserted that the protagonists and belligerents are both protected by the laws of war in terms of natural law and the dictates of public conscience. The fact that military weapons will inevitably consist of new technologies that have not yet been proscribed does not mean that these are not covered by international law. It is inevitable that new military innovations will create new forms of warfare, and render others obsolete. For example, electronic warfare uses drone aircraft and pilotless aerial gunships. These create a no-risk situation to the soldier who is conducting such warfare from behind his/her desktop computer. That absence of personal risk does not exculpate the person operating the drone in the comfort of an air-conditioned office, and personally disengaged from the warfare itself from ensuring that the violence that is used is proportionate to the military objective. Natural law and the dictates of public conscience will still prevail, whatever the novelty of the new military technology. In a hypothetical situation, if the computer network of an army deploying the drone were to fail and the drone set-off its munitions on a civilian festival, destroying all, this disproportionate violence would be illegal under international law, in

[169] The most important list of treaties and other instruments of international law that were pertinent to it in 1954 when Sack wrote this opinion on the legality of atomic, biological and chemical weapons were inter alia: The 1899 Hague Convention with Respect to the Laws and Customs of War on Land; the 1899 Hague Convention for the Pacific Settlement of International Disputes; the 1920 Statute of the Permanent Court of International Justice; the 1945 United Nations Charter; the 1945 Statute of the International Court of Justice; the 1945 Charter of the International Military Tribunal; the 1946 Charter of the Military Tribunal for the Far East; the 1946 The Crime of Genocide ,UNGA Res 96 (1), 11 December; the 1946 Affirmation of the Principles of International Law; the 1948 Convention on the Prevention and Punishment of the Crime of Genocide; the 1949 Geneva Convention Relative to the Protection of Civilian Persons in Times of War.

terms of both natural law and the dictates of public conscience. The fact that technological failures of drone aircraft might not have been proscribed does not render them legal because of this lack of foresight.

The laws of armed conflict extend beyond positive law and accept that there is a moral code of natural law which refers to the dictates of public conscience that will be the test of the lawfulness of conduct in war. The researcher consequently asserts that Alexander Sack ascribed to an ethical notion of law as contained in the Martens Clause, which regarded the dictates of public conscience as pre-eminent. Sack seemed to have an implicit anticipatory subscription to the notions of *jus cogens* and *erga omnes*, which originated twenty-nine years after he had written his opinion at the Vienna Convention of the Law of Treaties in 1969, and which ensures that a treaty is void if at the time of its conclusion, it conflicts with a peremptory norm of international law.

Sack's opinion was that violence could be authorised only for military objectives that could be deemed to be essential. Violence for the sake of violence, in other words, gratuitous violence, can never be a military objective and is illegal. The violence used must be proportionate to the military objective, and excessive violence is illegal. The violence that is applied must be selected for achieving a clear military-outcome,[170] and

> "[t]he use of weapons that cause cruel suffering like chemical, gas and biological weapons may be illegal under almost all circumstances.[171] ... The use of weapons needs to be discriminate and must discern between combatants and non-combatants. Killing, injuring and destroying civilians and their property is prohibited. There must be a correlation between the military objective that is being pursued and the arms that are used in pursuance of this objective."[172]

Sack's opinion provided an early and eloquent circumscription of any presumptive notion of the legality of nuclear weapons.

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[170] Op cit Sack at 162.
[171] Loc cit.
[172] Loc cit.

2.5 The *Lucky Dragon* Incident

The *Lucky Dragon* incident was provisionally discussed in the introduction to this chapter in order to provide the reader with an accessible understanding of the overall themes comprising this chapter. This matter will now be explored in greater depth. The *Lucky Dragon* incident was settled by agreement between the Japanese and United States governments, with the United States not accepting liability for their role in the events. The incident, if viewed as separate and in isolation, would have had minimal if any impact upon the creation of international law. But it should not be viewed alone as an isolated failure of nuclear testing. It has been argued that international law is often made from the interaction of catastrophic events and complex factors. The catastrophic event in this case was a United States atmospheric nuclear test that contaminated a fishing crew and its catch, which was the unwittingly sold for consumption by the Japanese public, who were ignorant of the radioactive hazards of the food. Over subsequent years, many nuclear tests were conducted in the South Pacific by the United States and France amidst snowballing public outrage. This moral outrage was subsequently converted into international law, and the culmination of this was the conclusion in 1996 of the Comprehensive Nuclear Test Ban Treaty.[173]

The *Lucky Dragon* incident was therefore seminal in the sense that it set the tone for subsequently clarifying the legality of nuclear testing and regulating the transport of nuclear material and other matters that were converted into international law via the conclusion of treaties and other mechanisms. It also undoubtedly would have been relevant to the Protocol on Civil Liability for Nuclear Damage and the Convention on Supplementary Compensation.

[173] ECOSCOC Res 1996/31, 25 July.
UNGA Res 50/54, 29 July.
UNGA Res 51/45 S (1), 10 December.
UNGA Res 51/210, 17 December.
WHA Res 49.17.

The *Lucky Dragon* incident occurred in 1954 and created international awareness about the potential environmental hazards associated with the atomic fallout that accompanies nuclear testing.[174] A cargo of fish on a Japanese fishing trawler – the *Lucky Dragon* – was contaminated by radiation from a bomb code-named 'Bravo' in a nuclear test conducted by the USA. It was only after the fish had been sold off and distributed to the public at large that the extreme levels of nuclear radiation which were contained in this catch were realised. All of the crew on the *Lucky Dragon* fell ill because of the nuclear fallout and one person died from this affliction. This nuclear test also curtailed the economic right to earn a living and constrained fishing rights in the high seas. There was a series of profound birth abnormalities and foetal deformities among the Pacific Islanders which resulted from these nuclear tests, and which still persist to this day.[175]

"At 6:45 on the morning of 1 March 1954, eight years after testing in the Marshall Island began, the US detonated a bomb codenamed 'Bravo' on the island of Bikini. The bomb was equivalent to 17 megatons of TNT. It was 1 300 times the destructive force of the atomic bomb dropped on Hiroshima, and was specifically designed to create a vast amount of lethal fallout. That morning, wind was blowing in the direction of two inhabited atolls, Rongelap and Utrik, roughly 100 and 300 miles from Bikini.

A Japanese tuna fishing boat, the *Daigo Fukuryu Maru* – the *Lucky Dragon* – was caught in the path of Bravo's nuclear fallout. The fishing boat was sprayed by a cloud of radioactive ash. The *Lucky Dragon* was located 100 miles east of Bikini at the time of nuclear detonation. Its crew members suffered from radiation sickness, and one of them died of liver and blood damage on 23 September."[176]

The Lucky Dragon Incident raised some important issues on the regime of the High Seas –including the right to fishing. Ian Brownlie notes that the freedom of the high seas is best viewed as a general principle of international law, from which particular principles need to be deduced. Its

[174] Lapp, Ralph E. 1958. *The Voyage of the* Lucky Dragon. New York: Harper & Brothers Publishers.
[175] Testimony to this effect is offered in section 3.5 of Chapter Three, under the interrogation of the 'Testimony Offered to the Court on the Effects of Nuclear Weapons – The Statement of Natural Law'.
[176] Op cit Lapp.

application to specific problems often fails to give precise results. Weapon testing which involves the closure of large areas of ocean is regarded by some as a legitimate form of enjoying the freedom of the seas and by others as a denial of that freedom.[177] It is contended that weapons testing which does not: cause any environmental damage whatsoever and does not intrude on the freedom to traverse the high seas, does not intrude upon the freedom to fish and fishing rights as sources of food, and does not violate sovereignty may be lawful.

Lapp maintains that the *Lucky Dragon* incident highlighted the legality of:

- The atomic legacy of World War II;
- Disruption in the supply of fish; a principal food item;[178]
- Curtailment of fishing rights on the high seas; and [179]
- A deep-rooted concern that the United States was insensitive to the feeling and sufferings of the Japanese people and unduly preoccupied with the development of weapons for mass destruction.

Earlier that year, US authorities had issued a general warning defining a danger zone around Bikini, but no specific warning had been given regarding the timing or location of the various atomic tests. The Japanese crew apparently knew of the warning and assumed that they were operating outside the danger area. Their tuna trawler was in fact about 32 kilometres outside the zone.[180]

The United States donated 1 million yen (US $2 800) to the widow of the deceased fisherman as a gesture of sympathy. The remaining crew members all recovered with no apparent after-effects despite their

[177] Op cit Brownlie at 225.
[178] *Anglo-Norwegian Fisheries Case*, 1951 ICJ Reports, which related to an attempt to enforce conservation measures in the high seas.
[179] Ian Brownlie at 11 discussed the role of the subsequent objector in the *Anglo-Norwegian Fisheries Case* (supra) and reflected that "… part of the Norwegian argument was that certain rules were not rules of general international law, and, even if they were, they did not bind Norway, which had 'consistently and unequivocally manifested a refusal to accept them'." This logic was certainly evident in France's approach to Australia and New Zealand in the *Nuclear Tests* case.
[180] Op cit Lapp.

exposure to powerful doses of radiation aboard the ship while returning to Japan. Following extended negotiations, the United States made a payment of US$2 million to the Japanese government in January 1955, without acknowledging legal liability, to compensate for all injuries and damages caused as a result of five nuclear tests it had conducted in the Marshall Island (Bikini Islands) area, including damage and injuries sustained by the crew of the *Daigo Fukuryo Maru*. Each crew member received an average of US$5 000; the remainder was allocated to pay for their medical expenses and the damage done to the tuna fishing industry.[181] [182] This small, symbolic payment of compensation by the United States without acknowledgement of liability can be interpreted as a residual moral and ethical obligation for recompense under natural law.

Although a ban on nuclear testing is one of the oldest items on the arms control agenda, the law in the first decade after Hiroshima up until the mid-1950s was initially mute on the legality of testing. It took some time for this issue to be tested in the courts. Intensifying, and sometimes vociferous, international protests started to arise, as increasing numbers of people gradually became educated about the health and environmental hazards associated with nuclear testing. Incrementally and inconsistently, clarity on the legality of nuclear testing has developed slowly but significantly over the years since 1945.

The law on nuclear testing has been incrementally clarified over the years from an initially hazy and rather ill-defined position in the immediate aftermath of World War II culminating in, firstly, the conclusion of the Limited Test Ban Treaty in 1963 and then, thirty-three years later, in the conclusion of the Comprehensive Nuclear Test Ban Treaty in 1996.[183] This

[181] Op cit Lapp.
[182] It interesting that the Convention for the Conservation of Southern Bluefin Tuna was concluded in 1993 – the cargo of fish on the *Lucky Dragon* consisted of tuna.
[183] Comprehensive Test Ban Treaty.
ECOSOC Res 1996/31, 25 July.
UNGA Res 50/54, 29 January.
UNGA Res 51/45 S (1), 10 December.
UNGA Res 51/210, 17 December.
WHA Res 49.17.

analysis will have revealed that there has been continuous pressure to render nuclear testing illegal from just after the conclusion of World War II.

The goal of achieving a ban on all tests of nuclear explosions has been a constant theme of protests by anti-nuclear activists since the end of World War II. It was the radioactive fallout that was associated with these nuclear tests which began in earnest in the immediate post-World War II period. The Cuban Missile Crisis created very real fears about the dangers of nuclear arms race between the United States and Soviet Union degenerating into nuclear conflict. There were many protests about this. It was clear that tensions between the United States and Soviet Union in the arena of nuclear weapons competition needed to be reduced.

Jonathan Medalia offered a useful synopsis of how these confrontations between superpowers were correlated with the conclusion of the Limited Test Ban Treaty, the Threshold Test Ban Treaty; the Peaceful Nuclear Explosions Treaty, and ultimately the Comprehensive Nuclear Test Ban Treaty:

"In the 1950s, the United States and Soviet Union conducted hundreds of hydrogen bomb tests. The radioactive fallout from these tests spurred worldwide protest. These pressures, plus a desire to reduce US–Soviet confrontation after the Cuban Missile Crisis of 1962, led to the Limited Test Ban Treaty of 1963, which banned nuclear explosions in the atmosphere, in space and under water. The Threshold Test Ban Treaty, signed in 1974, banned underground nuclear weapons tests having an explosive force of more than 150 kilotons, the equivalent of 150 000 tons of TNT, ten times the force of the Hiroshima bomb. The Peaceful Nuclear Explosions Treaty, signed in 1976, extended the 150-kiloton limit to nuclear explosions for peaceful purposes. President Carter did not pursue ratification of these treaties, preferring to negotiate a Comprehensive [Nuclear] Test Ban Treaty, or CTBC, a ban on all nuclear explosions. When agreement seemed near, however, he pulled back, bowing to arguments that continued testing was needed to maintain reliability of existing weapons, to develop new weapons, and for other purposes. President Reagan raised concerns about US ability to monitor the two un-ratified treaties and late in his term started negotiations on new verification protocols. These two treaties were ratified in 1990. The CTBC was negotiated in the Conference on Disarmament. It was adopted by the UN General Assembly on September 10, 1996, and

was opened for signature on September 24, 1996. As of June 9, 2005, 175 states had signed it and 121, including Russia, had ratified."[184]

The *Lucky Dragon* incident is therefore considered to be the starting point of over four decades of contention that ultimately resulted in the ratification of the Comprehensive Nuclear Test Ban Treaty. In this way an imperfect and fallible form of democracy pertaining to nuclear weapons was constituted.

2.6 Nuclear-Weapon-Free Zones

The Rapacki Plan to declare Central Europe a nuclear-weapon-free zone was the first suggestion proposing that states situated in common geographical regions should enter into multilateral negotiations with one another to achieve regional nuclear relinquishment, and more specifically to prevent the emergence of new nuclear-weapons-states. Mr Rapacki, the then foreign minister of Poland, envisaged that this zone would include Poland, Czechoslovakia, the German Democratic Republic and the Federal Republic of Germany. The door was left open for other Europeans to accede should they so wish. In other words, it anticipated the formation of both the underlying principles of the NPT and the conclusion of regional agreements on nuclear-weapon-free zones. This regional framework agreement was unsuccessfully proposed in 1958 by Mr Rapacki. The Polish government was fearful that Soviet nuclear weapons would be deployed in its territory as the arms race between the US and USSR escalated. In hindsight, the Rapacki Plan was a useful and important failure. The proposal did create an awareness of the necessity for multi-national agreements between states situated in geographical regions to prevent nuclear proliferation and contribute to nuclear disarmament. The Rapacki Plan opened up a debate about how to establish an

[184] Medalia, Jonathan. 2005. 'Nuclear Weapons: Comprehensive Test Ban Treaty'. Foreign Affairs, Defence and Trade Division, Congressional Research Service, The Library of Congress, Washington DC. 3. 2 June.

internationally-acceptable regional regime on nuclear disarmament, with the support of the United Nations and its agencies."[185]

The Rapacki Plan was obviously diagnostically correct; but it was 'before its time' in terms of prognosis. This putative treaty failed because it was conceived before it was ripe for implementation, in a time where its legal value was eclipsed by the hardening political attitudes of the Cold War. It took the intercession of the Cuban missile crisis to create the impetus for the establishment of Mr Rapacki's conception of nuclear-weapon-free zones. A little-appreciated but positive outcome of the Cuban Missile Crisis was the reaching of the Treaty of Tlatelolco in 1967. This Treaty was concluded five years after the Cuban Missile Crisis, and international law was created to prevent a repeat of this crisis by multilateral agreement. The Treaty of Tlatelolco created a Latin American Nuclear-Weapon-Free Zone and was congruent with the spirit and intent of the NPT, which opened for signature in 1968. In 1985 the Treaty of Rarotonga was reached in the South Pacific as a specific result of Australian, New Zealand and the Pacific Islanders' antipathy towards the French nuclear tests that were conducted in that oceanic territory.

In 1992 the Joint Declaration of the Denuclearization of the Korean Peninsula was reached, and in 1995 the Treaty of Bangkok proclaimed South East Asia a nuclear-weapon-free zone. Finally, Africa followed suit in 1996, when the Pelindaba Treaty was ratified and the entire continent of Africa was declared a nuclear-weapon-free zone.

The taste for establishing nuclear-weapon-free zones was nothing new. Earlier, in 1959, the Antarctic Treaty had been concluded; followed by the 1967 Outer Space Treaty, the 1979 Moon Treaty and the 1971 Seabed Treaty.

2.7 The McCloy-Zorin Agreement

[185] Goldblat, Jozef. 1997. 'Nuclear-Weapon-Free Zones: A History and Assessment'. *The Nonproliferation Review*, 8–19.

The McCloy-Zorin Agreement represented an all-too-transient moment of consensus between the United States and the Soviet Union during the Cold War on the matter of achieving a regimen to prevent nuclear proliferation and accordingly to relinquish nuclear weapons. It was reached on 25 September 1961 by John McCloy on behalf of the US and Valerian Zorin for the USSR. They submitted a Joint Statement on Agreed Principles for Disarmament Negotiations to the General Assembly of the United Nations. It was unanimously adopted by the General Assembly of the United Nations. This agreement was prescient, and demonstrated how international law might be created by virtue of a joint statement being communicated to the USA and USSR, and being ratified as a Resolution before the General Assembly of the United Nations.

Burns Weston put it thus:

> "[It] called for multilateral negotiations to design and implement an internationally acceptable programme of general and complete disarmament that would lead to the eventual dissolution of national armed forces, the creation of a standing UN peacekeeping force, and the establishment of effective and reliable mechanisms for the peaceful settlement of international disputes in accordance with the Charter of the United Nations."[186]

The germ of idealism reflected in the spirit of nuclear non-proliferation would seem to have been contained in the McCloy-Zorin Agreement, which may be one of the ways in which international law has developed. Seven years later and after the intercession of the Cuban Missile Crisis, the Mcloy-Zorin notion was re-codified in part into the Treaty on the Non-Proliferation of Nuclear Weapons. The Article VI obligation of the NPT encapsulates the essence of the McCloy-Zorin Agreement and specifies the obligation of all states to pursue good faith negotiations to relinquish their nuclear arsenals under international supervision. Each of the Parties to the Treaty undertakes to pursue in good faith negotiations on effective measures relating to the cessation of the nuclear arms race at early date,

[186] Weston, Burns H (ed.). 1984. *Towards Nuclear Disarmament and Global Security A Search for Alternatives*. Boulder, CO: Westview Press. 1

and to disarm under strict and effective international control. Elements of the idealism underpinning the McCloy-Zorin Agreement emerged in subsequent nuclear arms negotiations and agreements, including the Comprehensive Nuclear Test Ban Treaty and the nuclear-weapon-free zone agreements.

2.8 The *Shimoda* Case[187] and its Implications in respect of the Legality of Nuclear Weapons

Richard Falk presented an analysis of the *Shimoda* case in an elegantly-crafted article published in the *American Journal of International Law* in 1965.[188] The *Shimoda* case raised the issue of the need to reconcile municipal law and international law. This conflict of laws was effectively reconciled by the Japanese municipal court, where this case was heard. The court sought to apply the best and most appropriate aspects of international law to the case. The researcher discovered that, although not even acknowledged as being of any importance to the South African case, this reconciliation of international law and municipal law was a fundamental legal theme of South Africa's relinquishment of its nuclear arsenal and accession to the Treaty on the Non-Proliferation of Nuclear Weapons. Article 38(1)c is the mechanism whereby the courts reconcile municipal law with international law. It was an implicit rather than explicit theme.

Ian Brownlie cites Oppenheim in order to explain the dilemma:

"The intention of article 38(1)c is to authorise the court to apply the general principles of municipal jurisprudence, in particular of private law, insofar as they are applicable to relations of states ... The latter part of this statement is worthy of emphasis. It would be incorrect to assume that tribunals have employed elements of legal reasoning and private law analysis in order to make the law of nations a viable system for application in a judicial process. Thus, it is impossible, or at least difficult, for state practice to evolve the rules of procedure and evidence which a court must employ. An international tribunal

[187] Falk, Richard, Kolko, Gabriel & Lifton, Robert Jay (eds.). 1971. *Crimes of War – A Legal, Political, and Psychological Inquiry into the Responsibility of Leaders, Citizens and Soldiers for Criminal Acts in Wars*. New York: Vantage Books.
[188] Op cit Falk.

chooses, edits, and adapts elements from better developed systems: the result is a new element of international law the content of which is influenced historically and logically by domestic law."[189]

Democracy is constituted in this way, according to Klug's exposition.

For Richard Falk the Shimoda case was seminal because:

(a) No similar case which explored the legality of the deployment of nuclear weapons in war had ever before been brought before a court of law. It presented the court with an occasion to deliberate upon the relevance of the laws of war as it pertained to the use of nuclear weapons. It raised questions about whether the technological development of nuclear weapons had rendered concepts of war contained in the pre-nuclear laws of war obsolete. Had any laws of war been abrogated by the reality of the technological developments underpinning war? The facts of the case therefore provided a lens whereby the relevance, and perhaps obsolescence of aspects of the law war as they pertained to the deployment of nuclear weapons might be viewed. [190]

(b) The case was unique because it was the first time that a court interrogated the matter of the lawfulness of a victor country (the United States) regarding its military policies towards a defeated country. War has traditionally been characterised by a dual morality: the morality of the victor which presides over the morality of the defeated. This case allowed for an inversion of that morality and a retrospective re-assessment of the legality of the military policies that underpinned the US decision to deploy the atomic bombs upon Hiroshima and Nagasaki.[191]

(c) Richard Falk made mention of the notion that at the time of the trial, Asian courts were reluctant to accept international law, which was perceived to be the progeny of the West, into their courts. The

[189] Op cit Brownlie at 16.
[190] Op cit Falk at 759–760.
[191] Loc cit.

Japanese municipal court accepted international law in its entirety with respect to the *Shimoda* case. This marked a shift in attitude by an important Asian court towards accepting international law. The Japanese court recognised the validity and applicability of international law in this case.[192]

(d) This acceptance of the validity and applicability of international law meant that the Article 38(1)c 'bridge' between municipal law and international law raised by Brownlie and explicated upon by Oppenheim below was crossed. (This was apparently a repudiation of the parochialism which had in the past been demonstrated by Asian courts and was frequently indicated in the intersection between private law and international law.) It would appear that there were matters of national prestige and sovereign pride at stake and that the East found it difficult to validate international law, which was regarded as a discourse from the West. Richard Falk made the observation that some Asian countries had even gone so far as to 'attack' international law in the post-World war II situation.

(e) Mr Shimoda brought this case before the municipal court in Japan in his personal capacity. The court therefore had to ascertain the extent to which a private citizen could in his or her personal capacity bring a case before the courts in terms of international law. More specifically, the court was called on to consider the extent to which sovereign immunity might bar the claims of an individual against a government that has broken international law.[193]

(f) The *Shimoda* case raised the question of the extent to which sovereign immunity permits the waiver of a peace treaty with respect to the claims of nationals against another country.[194]

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[192] Loc cit.
[193] Loc cit.
[194] World War II was brought to an official conclusion upon the signing of The Treaty of Peace with Japan between 49 Allied Nations and Japan on 8 September 1951 in San Francisco. It came into force on 28 April 1952. The *Shimoda* case raised the question of whether sovereign immunity permits any waiver of this Treaty, by Japanese nationals against the United States.

(g) The court was compelled to determine whether the case should be heard under United States or Japanese municipal law. It was required to reach a decision on the choice of law.[195]
(h) The matter of the conflict of laws has already been alluded to in paragraphs c and d above. Related to this was the need to clarify the role of a domestic court in a court case which hears a case in international law.[196]

Richard Falk's summation of the importance of the *Shimoda* case will now be triangulated with the South African nuclear weapons case.

Points a, b, c and f above would not have been specifically relevant to South Africa's nuclear weapons status. There is no question about the validity and jurisdiction of international law in South African courts. Unlike the case of Japan in the 1960s, this has never been a controversial matter in South Africa. International law has been applied in many instances in South Africa's conflictive history. Point d, dealing with the assertion of individual rights that arise from violations of international law, was never raised in the South African case. It might conceivably have been raised had nuclear tests been conducted in the Kalahari Desert or elsewhere, and had individuals (or the environment) been afflicted by the consequential nuclear fallout. Point f, relating to the degree to which sovereign immunity would have barred claims from individuals, did not arise in the case of nuclear weapons, but did arise out of the establishment of the Truth and Reconciliation Commission, which heard the testimony of persons who were subjected to gross violations of human rights during the struggle against apartheid. This point is therefore of passing relevance. Point g, which refers to the choice of law in the case of the deployment of nuclear weapons, would not (in the researcher's view) have been controversial, as it would have required a harmonisation between South African municipal law and international law.

[195] Op cit Falk at 759–760.
[196] Loc cit.

2.8.1 The Key Holding of the *Shimoda* Case

Falk presents the key holding of the Court in the *Shimoda* case thus:

"The principle holding of the Court is, of course, that the attacks with the atomic bombs upon Hiroshima and Nagasaki on August 6 and 9 of 1945 were in violation of international law. The principal reasons given were as follows:

1. International law forbids an indiscriminate and blind attack upon an undefended city; Hiroshima and Nagasaki were undefended; therefore the attacks were illegal."[197]

This is congruent with Alexander Sack's fourth limitation: "The objectives of permissible violence and the infliction of death, destruction and injury on civilians and civilian property as a separate measure of war is absolutely prohibited."

2. "International law only permits, if at all, indiscriminate bombing of a defended city, if it is justified by military necessity; no military necessity of sufficient magnitude could be demonstrated here; therefore the attacks were illegal."[198]

This is congruent with Alexander Sack's fourth limitation, inasmuch as he contended that the "destruction of any property or devastation of a region must have a reasonably close connection with the military objective sought to be achieved".

3. "International law as it has specifically developed to govern aerial bombardment might be stretched to a permitted zone or area of bombing of an enemy city in which military objectives were concentrated; there was no concentration of military objectives in either Hiroshima or Nagasaki; therefore no legal basis exists for contending that the atomic attacks might be allowable by analogy to zone bombing, because even then, if the latter is legal, if at all, it is directed against an area not containing a concentration of military targets."

This is again congruent with Alexander Sack's fourth limitation.

4. International law prohibits the use of weapons and belligerent means that produce unnecessary and cruel forms of suffering and is illustrated by the prohibition of lethal poisons and bacteria, the atom bomb causes suffering far more severe and extensive

[197] Op cit Falk at 776.
[198] Loc cit.

than the prohibited weapons, therefore it is illegal to use the atomic bomb to realise belligerent objectives:

All the respondents to this research shared the view that there is a duty to refrain from causing unnecessary suffering under the very nature of international law by which all belligerent activity is tested, whether specifically regulated or not.[199]

2.9 Nuclear Tests in the South Pacific: The Australian, New Zealand and Pacific Islanders' Contending Legal Responses to France's Atmospheric Testing in the South Pacific[200]

It has already been mentioned that in 1985 the multilateral regional Treaty of Rarotonga was concluded as a specific result of Australian, New Zealand and the Pacific Islanders' antipathy towards the French nuclear tests that had been conducted in that oceanic territory, and the resultant fears about nuclear proliferation in that region.

This discussion will attempt to place these matters in context. The controversial matter of the post-World War II nuclear tests conducted by the US and France, particularly in the South Pacific Ocean, is relevant to South Africa's nuclear relinquishment process and accession to the NPT. These tests created an enormous amount of antagonism between New Zealand, Australia, and the South Sea Islanders and France, who had all been historical allies. One of the reasons for this antipathy was the feeling that France, in conducting atmospheric nuclear tests, was presumptively arrogating itself a right of access and usage of the high seas that violated these countries' rights to the freedom of navigation and fishing. France's nuclear testing was experienced by these countries as a violation of their own sovereignty and a wilful imposition of French sovereignty upon them, which was contrary to the rules of international law.

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[199] Loc cit.
[200] *Nuclear Test Case (Australia v France)*, [1974] ICJ 253; *Nuclear Test Case (New Zealand v France)*, [1974] ICJ 457; *Nuclear Test Case (Australia v France) (Interim Measures of Protection)*, [1973] ICJ 99; *Nuclear Test Case (New Zealand v France) (Interim Measures of Protection)*, [1973] ICJ 135.

According to Ian Brownlie, the Convention of the High Seas of 1958 states:

"The high seas being open to all nations, no State may validly purport to subject any part of them to its sovereignty. Freedom of the high seas is exercised under the conditions laid down by these articles and by the other rules of international law. It comprises inter alia, both for coastal and non-coastal States:

(1) Freedom of navigation,[201]
(2) Freedom of fishing,[202] [203]
(3) Freedom to lay submarine cables and pipelines;
(4) Freedom to fly over the high seas.[204]

These freedoms and others which are recognised by the general principles of international law shall be exercised by all States with regard to the interests of other States in their exercise of the freedom of the high seas."[205]

The relevance of the nuclear tests in the South Pacific is analogous to the South African test scenario, and lies in the fact that South Africa developed two nuclear test silos at Vastrap in the Kalahari Desert. Considerable internal pressure was exerted upon Mr Pik Botha by senior members of the South African Defence Force and ARMSCOR to authorise nuclear tests in the Kalahari Desert.

It was New Zealand which originally raised the idea of requesting the United Nations General Assembly to call upon the International Court of Justice to provide an Advisory Opinion on the legality of France's nuclear tests that were conducted in the region. This call was made in 1970, twenty-six years before the ICJ offered its famous Advisory Opinion on the Legality of the Use by a State of Nuclear Weapons in Armed Conflict,

[201] *Corfu Channel Case (Merits)*, 1949 ICJ Reports 4 at 22.
[202] *Behring Sea Fisheries Arbitration*, 19 at 225.
[203] Article 1 of the Convention on Fishing and Conservation of the Living Resources of the High Seas (1958).
[204] Op cit Brownlie at 227.
[205] Article 2 of the Convention of the High Seas of 1958.

1996.[206] [207] New Zealand, Australia and the Pacific Islanders became involved in an intensifying legal clash with France about their penchant for conducting atmospheric nuclear tests in the South Pacific for nearly three decades.[208]

John Dugard confirmed that France was taken to the International Court of Justice by Australia and New Zealand on 9 May 1973. These countries initiated proceedings against France on the grounds of a dispute concerning the legality of atmospheric nuclear tests in the South Pacific Ocean. Australia and New Zealand asserted that these atmospheric tests were prohibited under customary international law and therefore violated their rights under international law. They claimed that the rule of law was forbidden by various United Nations resolutions which condemned atmospheric nuclear tests. In addition, they asserted that these tests had been conducted in contravention of the Test Ban Treaty of 1963. The outcome of the case was very disappointing for Australia and New Zealand, as it was declared moot.[209] [210] The concurring opinion of the other judges was that the dispute was non-justiciable, because there was no specific rule of law that forbade atmospheric nuclear testing. This reasoning led to the deduction that the conflict was consequently of a political rather than a legal nature, and therefore fell outside of the remit of the court.[211]

John Dugard cited Judge Petren's opinion presenting his reasons for the matter's being non-justiciable:

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[206] *Legality of the Threat or Use by a State of Nuclear Weapons in Armed Conflict*, 1996 ICJ Reports 226.
[207] *Nuclear Tests (Interim Measures of Protection)*, 1973 ICJ Reports 99, 135.
[208] Hoadley, Stephen. 2005. 'New Zealand and France – Politics, Diplomacy and Dispute Management'. Wellington: New Zealand Institute of International Affairs.
[209] *Multilateral Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Under Water* (Moscow Test Ban Treaty), done 5 August 1963 [1963] 2 UST 1313, T.IA.S. No. 5433, 480 UNTS 43.
[210] Dugard, John. 1976. 'The Nuclear Test Cases and the South West Africa Cases: Some Realism About the International Judicial Decision'. *Virginia Journal of International Law*, 16(3):463, Spring.
[211] Op cit Dugard (2007) at 470.

"The Court ought in my view to have formed an opinion from the outset as to the true character of the dispute which was the subject of the Application; if the Court had found that the dispute did not concern a point of international law, it was for that absolutely primordial reason that it should have removed the case from its list, and not because the non-existence of the subject of the dispute was ascertained after months of proceedings."[212]

The *Lucky Dragon* incident had created an international awareness of the grave hazards associated with nuclear testing. It was in this climate that France persisted in carrying out 44 atmospheric nuclear tests at Moruroa and Fangataufa in the South Pacific Ocean between 1966 and 1974.

Kate Dewes offers a contextual explanation of John Dugard's reflections:

"An outraged New Zealand public, increasingly aware of the health and environmental effects and in solidarity with smaller Pacific Island states, formed coalitions across society and explored several visionary initiatives with the government ... In 1970 Auckland CND petitioned the government to work to request the United Nations General Assembly to obtain an Advisory Opinion on the legality of French action, suggesting Australia, Japan, and Latin American nations bordering the Pacific as co-sponsors."[213]

The New Zealand Advisory Opinion on Nuclear Tests[214] foreshadowed by two-and a-half decades the Advisory Opinion on the Legality of the Use by a State of Nuclear Weapons in Armed Conflict.

The Cook Islanders initially attempted to address France's nuclear tests in their region by enacting their own municipal legislation to prohibit nuclear testing by France. This was ignored by France. The New Zealand embassy in Paris sent diplomatic notes to the French Minister of Foreign Affairs requesting France to desist from nuclear testing in the South Pacific Ocean. These too were ignored by France.

Hoadley explains:

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[212] [1974] ICJ at 302.
[213] Dewes, Kate. 2000. 'Legal Challenges to Nuclear Weapons from Aoteoroa/ New Zealand'. *British Review of New Zealand Studies (1999/2000)*. 4.
[214] *Nuclear Test Cases (Interim Measures of Protection)*, [1973] ICJ Reports 99, 135.

"On 14 May 1973 the Attorney General submitted to the International Court of Justice a request by New Zealand for 'Interim Measures and Protection'.[215] The request listed five rights under international law that French testing would prejudice. Slightly abridged, these rights were stated as follows:

- The right of all members of the international community including New Zealand, that no nuclear tests give rise to radioactive fallout be conducted;
- The rights of all members of the international community including New Zealand and the Cook Island, Niue, or Tokelau, to the preservation from artificial unjustified radioactive contamination of the terrestrial, maritime and aerial environment;
- The right of New Zealand that no radioactive material enter the territory of New Zealand, the Cook Islands, Niue, or Tokelau, nor cause harm including apprehension, anxiety and concern to the people; and
- The right of New Zealand to freedom of the high seas, including freedom of navigation and over flight ... without interference or detriment resulting from nuclear testing.

To protect these rights, New Zealand requested that France refrain from conducting any further nuclear tests that give rise to radio-active fallout ... and asked the Court to rule accordingly. Treaty texts, United Nations Resolutions, resolutions and declarations by other international and regional organizations and scientific documents were appended in support of the Request, and oral presentations of judges followed."[216]

France rejected the jurisdiction of the Court on the grounds of the national security of sovereign states, and actually declined to appear before the Court. It did not offer a direct rebuttal to the points New Zealand put forward in its request, although it did take care to make its position clear in public announcements and diplomatic notes.

On 22 June 1973 the Court issued the following ruling on provisional measures:

"The French Government should avoid nuclear tests causing the deposit of radioactive fallout in the territory of New Zealand, the Cook Islands, Niue, or the Tokelau Islands."

[215] Ibid.
[216] Op cit Hoadley at 37. The Case of *New Zealand Applicant v France Respondent* can be sourced at http://www.amin.org/final/03/ICJ.Francememorial.

While New Zealand had gained a favorable interim ruling overall, this was not a satisfactory outcome, since within a few months France conducted seven atmospheric tests in the restricted areas. The Court recommended that New Zealand submit a memorandum indicating why the Court should take jurisdiction of the dispute. New Zealand did so in November 1973, and presented oral arguments to the Court in July 1975.

Again France declined to respond, citing the sovereign right to national security. In the period from June to September 1974 France conducted seven more atmospheric tests. But on 8 June 1974, the Office of the President of the Republic issued a statement that France "[would] be in a position to pass onto the stage of underground explosions as soon as the series of tests planned for ... summer [was] completed".

The Court, however, took these and other French statements in their entirety to constitute a good faith pledge to end atmospheric tests. Consequently the Court in December 1974 found that:

"The Court faces a situation in which the objective of the applicant has in effect been accomplished, inasmuch as the Court finds that France has undertaken the obligation to hold no further nuclear tests in the atmosphere of the South Pacific."[217]

Thereupon the Court ruled as follows:

"The claim by New Zealand no longer has any object and ... the Court is therefore not called upon to give a decision thereon. In brief, it declared the case void and dismissed it without ruling on the substantive issues. A similar ruling was made in the parallel case brought by Australia. The votes of the fifteen justices divided nine to six. The six dissenters wrote separate opinions, some objecting to the use of French government's communiqués as evidence on which to dismiss the case, others asserting New Zealand's entitlement to a Court judgment, and others supporting the substance of New Zealand's position."[218]

The division among the judges was important as it indicated the extent of the divide between the nuclear-weapons-states and the non-nuclear-

[217] *Nuclear Test Case*, 1974 ICJ Reports 253, 457.
[218] Op cit Hoadley at 37–38.

weapons-states. In essence, the nuclear-weapons-states asserted the legality of the use and threat of nuclear weapons in terms of positive law, while the non-nuclear-weapons-states contended that nuclear weapons are illegal in terms of natural law.

Kate Dewes mentions the fact that New Zealand adopted municipal legislation which banned all nuclear-armed warships from its territory. It was the first country in the West to do this. This was achieved by means of mobilising the general public into a spirit of anti-nuclear weapons activism. This activism was oppositional to all nuclear weapons testing in the South Pacific Oceanic. The domestic governments in New Zealand were compelled to take cognisance of the activism and act upon these protests. New Zealand's foreign policy on nuclear weapons became resultantly increasingly independent from its allies who possessed these nuclear weapons. The already-mentioned 1973 case, when New Zealand took France before the International Court of Justice, was indicative of this growing sense of independence. Visits by allied nuclear armed vessels to New Zealand were met with vociferous and sometimes physical protests, the most famous being the *Rainbow Warrior* affair, when this Greenpeace ship was sunk by the French intelligence service in Auckland Harbour. The sinking of the *Rainbow Warrior* hardened attitudes within New Zealand, and in 1984 they adopted a nuclear-weapon-free policy.[219] The New Zealand Nuclear Free Disarmament and Control Act was passed in June 1987.

Kate Dewes asserted:

"Although treated with barely concealed fury by most of its Western allies, it [New Zealand] won admiration and respect from many non-aligned states for being the first and only Western-allied state to legislate against nuclear weapons and thereby renounce nuclear deterrence."[220]

2.10 Conclusion

[219] *Rainbow Warrior Case*, (1987) 26 ILM 1346.
[220] Op cit Dewes at 1.

2.10.1 The Law as it has Evolved on the Usage of Nuclear Bombs from 1945 to 1995

The *Shimoda* case is the only court case that has been held on the actual usage of nuclear bombs in war – those dropped at Hiroshima and Nagasaki. This case was heard in a Japanese municipal court which made meticulous and tightly-reasoned use of international and international humanitarian law in the argumentation of the case. The key finding was that the deployment of the nuclear bombs was a violation of international law, the essential reasoning being that "international law forbids an indiscriminate and blind attack upon an undefended city. Hiroshima and Nagasaki were undefended; therefore the attacks were illegal".[221]

This judgment leaves room for a contrary view. It is conceivable that there might be a case which involves the recently-developed mini-nuclear weapons ('mini-nukes'), where a state which is at war with another conducts a very carefully-specified, discriminate and targeted nuclear attack on a defended military installation, which is also discriminate and proportional.

In the second holding it was found that "no military necessity of sufficient magnitude could be demonstrated here"[222] to justify the deployment of these nuclear bombs.

For the researcher, the key term here is 'sufficient magnitude'. What military situation might justify the deployment of a nuclear bomb because of a case of 'sufficient magnitude'? This translates into the question: "When, or under what conceivable circumstances, would it be proportionate to deploy a nuclear bomb in a military operation?" Obviously the risks of nuclear reprisal and escalatory risks would have to be brought into consideration in addressing this question. These risks would in the researcher's view significantly circumscribe the matter of 'sufficient

[221] Op cit Falk at 776.
[222] Loc cit.

magnitude' and proportionality as a rationale for deploying a nuclear bomb.

The fourth holding included the finding that "the atom bomb causes suffering far more severe and extensive than the prohibited weapons; therefore it is illegal to use the atomic bomb to realise belligerent objectives".[223] The researcher is inclined to agree with this finding because it would appear that the inducement of cruel suffering is analogous to torture, and therefore contrary to *jus cogens*.

2.10.2 The Law as it has Evolved on the Testing of Nuclear Weapons from 1945 to 1995

When the nuclear tests began in the immediate post-World War II period, their legality had obviously not yet been tested. At that time there seemed to be an overwhelming presumption among the nuclear-weapons-states that these nuclear tests could be justified in terms of the sovereign right to self-defence.

The first hint that the legality of nuclear testing would eventually be contested arose from the contamination by nuclear fallout of the crew and fish cargo of the *Lucky Dragon* fishing trawler in 1954. This matter was settled by the US granting an *ex gratia* payment to the Japanese government and afflicted crew members.

The controversy around nuclear testing escalated during the course of the 1960s and 1970s with the recurrent French nuclear tests conducted in the South Pacific Ocean. These tests were strongly opposed by Australia, New Zealand and the South Pacific Islanders, and an Advisory Opinion was sought from the IJR.

The case was declared moot, and the law as regards the testing of nuclear weapons was not noticeably advanced as a result of the Advisory Opinion.

[223] Loc cit.

Municipal law of Australia, New Zealand and the South Pacific Islands was then crafted in order to render the usage, possession, testing and transportation of nuclear weapons illegal.

An international public outcry occurred because of the French sinking of the *Rainbow Warrior* in Auckland harbour, and this incident again focused international attention on the legality of the threat, possession, usage, testing and transportation of nuclear weapons.

The testing of nuclear weapons was also associated with a growth in the development of international environmental law, which was linked to global warming and trans-boundary pollution, and therefore international environmental law. International law and international environmental law increasingly started to intersect harmoniously with one another on the matter of the legality of nuclear testing.

In 1995 the NPT Review Conference declared the entry into force of a comprehensive nuclear test ban.

The law relating to the testing of nuclear weapons therefore developed significantly in the post-World War II period between 1945 and 1995. In 1945 nuclear testing was deemed to be legal, and by 1995 it was subject to a comprehensive test ban.

2.10.3 The Law as it has Evolved in Nuclear Proliferation and Accession to the Treaty on the Non-Proliferation of Nuclear Weapons

This research has shown that several states including South Africa have taken the decision to relinquish their nuclear arsenals, and nuclear weapons programme and to accede to the Treaty on the Non-Proliferation of Nuclear Weapons. The finding was that the key common denominator for this pattern of relinquishment and accession pertained to matters relating to state recognition and state succession.

The Treaty on the Non-Proliferation of Nuclear Weapons was concluded in 1968. The researcher's view is that it has been for the most an extremely effective treaty and has achieved what it was intended to do. However, its problematic areas are twofold. The first problem is the non-accession of the Threshold States – India, Pakistan, North Korea and Israel. They could conceivably serve as a conduit for further disaffiliation from the treaty. Secondly, the Nuclear-Weapons-States are contravening Article VI of the NPT by being themselves the greatest proliferators of nuclear weapons.

Chapter Three

The International Court of Justice's Advisory Opinion on the Legality of the Threat or Use by a State of Nuclear Weapons in Armed Conflict (8 July 1996)

3.1 Introduction

The International Court of Justice's Advisory Opinion on the Legality of the Threat or Use by a State of Nuclear Weapons in Armed Conflict, presented in 1996, distils, integrates and offers a heightened understanding of the gradual and rather irregular development of the law of war as it relates to the possession, usage and testing of nuclear weapons in the post-World War II period, covered in the previous chapter. This opinion presented important findings about the customary nature of international humanitarian law and offered pronouncements as to how this law might be interpreted as it pertained to the threat and use of nuclear weapons. According to Francis Boyle:

> "It is the first decision which expresses the view that the use of nuclear weapons is hemmed in, and limited by a variety of treaty obligations. In the environmental field, it is the first Opinion which expressly embodies, in the context of nuclear weapons, a principle of prohibition of methods of warfare which not only are intended, but may also be expected to cause 'widespread, long-term and severe environmental damage', and the 'prohibition of attacks against the natural environment by way of reprisals'." [224]

The Opinion clarified how these rules were interconnected with other laws and how this interconnectivity of law might be understood.[225] The customary nature of international law was affirmed in the Opinion which confirmed certain non-derogable principles of international humanitarian law, all of which have been referred to already by Professor Charles Moxley. These included the principle of distinction; the prohibition on the

[224] Boyle, Francis. 1996. 'The Criminality of Nuclear Deterrence'. Humanitarian Law and War Tribunals, College of Law, University of Illinois at Urbana-Champaign. 4–5, 17 October. [Online]. Available: http://www.derechos.org/koaga/v/boyle.html at 4–5.
[225] Doswald-Beck, Louise. 1997. 'International Humanitarian Law and the Advisory Opinion of the International Court of Justice on the Legality of the Threat or Use of Nuclear Weapons'. *International Review of the Red Cross*,.316:35, 28 February.

use of indiscriminate weapons; the prohibition against causing unnecessary suffering to combatants, and the fact that States do not have unlimited choice of means in the weapons which they use.[226] International humanitarian law contains the rules relating to both how a state might conduct a war, and a state's obligations to protect victims and antagonists (the civilians and the *hors de combat*) who discover that they are caught in the middle of a military maelstrom. The Hague Law was concerned about the laws of war relating to how hostilities are actually conducted, whilst the protection of victims in war was the predominant focus of the Geneva Law. These two differential though complementary points of legal focus were coalesced into a unitary body of law by the Additional Protocols of 1977. One of the objectives of the Advisory Opinion was to establish whether an *opinio juris* could be deduced on the legality of the use of nuclear weapons.

The International Court of Justice (ICJ) in 1969 submitted that for an *opinio juris sive necessitatis*, and therefore a customary law, to exist, there must be evidence of 'settled practice by states' on the matter:

"In considering the instances of the conduct above described, the Court has emphasized that, as was observed in the *North Sea Continental Shelf* cases, for a new customary rule to be formed, not only must the acts concerned 'amount to settled practice', but they must be accompanied by the *opinio juris sive necessitatis*.

Either the States taking such action or other States in a position to react to it must have behaved so that their conduct is 'evidence of a belief that this practice is rendered obligatory by the existence of law requiring it. The need for such a belief i.e. the existence of a subjective element is implicit in the very notion of the *opinio juris sive necessitatis*."[227]

The matter of a nuclear-weapons-state declining to sign a treaty on some facet of the legality of nuclear weapons because of parochial interest means that the development of an *opinio juris sive necessitatis* may be stillborn, and the development of customary law will be obstructed.

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[226] International Court of Justice. Legality of the Threat or Use of Nuclear Weapons: Advisory Opinion of 8 July 1996: Dissenting opinion of Judge Weeramantry at para 78.
[227] *Military and Paramilitary Activities in and Against Nicaragua (Nicaragua v USA) Merits*, 1986 ICJ Reports 14; 1969 ICJ Reports 44 at para 77.

David Bederman contends that it is often difficult to ascertain whether an *opinio juris* exists or not.[228] An *opinio juris* is the subjective element of law and relates to the belief that action was conducted because it was morally obligatory. If there is clear evidence of constant practice and conduct over a substantial period of time, the need for an *opinio juris* diminishes. The judges therefore sought the intermediary measure of relevant United Nations Resolutions which had been reached over the years that had passed since the conclusion of World War II in order to help ascertain whether or not an *opinio juris* existed on the legality of the threat or use by a state of nuclear weapons in armed conflict.[229] No *opinio juris* was affirmed in the case of the 1996 Advisory Opinion. This is because state practice since 1945 has often been quite inconsistent, although there is arguably a regular pattern underlying that inconsistency. The nuclear-weapons-states have constantly asserted that their possession of nuclear weapons is lawful and, indeed, essential to ensure the maintenance of world peace. Many non-nuclear-weapons-states, on the other hand regard the possession and use of these weapons as illegal and a threat to world peace. There is therefore, broadly speaking, a divide in the opinion as to and interpretation of the legality of possession, usage and deterrent application of nuclear weapons between the nuclear-weapons-states and non-nuclear-weapons-states. This divide in opinion will be explored in this chapter and constitutes an important theme. It is in the context of a divided opinion, such as this that the search for the presence of an *opinio juris* intensifies. Bederman asserted that the presence of a custom need not be world-wide and can be restricted to a region. Custom arises from the manifestation of clear, regular, repeated and respected normative sets of behaviours which occur regionally and/or internationally. This division in opinion among the judges ties in with David Bederman's assertion that custom need not be world-wide and can be regional in orientation.

[228] Bederman, David. 2001. *International Law Framework*. New York: Foundation Press. 15–16.
[229] Op cit Bederman.

The non-nuclear-weapons-states arguably have strong regional and weaker global influence. Conversely, the nuclear-weapons-states enjoy strong global, political and military influence accompanied by weaker regional influence than the non-nuclear-weapons-states. This differential pattern of influence has maintained itself in a relatively stable dynamic equilibrium since the end of World War. One could therefore contend that this equilibrium represents a custom. The nuclear-weapons-states and non-nuclear-weapons-states can be regarded as separate and distinct groupings of states and can be clearly defined as 'differing sets' on the basis of their mutually exclusive coalition of interests relating to the interpretation of the legality of the possession and use of nuclear weapons. These interests and interpretations of the law are 'almost' mutually exclusive and collectively exhaustive, on the basis of fundamental presumptions and assumptions: the nuclear-weapons-states possess nuclear weapons, while the non-nuclear-weapons-states do not possess nuclear weapons. Both NWS and NNWS vigorously hold that their respective positions are lawful, but some (an increasing number) of the non-nuclear-weapons-states are starting to interrogate the presumptions of legality that the nuclear-weapons-states assume with respect to the possession, use and deterrent application and use of nuclear weapons. This is evident from the testimony and evidence presented before the ICJ, some of which is detailed in this chapter.

The nuclear-weapons-states are a grouping with restricted membership and global influence, which arises from the scarcity of access to membership, and the power to assert the deterrent menace of these weapons. The nuclear-weapons-states have regularly asserted since the end of World War II that their possession of and right to use nuclear weapons is indeed lawful. Many non-nuclear-weapons-states regard the possession and right to use nuclear weapons as illegal. There was clearly a division in opinion between the groupings, and the judges could not find sufficient grounds to decide that an *opinio juris* existed regarding the legality of use of nuclear weapons. This subjective and divided opinion was reflected in negative votes and abstentions in voting.

The ICJ[230] advised that:

"The Court notes that General Assembly resolutions, even if they are not binding, may sometimes have normative value. They can, in certain circumstances, provide evidence important for establishing the existence of a rule or the emergence of an *opinio juris.* To establish whether this is true of a given General Assembly resolution, it is necessary to look at its content and conditions of adoption; it is also necessary to see whether an *opinio juris* exists as to its normative character. Or a series of resolutions may show the gradual evolution of the *opinio juris* required for the establishment of a new rule.

Examined in their totality, the General Assembly resolutions put before the Court declare that the use of nuclear weapons would be a direct violation of the Charter of the United Nations; and in certain formulations that such use should be prohibited. The focus of these resolutions has sometimes shifted to diverse and related matters; however, several of the resolutions under consideration in the present case have been adopted with a substantial number of negative votes and abstentions; thus, although those resolutions are a clear sign of deep concern regarding the problem of nuclear weapons, they fall short of establishing the existence of an *opinio juris* on the use of nuclear weapons."[231]

In essence, therefore, the judges' findings reflect a division between two essential (and 'final analysis') questions, which were whether a nuclear-weapons-state possessed the fundamental right to use these weapons in self-defence when attacked by an aggressor, versus the opposing question and underlying sets of arguments which questioned whether the fundamental right of a state to self-defence was superseded by the requirement for the future survival of civilisation and life on the earth. Did the latter right obviate and supersede the former? This right to self-defence might if asserted place the survival of life on the planet at risk, while the dilution of a state's right to self-defence could imperil it and cause it to fail. There was therefore both an advisory and a dissenting set of opinions which provided important insight into the legality and threat of the use of nuclear weapons in armed conflict, and which would undoubtedly assist in the interpretation of the law.[232]

[230] 1996 ICJ Reports 226.
[231] Op cit ICJ Reports at paras 70–71.
[232] Op cit Doswald-Beck.

The *Dispositif* of the International Court of Justice can be regarded as the formulaic exposition of the Court's essential findings, and the discussion in this chapter is predicated on that legal keystone. The International Court of Justice was conceived of by its founders as a continuous dispute settlement organ rather than a shaper of the law. An unanimous or near-unanimous Advisory Opinion will effect the creation of the law. The dissenting opinions in the Advisory Opinion as to the Legality of the Use by a State of Nuclear Weapons in Armed Conflict do not detract from the fact that there was a considerable degree of consensus as to the status of the law. Brownlie states that "[s]ince 1947, the decisions and advisory opinions in the *Reparation*,[233] *Genocide*,[234] [235] *Fisheries*[236] [237] [238] and *Nottebohm*[239] cases have had a decisive influence in general international law."[240] This chapter will explore the basis of the dissent that is contained in the Advisory Opinion in terms of the 'positivist versus natural law divide' that was reflected in the thesis and antithesis of the *Lotus* case versus the Martens Clause, the latter of which is explored further in section 3.4.

Moxley posed the question:

> "... whether the risk factors associated with *all* aspects of nuclear weapons are so inherently extreme that any manufacture, possession or use of nuclear weapons, in any circumstances, is so serious as to render even the most limited use of nuclear weapons unlawful.[241]

> Certain rules of law as to the prerequisites of the per se rule and as to civil and criminal liability for risk creation are so widely recognised as to constitute binding principles of international law.[242]

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[233] *Reparation for Injuries Suffered in the Service of the United Nations*, 1949 ICJ Reports 174.
[234] *Genocide Convention, Provisional Measures (Bosnia & Herzegovina v Yugoslavia (Serbia & Montenegro))*, 1993 ICJ Reports 3.
[235] *Genocide Convention, Preliminary Objections*, 1996 ICJ Reports 595.
[236] *Fisheries Jurisdiction Case (Jurisdiction) (Spain v Canada)*, 1998 ICJ Reports 431.
[237] *Fisheries Jurisdiction (Jurisdiction) (UK v Iceland)*, 1973 ICJ Reports 3.
[238] *Fisheries Jurisdiction (Merits) (UK v Iceland)*, 1974 ICJ Reports 3.
[239] *Nottebohm (Second Phase)*, 1955 ICJ Reports 4.
[240] Brownlie, Ian. 2003. *Principles of International Law*. Sixth Edition. Oxford: Oxford University Press. 20.
[241] Moxley, Charles J. 2000. *Nuclear Weapons and International Law in the Post Cold War World*. Lanham, MD: Austin & Winfield. 7.
[242] Loc cit.

For a per se rule to arise it is necessary that every single imaginable use be unlawful, or is sufficient if most, not necessarily all, such uses be unlawful, or if in the vast majority of the likely uses in the circumstances in which such uses would likely take place would be unlawful."[243]

The Nuclear-Weapons-States do not subscribe to the view that there are at present sufficient prerequisites for the establishment of a rule that the use or threat of nuclear weapons is illegal per se.

3.2 The *Lotus* Case and the 1996 ICJ Advisory Opinion – The Positivist Testimony

The *Lotus* case[244] case related to the matter of deciding upon the criminal jurisdiction arising from a collision between ships at sea. The Lotus case embodies the permissive and positivist theory in international law which asserts that "what is not specifically prohibited is permitted".[245] The Nuclear-Weapons-States applied this permissive and positivist theory of international law in defence of their possession, deterrence and putative usage of nuclear weapons in war. The authority to build and use the bombs was derived from the permissive theory of international law. This interpretative theme recurrently emerged in the various submissions that were presented before the International Court of Justice's Advisory Opinion on the Legality of the Use by a State of Nuclear Weapons in Armed Conflict.

Judge Guillaume subscribed to this positivist opinion and cited the *Lotus* case in support of the point that States elect to prohibit weapons by the conclusion of a treaty, and if no such treaty is reached, the weapons will be lawful.[246] The unifying theme of the Judges who afforded a positivist interpretation of the legality of the use and threat of nuclear weapons was contained in the reasoning that, *because there is no express legal*

[243] Loc cit
[244] *Lotus Case*, 1927 PCIJ Reports, Series A, No. 10.
[245] Datan, Merav. 2003. 'Nuclear Weapons and International Law'. Institute for Energy and Environmental Research, Takoma Park, Maryland. *Science for Democratic Action*, 9(3), 14 October; Energy and Security Law 17 of 2003, 7. [Online]. Available: http://www.ieer.org/sdafiles/vol_9/9-3/law.html
[246] Judge Guillaume's Separate Opinion para 10.

prohibition on the possession and threat of nuclear weapons, they are therefore permitted.[247] The positivist rationale and permissive view of international law arguably constituted both a legal and a practical justification for the South African decision to design and build the nuclear bombs, as none of the respondents conceded to any notion that South Africa had acted illegally in developing and possessing its own nuclear arsenal. They subscribed to a positivist Nuclear-Weapons-State justification for the creation of the nuclear bombs. Non-Nuclear-Weapons-States that intend to proliferate nuclear weapons may be tempted to employ the self-same positivist arguments proffered by the Nuclear-Weapons-States to justify their recourse to nuclear proliferation, and the *Lotus* case may provide a rationale for claiming that this is lawful in terms of international law.

Merav Detan contextualised this positivist interpretation by confirming that the Advisory Opinion "was also bound by a tradition of jurisprudence inherited from its predecessor, the Permanent Court of International Justice (PCIJ). In a 1927 criminal jurisdiction case, *Lotus*, the PCIJ held that 'restrictions upon the international law provide that what is not specifically prohibited is permitted' ".[248]

Charles Moxley presented a thorough assessment of the United State's stance on the law as it applies to the legality of the possession and use of nuclear weapons. The US interpretation of the law may be regarded as emblematic of the Nuclear-Weapons-States' interpretation of the law. It is clearly positivist and affirms the *Lotus* case dictum that what is not expressly prohibited is permitted.[249] For this reason, it has been decided to illustrate the general composition of the positivist argument.

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[247] Researcher's italics.
[248] Datan, Merav. 2003. 'Nuclear Weapons and International Law'. Institute for Energy and Environmental Research, Takoma Park, Maryland. *Science for Democratic Action*, 9(3), 14 October; Energy and Security Law 17 of 2003, 7. [Online]. Available: http://www.ieer.org/sdafiles/vol_9/9-3/law.html. 6–7.
[249] Op cit Moxley (2000) at 105.

The first point that Moxley makes with respect to the United States' stance on the legality of the possession and use of nuclear weapons is that they note that there is no per se rule. There is no international convention that prohibits usage of nuclear weapons purely because they are nuclear. This is a point which is grasped by the positivists – the nuclear-weapons-states – and weakens the argument for the relinquishment of nuclear weapons and accession to the NPT. This is precisely what Judge Guillaume asserted in the citation above.

Secondly, Moxley asserts that under customary law there is no custom of non-usage of nuclear weapons, and therefore no customary prohibition of deployment. Indeed, the nuclear powers' policy of deterrence constitutes an affirmation of the legality of the policy of deterrence by the Nuclear-Weapons-States. The nuclear powers have regularly over the years indicated a readiness to use nuclear weapons.[250] The policy of nuclear deterrence has continued unabated since the end of World War II. One could contend that customary law permitting both nuclear deterrence and the testing of nuclear weapons by the nuclear-weapons-states existed during the Cold War period. Moxley's reasoning reveals why no *opinio juris* was reached by the ICJ in the Advisory Opinion.

Moxley contended that the conclusion of the series of conventions between the nuclear powers on production, testing, maintenance, and proliferation indicates that these weapons are not generally prohibited but rather that they are permitted under a very specific regimen.[251] He maintains that the Nuclear-Weapons-States have expressed a doctrine of the lawfulness of these weapons, and for this reason a per se prohibition cannot be deduced.

It is the case of the nuclear-weapons-states that nuclear weapons, like any other weapons, can be used legally or illegally, and that each case of usage would have to be assessed on its own merits ... on "a case by case

[250] Loc cit.
[251] Loc cit.

determination".[252] The United States contended that many usages of nuclear weapons could comply with the rules of "proportionality, necessity, discrimination, moderation, civilian immunity, neutrality, humanity, and prohibition of genocide".[253] In addition, the US and other nuclear-weapons-states held that they would have a right to reprisal, if there were a preceding nuclear strike.[254] In recent times mini-nuclear weapons, referred to as 'mini-nukes', have been developed. The US contends that these weapons can be deployed with great accuracy and with controllable radioactive fallout. Professor Moxley cited the US Joint Chief of Staff, Doctrine for Joint Theatre Nuclear Operations as, confirming the US operational policy:

"There is no customary or conventional international law to prohibit nations from employing nuclear weapons in armed conflict. Therefore, the use of nuclear weapons against enemy combatants and other military objectives is lawful."[255]

He further cited the US military manual on the Doctrine for Joint Theatre Nuclear Operations:

"The law of armed conflict does not prohibit the use of nuclear weapons in armed conflict. However, any weapon must be considered a military necessity, and measures must be taken to avoid collateral damage and unnecessary suffering. Since nuclear weapons have greater destructive potential, in many instances they may be inappropriate."[256]

It is here that the positivist argument that nuclear weapons are permitted because they are not expressly prohibited becomes bridled. The usage of nuclear weapons in armed conflict is restrained by the basic principles of international humanitarian law that prevail in armed conflict; the principle of distinguishing an enemy from neutral persons; the illegality of the use of indiscriminate weapons (which could destroy not only the enemy but neutral states as well because, for example, the wind might blow nuclear fallout and deposit it in another country); the prohibition against causing unnecessary injuries to combatants (it is for this reason that blinding laser

[252] Op cit Moxley (2000) at 106.
[253] Loc cit.
[254] Loc cit.
[255] Op cit Moxley (2000) at 107.
[256] Loc cit.

beams are banned under international law); and the circumscribed choice that states have in their selection of weapons.

Rupert Ticehurst argues that the positivist philosophy of international law has held sway since World War II, with treaty and customary law being the predominant regulatory mechanisms in relations between sovereign states. He argues that the nuclear-weapons-states have used this reliance on treaty and customary law actually to curtail the development of the law on armed conflict. The reason behind his assertion is that the nuclear-weapons-states can decline to ratify treaties and concede to the development of customary norms and thereby assume control of the content of the law of war. They can retard the development of the law and sometimes assume control of the evolution of international law by strategically obstructing treaty ratification by withholding ratification and thereby not contributing to the development of customary law.

Ticehurst postulates that:

"Other states are helpless to prohibit certain technology possessed by the powerful military states. They can pass UNGA resolutions indicating disapproval but, in the presence of negative votes and abstentions, these resolutions are not from a strictly positive perspective, normative.[257]

This means that there is interpretatively one set of international humanitarian law for the five Nuclear-Weapons-States and another set of international law for the non-nuclear-weapons-states that have acceded to the Nuclear Non-Proliferation Treaty."[258]

It is pointed out to the reader that this dualistic legal reasoning articulated by Ticehurst was given practical effect by Professor Stumpf and Dr Barnard in their respective interviews. They made explicit reference to the legal dualism of one set of self-justificatory laws applying to the nuclear-weapons-states and another set of restrictive and sometimes punitive laws pertaining to the non-nuclear-weapons-states, as to the question of the

[257] Ticehurst, Rupert. 1997. 'The Martens Clause and the Laws of Armed Conflict'. *International Review of the Red Cross*, 317:129. Lecturer in Law, King's College School of Law; London.
[258] Op cit Ticehurst.

legality of possession and use of nuclear weapons. The International Court of Justice in the *North Sea Continental Shelf* case offered a positivist testimony on how a new customary rule may be formed. This is of obvious relevance to the exposition about the relevance of treaties and customary law in clarifying the law of war, and specifically to the question of the legality of the possession and use of nuclear weapons.

A citation submitted to the ICJ by John McNeill[259] on behalf of the United States represents a practical example of the reasoning contained in the positivist testimony, which asserted that nuclear weapons and their usage are lawful, as there is no express law to the contrary. This citation is then subjected to a critique by the researcher, which leads logically to an exposition of the counter-philosophy to the positivist argument, which is the statement of natural law and is illustrated in the Martens Clause, which is explored further in section 3.4.

McNeill submitted that:

"The World Health Organization and some States have submitted to the Court materials discussing the destructive effects of nuclear weapons, including the effect of their use on human health and the environment. It is true that the use of nuclear weapons would have an adverse collateral effect on human health and both the natural and physical environment. But, so too, can the use of conventional weapons. Obviously, World Wars I and II, as well as the 1990–1991 conflict resulting from Iraq's invasion of Kuwait, dramatically demonstrated that conventional war can inflict terrible collateral damage to the environment.[260] The fact is that armed conflict of any kind can cause widespread, sustained destruction; the Court need not examine scientific evidence to take judicial note of this evident truth.[261]

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[259] The citation from John McNeill is quite lengthy and the researcher apologises to the reader for this. It is included in the text on the basis of its practical relevance, and as an example of the underlying reasoning that is used by nuclear-weapon-states to contend that the possession and use of nuclear weapons is lawful.

[260] See Hulme, Karen. 1997. 'Armed Conflict, Wanton Ecological Devastation and Scorched Earth Policies: How the 1990–1991 Gulf Conflict Revealed the Inadequacies of the Current Laws to Ensure Effective Protection and Preservation of the Natural Environment'. *Journal of Armed Conflict Law*, 2(1):45, June. Nottingham University Press, University of Nottingham, Department of Law.

[261] McNeill's call 'not to examine the scientific' is logically inconsistent and selective. It is a good example of both obfuscation and moral relativism. McNeill is in fact calling for a scientific

Some States have adverted to studies of the effects of nuclear weapons in an attempt to demonstrate that every use of every type of nuclear weapon would necessarily violate principles of proportionality and discriminate use. But the material that has been presented for the Court's consideration cannot support such a sweeping proposition. Any given study rests on static assumptions: assumption regarding the yield of a weapon, the technology that occasions how much radiation the weapon may release, where, in relation to the earth's surface it will be detonated, and the military objective at which it would be targeted.

The assumptions made by the World Health Organization in the material submitted to the Court are in fact highly selective (*Effects of Nuclear War on Health and Health Services*, 2nd ed, 1987). The four scenarios on which the World Health Organization Report focuses address civilian causalities expected to result from nuclear attacks involving significant numbers of large urban area targets or a substantial number of military targets. But no reference is made in the report to the effects expected from plausible scenarios, such as a small number of accurate attacks by low-yield weapons against an equally small number of military targets in non-urban areas. The plausibility of such scenarios follows from a fact noted in the WHO Report by Professor Rotblat: namely, that 'remarkable improvements' in the performance of nuclear weapons in recent years have resulted in much greater accuracy. Clearly such possible scenarios would not necessarily raise issues of proportionality or discrimination."[262]

3.3 Critique of McNeill's Testimony

In order to understand the meaning and intention of the positivist testimony, one needs to assess the underlying message that is contained in McNeill's submission before the ICJ. McNeill acknowledged the truth that "nuclear weapons would have adverse collateral effects on human health, on both the natural and physical environment".

Euphemism is used as a linguistic technique to sterilise, objectify, diminish and obfuscate the statement of natural law. The term 'adverse collateral damage' is applied euphemistically to diminish the fact that the use of nuclear weapons is indiscriminate, that it is impossible to distinguish friend from foe, and that the damage inflicted by the deployment of these

promotion of the analysis of conventional weapons, and a demotion of the scientific analysis of the impact of nuclear weapons.

[262] Verbatim Record, 15 November 1995 at 89–90.

weapons will always be disproportionate to the military objectives. Collateral damage actually means that perhaps millions of non-combatants, innocent people, and civilians are killed, maimed, and suffer cancers and genetic birth damage which may be trans-generational, from the use of nuclear weapons in armed conflict. McNeill's statement is also intended to diminish the environmental damage that may ensue from nuclear fallout. Environmental damage can also be deemed to be 'collateral damage' of a sort. It is the researcher's view that McNeill would seem to be using this linguistic technique of euphemism to skirt over and avoid interrogating the legality of the principles of permissible violence, discrimination, proportionality, and the destruction of non-military property as a result of the deployment of nuclear weapons. The researcher has noticed that in common parlance the notion of 'collateral damage' has gained currency in recent years and is often used as a cliché to discount and divert attention away from war crimes. This catch-all terminology inhibits the ability to diagnose the status of what is actually being contended – that nuclear weapons which can cause trans-generational genetic destruction and trans-border environmental pollution that can endure for millennia are lawful.

The linkage of the destruction caused by nuclear weapons to conventional weapons can be interpreted as diversionary information calculated to detract from the remit of the ICJ's Advisory Opinion, which pertains to the use of nuclear weapons in war, and not to their comparability with conventional weapons. It is a red herring intended to divert the reader's attention away from the core intention of the hearing, which was to decide upon the legality of the possession and use of nuclear weapons. McNeill used the term 'collateral' twice in order to emphasise the appearance of objectivity and the rationality of his presentation. He also magnified the impact of damage (presumably resulting from burning oil rigs) caused to the environment by the use of conventional weapons as a linguistic technique to discount and set off the damage that is caused by nuclear fallout. He was presenting a case that the damage caused by conventional weapons and nuclear weapons is comparable and therefore implies, by a

contortion of logic, that the damage caused by conventional weapons legitimates the surgical use of nuclear weapons, and therefore that two wrongs make a right. A scientific assessment of the human and environmental damage caused by the atomic bombing of Hiroshima and Nagasaki is conspicuously absent from his analysis. This critique of McNeill's submission therefore pertains to both what is said and also what is left unsaid by him.

So, too, is an analysis of the human and environmental damage caused by peacetime nuclear testing. McNeill makes no mention of the human and environmental damage that ensued from the peacetime meltdown of the Chernobyl Nuclear Power Station in the Ukraine, as well as the many other well-documented nuclear power failures that have occurred over the years. McNeill refrains from reflecting upon the grave criminal danger that may ensue from the proliferation of mini-nukes by terrorist groupings almost anywhere in the world, which make for an alarming spectre.[263]

Rupert Ticehurst contended that the development of military weapons and of the law controlling these weapons can be asynchronous. The law will logically always be required to 'catch up' on military innovation. Ticehurst's view is that positive law can be particularly weak and ineffective in protecting persons from indiscriminate new advances in military technology, and he contends that a moral code vested in natural law should be seen as complementary to a positivist code.[264] Ticehurst's assertion is of obvious relevance to the mini-nuke debate referred to above.

"The assumption that a state may do anything that is not explicitly prohibited goes to the heart of the *Lotus* case. This is clearly a narrow interpretation of the law. The legality of the use and threat of nuclear weapons needs to be assessed in terms of congruency with

[263] Corera, Gordon. 2006. *Shopping for Bombs: Nuclear Proliferation, Global Security and the Rise and Fall of the AQ Khan Network*. London: Hurst & Company. (Dr Barnard referred to the danger of an exponential proliferation of nuclear weapons which might occur through the miniaturisation of this technology. He regards this as a potentially grave threat to international peace, because criminals would be able to trade and store these weapons if this scenario were to manifest.)
[264] Op cit Ticehurst.

Article 38 [of the Statute] of the ICJ. The notion that the possession and use of nuclear weapons is legal per se is deeply flawed, and cannot be adjudged upon the existence or non-existence of a rule."[265]

Finally, it is noted that the *Lotus* case, with its assertion of legal positivism, arose from a divided bench. This division among the bench constricts the presumption that what is not prohibited is permitted, and suggests that the principle may be generalised without restriction and reservation to other contexts.

Ian Brownlie, in discussing the *Lotus* case, cautions:

"Some discretion is needed in handling decisions. The *Lotus* decision arose from the casting vote of the President, and was much criticised, and was rejected by the International Law Commission in its draft articles on the law of the sea, and at the third session the Commission refused to accept the principles emerging from the *Genocide* case … Moreover, the view may be taken that it is incautious to extract general propositions from opinions and judgments devoted to a specific problem or settlement of disputes entangled with the special relations of two states."[266]

Brownlie's caution pertains to the danger of selectively extracting principles from a case such as the *Lotus* case, where the findings of the Court are context-specific, and then attempting to generalise these context-specific principles to other inapplicable situations. Using analogous reasoning, it is asserted that the weakness in John MacNeill's positivist testimony is too literal and strident, and is almost an invocation of the *Lotus* finding, which is fallible in terms of the reasoning contained above.

For Datan:

"*Lotus was the brooding omnipresence in the ICJ's Advisory Opinion* [researcher's italics] causing it to look for explicit prohibitions of nuclear weapons, for example, Judge Weeramantry moves beyond this extreme deference to state sovereignty, noting also that

[265] Meyrowitz, Elliott & Fried, John HE. 1981. 'Statement on the Illegality of Nuclear Weapons' (Drafted by Meyrowitz and Fried.) Approved by the Lawyers Committee on Nuclear Policy on 24 November 1981. Cited in Burns H Weston (ed.). 1984. *Toward Nuclear Disarmament and Global Security A Search for Alternatives*. Boulder, CO: Westview Press. 147.
[266] Op cit Brownlie at 20.

in times of war, when humanitarian law applies, there can be no presumption of permissibility."[267]

Datan observed:

"Judge Weeramantry's[268] analysis of *Lotus* foreshadows a fundamentally different interpretation of sovereignty and permissible state behavior than that espoused by the Nuclear-Weapons-States. He recognizes that the law contributes to and functions within the premise of continued existence of the community served by that law. Legal systems are postulated upon the continued existence of society."[269]

Judge Weeramantry's affirmation of the abiding relevance of the Martens Clause (see section 3.4 below) provides a balance contained in natural law to a strident positivist argument. It will be shown in the following analysis that the ICJ itself also affirmed the continued relevance of the Martens Clause both in itself and to the law of war.[270]

3.4 The Martens Clause[271] – The Testimony of Natural Law

The proponents of the illegality of the possession and use of nuclear weapons used arguments based upon natural law to counter the positivists stance on the legality of these weapons. An important component of the natural law logic was the authority provided by the Martens Clause, which offered an important rationale under customary law for declaring the use and threat of nuclear weapons to be illegal. The ICJ in fact "confirmed that the basic principles of humanitarian law continued to apply to all new weapons, including nuclear ones, and pointed out that no State disputed this".[272] It needs to be conceded at the outset that the ICJ, while acknowledging that there was an irrefutable place for natural

[267] Op cit Datan.
[268] Refer to the Dissenting Opinion of Judge Weeramantry.
[269] Op cit Datan.
[270] Opinion, para. 87
[271] Contained in Article 23(e) of the Hague Convention No. II Preamble to Fourth Hague Convention on the Laws and Customs of War on Land of 1899, and modified in 1907; used in the Nuremberg jurisprudence; modified in main body of Additional Protocol I to the Geneva Convention of 1949 of 1977; Preamble to Additional Protocol II, and used by the ICJ in the Advisory Opinion; Preamble to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects, 10 October 1980, Preamble, para.5 1342 UNTS 609, Legality of the Threat or Use of Nuclear Weapons (8 July 1996).
[272] Opinion, para.86.

law in the law of war, did not indicate the extent to which the Martens Clause would be accepted into the development of the law of war. Those who sought to confirm that possession and use of nuclear weapons are illegal actions tried to do this by reaching beyond the positivist norms contained in MacNeill's and other similarly-formulated positivist testimony. The Martens Clause has been relied upon and has endured over the years, albeit with amended wording and therefore varying interpretations with the passage of time. The ICJ in its Advisory Opinion afforded the Martens Clause a special emphasis. The Martens Clause naturally forms a counterpoint to the positivist view that "that which is not prohibited is permitted", which was discussed in the previous analysis, and provides a testimony to natural law. In 1899, when originally formulated, the Martens Clause read as follows:

"Until a more complete code of the laws of war is issued, the High Contracting Parties think it right to declare that in cases not included in the Regulations adopted by them, populations and belligerents remain under the protection and empire of the principles of international law, as they result from the usages established between civilized nations, from the laws of humanity and requirements of public conscience."[273]

The Martens clause therefore insists that if a particular rule is not positively encrypted into treaty law, belligerents will remain under the protection and authority of customary law, the principles of humanity, and the dictates of the public conscience.[274] Judge Shahabuddeen pointed out in his dissenting opinion proffered before the ICJ that the Martens Clause had been invoked in the United States Military Tribunal at Nuremburg in the case of Krupp 1948,[275] where it had been asserted:

"The Martens Clause is much more than a pious declaration. It is a general clause, making the usage established among civilised nations, the laws of humanity and the dictates of public conscience into the legal yardstick to be applied if and when the specific provisions of the convention do not cover specific cases."[276]

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[273] The Hague II Convention of 1899.
[274] Op cit Doswald-Beck at 44–45.
[275] In re Krupp and others, 15 Ann. Dig. 620, 622 (U.S. Mil. Trib. 1948). Interestingly, the powerful NWS accepted the primacy of natural law in the Nuremberg Trials and then eschewed it insofar as the legality of the use and threat of nuclear weapons was concerned.
[276] Dissenting Opinion of Judge Shabuddeen at 22–23.

In a complementary explication on the continuing pertinence of the Martens Clause, Rupert Ticehurst asserts that:

"... the laws of armed conflict do not simply provide a positive legal code, they also provide a moral code. This ensures that the views of smaller states and individual members of the international community can influence the development of the laws of armed conflict. This body of international law should not reflect the views of the powerful military states alone. It is extremely important that the development of the laws of armed conflict reflect the views of the world community at large".[277]

This can be regarded as a counterpoint to the *Lotus* case. Louise Doswald-Beck makes the point that it is much contested "whether the 'principles of humanity' and the 'dictates of the public conscience' are separate, legally-binding yardsticks against which a weapon or a certain type of behaviour can be measured in law, or whether they are rather moral guidelines".[278]

For Rupert Ticehurst, the Martens Clause offers a bridge between the legal positivists' position and for the intercession of natural law. He contends that natural law fell into decline because of its subjectivity, with contending states criticising its legal consistency by submitting that it was supportive of differing and contradictory norms of natural law. He contends that the Martens Clause lays out an objective means for determining natural law, which is the dictate of public conscience. Ticehurst argues that this enriches the law of war and ensures participation of states in its development, because these states participation in the creation of the law is effectively the manifestation of the dictates of public conscience.

The International Court of Justice's Advisory Opinion on the Legality of the Use by a State of Nuclear Weapons in Armed Conflict involved an extensive analysis of the laws of armed conflict. Inevitably, the oral and written submissions to the ICJ and the resulting Opinion made considerable reference to the Martens clause, revealing a number of

[277] Op cit Ticehurst.
[278] Op cit Doswald-Beck.

possible interpretations. The Opinion itself did not provide a clear understanding of the Martens Clause. However, submissions from the States and some dissenting opinions provided very interesting insight into its meaning.

Judge Koroma in his dissenting opinion challenged the whole notion of searching for specific bans on the use of weapons, stating that ”the futile quest for specific legal prohibition can only be attributable to an extreme form of positivism”,[279] the sources of which are contained in Article 38 of the Statute of the International Court of Justice.

Judge Shahabuddeen in his dissent also provided an analysis of the Martens clause. He commenced by referring to the ICJ's Advisory Opinion, paragraphs 78 and 84, where the Court determined that the Martens clause is a customary rule and therefore has normative status. In other words, the clause itself contains norms regulating State conduct – *jus cogens* and *erga omnes*.

With reference to submissions made by Nuclear-Weapons-States such as the United Kingdom, he stated that ”it is difficult to see what norm of State conduct it lays down, if all it does is to remind States of norms of conduct which exist wholly *dehors* the Clause”. Judge Shahabuddeen was clearly of the opinion that the Martens clause is not simply a reminder of the existence of other norms of international law not contained in a specific treaty – it has normative status in its own right and therefore works independently of other norms.[280]

3.5 Testimony Offered to the Court on the Effects of Nuclear Weapons – The Statement of Natural Law

A citation offered by Lijon Eknilang of the Rongelap Atoll in the Marshall Islands situated in the South Pacific Ocean on the physical and

[279] Op cit Ticehurst.
[280] Op cit Ticehurst at 126.

psychological effects of the testing of nuclear weapons is offered as a contrast to positivist testimony asserting the legality of the use and threat of nuclear weapons provided by John McNeill. Lijon Eknilang[281] was a member of the Rongelap Atoll's local government, and she was on land when the *Bravo* test shot occurred. Her statement is a moral testimony of the great power of public conscience and therefore encompasses concerns of the Martens Clause and natural law. Eknilang referred to the radiation and fallout effects on physical, psychological, and environmental health in the aftermath of the *Bravo* atmospheric nuclear testing, which tests were conducted by the US.[282] This is an elegant statement of natural law.[283]

Lijon Eknilang's citation together with the positivist testimony of John McNeill was contained sequentially in *The (Il)legality of Nuclear Weapons* by John Burroughs. She testified as follows to the Court:

"Mr President, Members of the Court, I would like to begin by thanking you for allowing me to present a statement on the effects which the explosion of nuclear weapons have had on my life and family, friends, and other fellow citizens of the Marshall Islands. These experiences are relevant to the questions put to this Court, because unnecessary injuries, indiscriminate impacts, and adverse collateral environmental effects of the radioactive fallout resulting from the atmospheric tests have so gravely affected the Marshall Islands would be repeated for other people and their lands in the event of any military use of nuclear weapons ...

On the morning of 1 March 1954, the day of the *Bravo* shot, there was a huge, brilliant light that consumed the sky. We all ran outside our home to see it. The elders said another world war had begun. I remember crying. I did not realise at the time that it was the people of Rongelap who had begun a lifelong battle for their health and a safe environment. Not long after the light from *Bravo*, it began to snow in Rongelap. We had heard about snow from the missionaries and other westerners who had come to our

[281] The reader is reminded of the fact that the *Bravo* tests in the South Pacific actually caused the nuclear fallout associated with the *Lucky Dragon* incident of 1 March 1954, discussed in the previous chapter. An incorrect and misleading impression may have been created that the crew on the *Lucky Dragon* were the only persons who were contaminated by the *Bravo* nuclear fallout and that only one person died as a result of this event. This was not the case. Entire communities were contaminated by the nuclear fallout that accompanied the *Bravo* atomic tests.
[282] Eknilang's testimony echoes the *Lucky Dragon* affair, discussed in the previous chapter. She lived on one of the islands afflicted by the nuclear radiation fallout in 1954.
[283] Verbatim Record, 14 November 1995 at 26–27, 30–31.

islands, but this was the first time we saw white particles fall from the sky and cover our village. Of course, in 1954, Marshallese children and their parents did not know that the snow was radioactive fallout from the *Bravo* shot …

Women have experienced many reproductive cancers and abnormal births. Marshallese women suffer silently and differently from the men who were exposed to radiation. Our culture and religion teaches us that reproductive abnormalities are a sign that women have been unfaithful to their husbands. For this reason, many of my friends keep quiet about the strange births they had. In privacy, they gave birth, not to children as we like to think of them, but to things that we could only describe as 'octopuses,' 'apples,' 'turtles,' and other things in our experience. We do not have Marshallese words for these kinds of babies because they were born before the radiation came … The most common birth defects on Rongelap and nearby islands have been 'jellyfish' babies. These babies are born with no bones in their bodies and with transparent skin. We can see their brains and hearts beating. The babies usually live for a day or two before they stop breathing. Many women die from abnormal pregnancies and those who survive give birth to what looks like purple grapes which we quickly hide away and bury."[284]

The researcher's view is that Lijon Eknilang has offered an eloquent case in natural law for the illegality of nuclear testing which should simply be tested against the dictates of public conscience, and therefore peremptory norms of international law and *jus cogens*. The individual, trans-generational and environmental consequences of such atmospheric tests are so self-evidently harmful that it is difficult to conceive of a lawful nuclear test. In this regard, the Court found the existence of customary environmental law.[285]

"The existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment."[286] (and)

"The Court stated that environmental treaties are not intended to divest a State of its right to self defence but 'States must take the environmental considerations into account when assessing what is necessary and proportionate in the pursuit of legitimate military objectives'."[287]

[284] Verbatim Record, 14 November 1995 at 26–27, 30–31.
[285] Op cit Doswald-Beck at 42.
[286] Opinion, para.29.
[287] Opinion, para.30.

It is noted that the NWS in their testimony skirted over the effects of nuclear weapons on health and the environment.[288] The reason for this reluctance on the part of the NWS to discuss the effects of nuclear weapons is in the researcher's view rather obvious. The testimony offered by Lijon Eknilang on the effects of nuclear weapons is so powerful in terms of the dictates of public conscience and individual morality that it is very difficult to counteract without bringing their own motives into disrepute.

3.6 The Arguments For and Against the Presumed Lawfulness of Nuclear Deterrence

The Nuclear-Weapons-States argued before the ICJ that the policy of nuclear deterrence was indicative of continuous usage of nuclear weapons in the post-World War II era, and that they were therefore legal in terms of customary law. The NWS contended that this policy was both lawful and essential, and should continue uninterrupted because it ensured that the nuclear-weapons-states would continue to uphold a balance of power which ensured world peace *opinio juris sive necessitatis*. The thrust of the evidence of the NWS regarding the deterrent threat of nuclear weapons was not so much to engage in the specific legality of the merits and demerits of the policy in terms of its meaning and application under international law. The NWSs instead argued that the threat and use of nuclear weapons is integral to the policy of deterrence and therefore to international security. They claimed that nuclear weapons are not so much military means to wage war as political instruments to prevent war.[289]

It is the researcher's view that the 'public security' focus in which the Nuclear-Weapons-States presented their case before the ICJ on the legality of deterrence was purposive. It is contended that it is much easier to both assert and defend a policy of nuclear deterrence before the general public on the basis of international security arguments than to

[288] Burroughs, John. 1997. *The (Il)legality of Threat or Use of Nuclear Weapons: A Guide to the Historic Opinion of the International Court of Justice*. Munster, Amsterdam: Die Deutsche Bilbliothek. 93.
[289] Op cit Burroughs at 133.

assert and defend this policy on the basis of arguments submitted in terms of international law. An international law argument will be much more stringently and exactingly assessed than an argument presented in a doctrine of public security formulation. It is one matter to present a public security argument which is emotive; is easy to understand; and appeals to the fears and prejudices of the general public. It is quite another matter to present a carefully-reasoned international law argument asserting the legality of nuclear deterrence before a court with a bench of eminent judges. The basic line of reasoning employed by nuclear-weapons-states to justify the policy of nuclear deterrence was that the threat of the use of nuclear weapons was such an extreme and outrageous notion that it deprived any state that might contemplate using them of a logical rationale actually to use them. This point does not hold water, because there might well be a state (or states) that might enact the deterrent threat and deploy nuclear weapons because they are extreme and outrageous weapons and in spite of the fact that their use would be totally irrational. The presumption of an inevitable rationality in the threat and use of nuclear weapons is indeed a fragile notion. The nuclear-weapons-states submitted that this policy of deterrence has led to international stability since World War II and conformed that no nuclear weapons have been used in war since Hiroshima and Nagasaki. This policy of deterrence therefore created a stable equilibrium between states and should remain in place, because the reality is that it is effective. They accordingly contended that the policy of nuclear deterrence was legal, on the basis of custom.

John Burroughs cited the French representative, Perrin de Brichambaut, as contending that "a nuclear weapon is a weapon intended to prevent war by depriving it of any possible rationale".[290] In this regard, Burroughs asserted correctly, in the researcher's view, that "because deterrence depends on the threat and apparent willingness to employ weapons in war, the argument had to circle back to the legality of its use".[291]

[290] Verbatim Record (translated), 1 November 1995, at 33.
[291] Op cit Burroughs.

Perrin de Brichambaut's testimony to the ICJ in the 1996 Advisory Opinion was entirely consistent with the stance assumed by France in 1973 when New Zealand, Australia and the South Pacific Islanders took France to the ICJ to prohibit it from conducting nuclear tests in the Pacific Ocean. There was effectively no change to the French assessment of the legality of the threat, testing or deterrent usage of nuclear weapons over the interceding twenty three year period.

John Burroughs continues: "Indeed, the nuclear-weapons-states implied that because deterrence is essential to international security, the threat or use of nuclear weapons must therefore be legal."[292]

Matheson presented the public security argument in favour of the legality of the policy of nuclear deterrence for the United States thus:

"If these weapons could not lawfully be used in individual or collective self-defence under any circumstances, there would be no credible threat of such use in response to aggression, and deterrent policies would be futile and meaningless. In this sense, it is impossible to separate the policy of deterrence from the legality of the use of the means of deterrence. Accordingly, any affirmation of a general prohibition on the use of nuclear weapons would be directly contrary to one of the fundamental premises of the national security policy of each of these many states."[293]

Matheson confirmed the circular pattern of reasoning mentioned by John Burroughs above. He contended before the ICJ on behalf of the United States that the threat and the usage of nuclear weapons cannot be separated. Both must be lawful if world peace is to be upheld. Matheson's reasoning implies that one cannot have a legal threat and illegal usage of nuclear weapons and vice versa, as one postulation would negate the other. He linked his contention to a public security argument rather than an explication of the legality of deterrence in terms of international law, as explained early on in this discussion.

[292] Loc cit.
[293] Verbatim Record, 15 November 1995 at 78.

Matheson's argument raises serious practical problems associated with the legality of deterrence and the possible unintended consequences that might arise were this policy to be declared illegal. France's position on the legality of nuclear deterrence as presented before the ICJ was quite similar in its logic to that proffered by Matheson of the USA. It was likewise presented according to a public security doctrine, discussed above.

Burroughs cited Perrin de Brichambaut again as stating for France:

"The policy of deterrence publicly stated by the Nuclear-Weapons-States is only meaningful if the threat of the use of such weapons is not considered unlawful in any circumstances.

France's doctrine of deterrence is the keystone of its security. It also constitutes a pre-eminent factor of stability, more particularly for the European continent, through its positive effects for the allies of France and for the entire international community. It has thus contributed, for several decades, to maintaining that essential asset – world security and peace … I should like to warn against any pronouncement which directly or indirectly might imply judgment being passed on a policy based on deterrence."[294]

The reasons underpinning Great Britain's submission before the ICJ on the legality of deterrence converged with those afforded by the United States and France. They are very similar to those afforded by France and the United States. Sir Nicholas Lyell, the representative of the United Kingdom, presented his country's case before the Court in terms of what he referred to as 'real world' imperatives, implying that disagreement with his contentions would be relegated to the 'unreal world', a place which he unfortunately did not define. Sir Nicholas Lyell's argument, too, was clear in terms of its public security assertions, rather than its cogency in terms of international law.

Burroughs cites Lyell as asserting that deterrence should be deemed lawful because of the following:

"Since the Second World War, the concept of deterrence has been fundamental to the maintenance of the peace and security of a substantial number of States. Not only the

[294] Verbatim Record (translated), 1 November 1995 at 33, 36.

nuclear powers themselves, but many non-nuclear States, have sheltered under the umbrella of these weapons. We might wish nuclear weapons away, as we might wish all weapons and, indeed, the whole concept of war and coercion. But nuclear weapons do exist and the Court – as a Court of Law – must operate not in some idealized world but in the real world … Some start has been made in the reduction of those massive nuclear arsenals which are rightly feared. But huge numbers of nuclear weapons still exist. Our real world remains a fragmented and dangerous place and in this real world, to call in question now the legal basis of the system of deterrence on which so many States have relied for so long for the protection of their peoples could have a profoundly destabilizing effect."[295]

It would appear as though Nicholas Lyell is reasoning that the non-nuclear- weapons-states should gratefully accept on faith the 'shelter' of nuclear weapons that are benignly provided by the NWS for their security, created by the enduring peaceful military equilibrium that is offered by deterrence. Lyell's logic is in its very essence actually a religious argument … the imprecation to believe. The public policy case for the legality of nuclear deterrence, together with the customary law argument that is predicated on a post-World War II period of international acquiescence to the policy of deterrence, created an impediment to the judges' reaching an *opinio juris* regarding the legality of use of nuclear weapons.

In this regard, Charles Moxley contended:

"There is a sense in which the policy of deterrence presents the greatest barrier to the broad recognition of the unlawfulness of the use of nuclear weapons. It seems to be widely recognised that nuclear weapons are not reasonably useable. Yet many thoughtful and sincere people, leaders and populace alike, widely believe that the policy of deterrence makes sense: we have these weapons so no one else will use such weapons or commit acts of extreme violence against us."[296]

John Burroughs observed in his penetrating analysis of the ICJ's Advisory Opinion:

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[295] Verbatim Record, 15 November 1995 at 22–23.
[296] Moxley, Charles. 2001. 'Unlawfulness of the United Kingdom's Policy of Nuclear Deterrence – Invalidity of the Scots High Court's Decision in Zelter'. *Disarmament Diplomacy*, 58(1):17, June.

"In addition to the UN Charter's prohibition of the threat of force for aggressive ends contrary to the UN purposes, non-nuclear-weapons-states invoked humanitarian and other provisions of international law in support of the illegality of the threat or use of nuclear weapons.[297] In reply the nuclear-weapons-states stressed the value of deterrence to international security, provoking an intense wide-ranging debate."

The Solomon Islands argued in a written submission:

"Any use of nuclear weapons would prima facie violate international humanitarian law. The threat of their use must be considered as totally incompatible with the solemn obligation undertaken by States under Article 1 of the Four Geneva Conventions of 1949 and Article 1(1) of the 1st 1977 Additional Protocol to respect, and ensure respect, of the four Conventions and the Protocol. Given the inevitably of the lethal effects of nuclear weapons, threatening their use, must surely violate the rights of potential victims as set in Article 40 of the 11th Additional Protocol."[298]

The Non-Nuclear-Weapons-States (like the Solomon Islands, cited above) did not invoke public security arguments to assert the illegality of the threat and use of nuclear weapons. They used straightforward and powerful arguments that were based in international law to present their case. The researcher's view is that this will prove to be more enduring than public security arguments, which will arguably become obsolete with the vagaries of political alliances. Berchmans (who represented Indonesia at the ICJ) argued that if the threat or use of nuclear weapons is illegal under any circumstances, the policy of nuclear deterrence would be illegal because there is no right to commit a crime, whether it be in self-defence or reprisal.[299] Berchmans substantiated this argument by citing the Nuremberg Principles[300] and the Genocide Convention:

"The Nuremberg Principles prohibit planning, preparation, initiation, or waging of a war of aggression or a war in violation of international treaties, agreements or assurances. Planning and preparation for a war involving the use of nuclear weapons, whether or not aggressive, is prohibited, because such a war would entail the commission of war crimes and crimes against humanity, and therefore would be in violation of international treaties

[297] Article VI of the NPT read with Article 2(4) and Article 51 of the United Nations Charter.
[298] Written Observations of the Solomon Islands re General Assembly Question, para 3.10, at 25–26.
[299] Verbatim Record, 3 November 1995 at 39–40.
[300] *Judgment of the Nuremberg Tribunal*. 1947 *American Journal of International Law*, 41:172.

and agreements. The Convention on the Prevention and Punishment of the Crime of Genocide of 1948 renders punishable not only genocide, but also conspiracy, and public incitement."[301]

Berchmans's reasoning identifies the legal danger of presumptively assuming the legality of deterrence. If the use of these weapons is illegal, the threat of their usage will also, as a corollary, be illegal.

Francis Boyle asserted that the importance of the Advisory Opinion resides in the fact that it was the first occasion that the ICJ clearly articulated the restrictions that pertain to nuclear weapons as they relate to the United Nations Charter, and it expressly explored "the contradiction between nuclear weapons and the laws of armed conflict and international humanitarian law".[302]

The Opinion also insisted that all nations are obliged to enter into negotiations to ensure and expedite all aspects of nuclear relinquishment and accession to the Treaty on the Non-Proliferation of Nuclear Weapons. The Opinion acknowledged that the threat and use of nuclear weapons represents a threat to the integrity of international law.[303]

3.7 Nuclear Weapons and Deterrence as a Threat to World Peace

Moxley maintained that deterrence itself is intrinsically risky, because the policy is extremely provocative, and provocation together with national pride might create the escalatory danger *of triggering a nuclear war*".[304] The reason the United States of America and the Soviet Union were so concerned about South Africa's development of a nuclear arsenal was that in a moment of extreme stress and irrationality, it might have precipitated a nuclear conflict. Secondly, the decision of actual usage might be provoked

[301] Loc cit.
[302] Boyle, Francis. 1996. 'The Criminality of Nuclear Deterrence'. Humanitarian Law and War Tribunals, College of Law, University of Illinois at Urbana-Champaign. 4–5, 17 October. [Online]. Available: http://www.derechos.org/koaga/v/boyle.html at 4–5.
[303] *Hague Convention of 1899 with respect to the Laws and Customs of War on Land* (a modern version of which has been codified in Article 1, paragraph 2, of Additional Protocol I of 1977).
[304] Op cit Moxley (2000) at 72, 92, 131 & 135 [researcher's italics].

by a policy of deterrence and a political and military crisis.[305] The decision of usage might not be rational. The policy of nuclear deterrence includes a dangerous and unreliable presumption of human rationality. There are many cases in history where the heart has overwhelmed the mind and the presumption of rationality is a perilous view.

Moxley contended also that the policy of nuclear deterrence by its very nature creates an arms race, because countries will always aspire towards better, bigger, more powerful and more modern arsenals. Accordingly, the policy of nuclear deterrence may in itself sew the seeds of nuclear proliferation.[306] This threat arises from the natural and inherent competitiveness of humans, which may lead to terrorism and jeopardise respect for the law.[307] [308]

3.8 Conclusion

This analysis of the ICJ's Advisory Opinion on the Legality of the Use of Nuclear Weapons in Armed Conflict, together with an assessment of the 1945 to 1995 development of the law, was conducted in order to offer a legal and conceptual framework for addressing the matter of the legality of South Africa's nuclear arsenal, which is analysed and discussed in the next chapter.

It remains to be seen whether the policy of nuclear deterrence will remain integral to the system of international law. The researcher's view is that an argument on the legality of the threat and use of nuclear weapons will in the fullness of time become unsustainable and indefensible in terms of international law. The public security arguments are muddying the waters and are not a substitute for the cogent logic of international law. This legal clarity will probably occur over a period of time and be encouraged by a

[305] Loc cit.
[306] Loc cit.
[307] Loc cit.
[308] Op cit Moxley (2000) at 533.

nuclear weapons crisis. This line of reasoning is congruent with the thesis offered by Klug on ‘constituting democracy’.

It is contended that the notion of South Africa’s constitutional sovereignty and statehood has changed dramatically since 1945. This is reflected in its descent into pariah status, which reached its nadir in about 1989. Mr de Klerk’s invocation of constitutional negotiations, relinquishment of the nuclear arsenal, and pursuit of accession to the Treaty on the Non-Proliferation of Nuclear Weapons resulted in a reversion of that pariah state status. The persons who assumed responsibility for negotiating South Africa’s democratic constitutional settlement understood this. One of the reasons for the constitutional negotiations being conducted in South Africa was to create respect for human rights and the culture of the law, which had been trampled upon during the period of apartheid. Any attempt to retain the nuclear arsenal would have flouted that respect and undermined Mr de Klerk’s imperative for constitutional continuity and international recognition free of pariah status. They realised that they had little choice but to metamorphose South Africa’s Constitution into a system that was congruent with global geo-governance.

Chapter Four

Interpreting the Respondents' Understanding of the Legality of South Africa's Nuclear Weapons Policy

4.1 Introduction

This chapter will be devoted to seeking an understanding of the respondents' interpretation of the legality of South Africa's nuclear weapons policy. The changing interpretation of the legality of nuclear weapons will be, in part derived by deduction from the facts that are presented, and in part by inference and imputation from the various interviews that were conducted with the expert sample, triangulated with the literature. The respondents portrayed a variety of interpretations of the law relating to the legality of nuclear weapons. It is intended that this research will be of assistance to persons in other countries around the world who may be grappling with similar challenges of relinquishment and accession. The diverse interpretations of the law all occurred in the complex reality of South Africa's constitutional transition, which coincided with the switch from the war in Angola to a gradually emerging peace. The interviews grapple with important events that led to the decision to relinquish the nuclear arsenal and to accede to the NPT. The interpretation will initially be set out from the broad perspective of international customary law and will subsequently flow under the lens of international law. This interpretation will furthermore be contextualised into a chronology of events that indicate a gradual and uneven pattern of initial rejection by the South African leadership, then acquiescence, and later acceptance of customary law as it pertains to the legality of nuclear weapons. It is to be noted that the respondents' understanding sometimes had to be de-coded and imputed via inference.[309] An attempt has been

[309] The respondents were involved over different periods and for different purposes in the nuclear weapons programme. This implies that their perspectives will vary and be constrained by the duration of their involvement. Professor Stumpf's involvement in the nuclear relinquishment and accession process began in earnest in September 1989. The legal and political process leading up to nuclear relinquishment and accession began a long time before his secondment. His knowledge of the period preceding September 1989 was learnt rather than lived. Professor Stumpf specifically acknowledged this delimitation during his interview. A similar delimitation applies to Professor

made to compensate for this weakness by triangulating the inference with chronological facts exacted from the literature and the law. In certain cases, the respondents' commentaries did have the status of state policy and could be interpreted as being 'soft law' and heralding customary norms. In other instances, they went further and indicated the creation of customary law as such.

The Angolan civil war began in 1967 and intensified to such an extent that the Portuguese dictator Marcello Caetano fell in April 1974. Portugal abandoned both Angola and Mozambique in quick succession.[310] The resultant military vacuum in Angola was soon filled by the South African Defence Force, which entered the war with the initial support of the United States. In December 1975 a ban was imposed by the US Congress which prohibited military assistance to any of the parties involved in the war in Angola. The ban was subsequently termed the Clark Amendment and was later extended by the Carter administration to 1980.[311] South Africa's apartheid policy was politically unacceptable to the United States and resulted in the withdrawal of overt US military support to South Africa under inter alia the aegis of the Clark Amendment. South Africa consequently found itself increasingly isolated and pitted again the military might of the Soviet Union through Cuban and East German intermediaries.

Isolationism in general and the Clark Amendment in particular were important driving forces behind the development of the South African armaments industry. They precipitated a quest for self-sufficiency and

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Wynand Mouton, whose time of involvement corresponded approximately with that of Professor Stumpf. Dr Barnard's involvement in the nuclear programme preceded that of Professors Mouton and Stumpf by many years, but was concluded quite early on in the accession and relinquishment process. This means that there is probably a delimitation upon the latter phases of Dr Barnard's access to knowledge. The delimitation on Mr Mike Louw's feedback would possibly be similar to that pertaining to Dr Barnard. Mr Pik Botha's involvement in South Africa's nuclear weapons programme is generational and he had first-hand knowledge of the entire nuclear programme from conception to termination and accession. Mr de Klerk, like Mr Botha, also had similar long-term knowledge of the process, but while Mr Botha's knowledge in the pre-1989 period was always first-hand, it is probable that Mr de Klerk's knowledge of that time was not as dedicated.

[310] Gliejeses, Peiro. 1999. *Conflicting Mission*s: Havana. Washington, Pretoria. Alberton: Galago Books. 229.

[311] Crocker, Chester. 1992. *High Noon in Africa: Making Peace in a Rough Neighbourhood*. Johannesburg: Jonathan Ball Publishers. 54.

autonomy in all fields of weaponry, including nuclear weapons. The armaments industry was developed because of the perception that the United States could not be relied upon to stand by its initial commitment of support offered to South Africa against the expansionism of the Soviet Union in the early days of the Angolan civil war. There was consequently an escalation in military expenditure during the late 1960s and early 1970s which inter alia included investment in nuclear and conventional weapons.[312] Nuclear weapons were not the only weapons of mass destruction that were developed; a small but highly sophisticated chemical and biological weapons industry was also established.

The interview with Mr Pik Botha revealed that there were strong indications that accession was being seriously contemplated many years before it formally occurred, notwithstanding the build-up in nuclear weapons and technology. In the late 1970s and early 1980s, support for accession to the NPT within South Africa, was often divided and begrudging, attributable partially to the perilous military status of the war in Angola. It would appear that security concerns generally usurped concerns about international law.

There was also a lack of consensus between and within the political leaders and the military establishment at that time on whether or not to accede to the NPT. The South African Defence Force, the South African Police, the National Intelligence Service, the security apparatus, ARMSCOR, and the industrial military complex were undoubtedly in the political ascendency during the late 1970s and early 1980s. There were powerful persons and interest groups who were strongly opposed to South Africa's accession and relinquishment. Some sought a hard, tangible, deterrent bargain. Others advocated nuclear testing, and there were still others who might well even have seriously considered deploying a nuclear bomb in armed conflict. The leaders who ultimately prevailed thankfully

[312] Shearer, Jeremy. 1994. Jeremy Shearer Papers. *Denuclearization in Africa: The South African Dimension*. South African Foreign Affairs Archive Derived from Anna-Mart (Martha) van Wyk, cited below.

rejected these ideas as being self-destructive, possibly genocidal, and probably suicidal. Over time, the complex matter of whether or not to accede to the NPT distilled into a conundrum manifested in an impasse. It became increasingly evident that South Africa was not antagonistic to acceding to the Treaty on the Non-Proliferation of Nuclear Weapons, as such, but it was adamant that such accession should be supported by United States security guarantees that would negate the expansionistic policies of the Soviet Union in the sub-continent.[313] The United States could not provide these security guarantees to the satisfaction of the South Africans, so the proliferation stalemate continued, and South Africa refused to accede to the NPT.

4.2 Chronology of South Africa's Relationship with the IAEA

A brief chronology of South Africa's relationship with the IAEA will be offered in this section in order to set the stage for interpreting the respondents' personal understanding of the legality of South Africa's nuclear policy. South Africa's changing policy relationship with the IAEA over the years is important as it can be regarded as a litmus test of both Pretoria's relative degree of estrangement from the decision to accede to the Treaty on the Non-Proliferation of Nuclear Weapons and norms of customary law; and the inclination towards acceding to the NPT and acceptance of customary international law. (This chronology will be framed by the literature in this section, and later triangulated with the respondents' views in subsequent sections of this chapter.)

South Africa declined for many years to sign the Treaty on the Non-Proliferation of Nuclear Weapons, which came into effect on 1 July 1968. The Treaty had three objectives, which included: (1) prevention of proliferation of nuclear weapons; (2) encouraging co-operation in cases where nuclear science is used for peace, for example, in the realms of civilian energy usage and nuclear medicine; and (3) facilitating

[313] Van Wyk, Anna-Mart (Martha). 2009. Sunset Over Atomic Apartheid: United States–South African Nuclear Relations, 1981–1993. *Cold War History*, 10(1):51–79. First published 7 August 2009.

negotiations relating to arms control, which includes nuclear relinquishment.[314] South Africa's decision not to accede to the NPT created an attitude of deep mistrust towards the integrity of its nuclear motives, which soon crystallised into policy in the form of mandatory sanctions and an increasingly pariah recognition status. It begged the question: "Why would a state decline an international agreement that opposes nuclear proliferation, encourages civilian usage of nuclear science, and opposes negotiations that advance arms control? It must be a regime that has scant regard for international customary law and the notion of the community of nations …"

South Africa served as a member of the Board of Governors of the International Atomic Energy Agency (IAEA) until June 1977. It was stripped of its role in 1979 because of pressure that arose from the Non-Aligned States and African countries about its suspected proclivity towards developing nuclear weapons. In 1979 South Africa's credentials were rejected at the General Conference of the IAEA in New Delhi, India.[315] In spite of being divested of its role on the Board of Governors, it continued to retain full membership of the IAEA and accrued the benefits that arose from its membership, which included resources and knowledge on peaceful nuclear usage. Abdul Minty recalled that the United Nations General Assembly had adopted various resolutions calling upon its members to desist from co-operating with South Africa on nuclear matters because of its perceived tendency to proliferate nuclear material.[316]

During the course of 1977, in the midst of the intense conflict of the Angolan war, South Africa discontinued safeguards negotiations with the IAEA regarding enriched uranium, which is a vital component of an atomic

[314] The Nuclear Information Project. 'Nuclear Non-Proliferation Treaty (NPT)': Chronology. Oxford Brookes University. 4. [Online]. Available: http://www.fas.org/nuke/control/npt/chron.htm [Accessed 12 April 2010].
[315] Minty, Abdul. 1986. 'South Africa's Nuclear Capability: The Apartheid Bomb'. In Phyllis Johnson & David Martin (eds). *Destructive Engagement: Southern Africa at War*. Harare: Zimbabwe Publishing House. 211.
[316] Loc cit.

bomb.[317] At that time there was an absence of normative consent between Pretoria and the IAEA concerning state obligations with respect to nuclear protocols, safeguards and accession to the NPT. With the knowledge of hindsight, this break-off in negotiations with the IAEA may be interpreted as South Africa's assertion, by the dominant leadership group at that time, of the legality of nuclear deterrence and the lawfulness of the possession and use of nuclear weapons in armed conflict. South Africa was not ready to concede to settled practice – *usus* – with respect to being bound by the NPT, as the state did not accept an obligation to be bound by the NPT *opinio juris sive necessitates*. The leadership at that time subscribed to a strongly positivist interpretation of international law. The quiet voice of customary law was drowned out by the more bombastic voice of the positivist militarists. Their prime concerns revolved around winning the war in Angola and mitigating their inherent military risks in that country. The militarists required concrete security undertakings from the United States with respect to supporting South Africa in the Angola war, with particular emphasis on counteracting the threat of Soviet expansionism in Southern Africa. These security undertakings were not forthcoming. The Clark Amendment, mandatory arms embargoes and sanctions made it very clear that South Africa was on its own and had to be militarily self-sufficient if it were to survive. Its apartheid policy rendered it a recognition pariah.

Dr Neil Barnard captured South Africa's and the Nuclear-Weapons-States' security dilemma in an article that he wrote in 1979, when he contended that:

"Since the NPT (1968) the nuclear powers have stated again and again that the proliferation of nuclear weapons would seriously affect international order. The non-nuclear states, however, have no guarantee that the superpowers would guard their security or that their sovereignty is indeed threatened by the awesome nuclear power of privileged nuclear states. In an international order consisting of national states this is

[317] MacLachan, Ann. 1984. 'The IAEA and South Africa have Resumed Negotiations on Safeguards'. *Nucleonics Week*, 9, 16 August.

altogether discriminatory. Either nuclear weapons must be banned altogether or the security dilemma will undoubtedly lead to the further proliferation of nuclear weapons."[318]

Dr Barnard appeared to be advocating that nuclear weapons should be declared illegal for all states including the nuclear-weapons-states, and banned outright. If they were not banned, he feared that the law of the jungle would prevail and that further proliferation would take place to the extent that it could become very difficult to regulate. He argued that if the normative rules of society continued to permit nuclear proliferation amongst the nuclear-weapons-states, the natural competitiveness of the human spirit would soon result in general nuclear proliferation.

The United States was not prepared to offer any formal security to South Africa to counteract the Soviet Union during the war in Angola. Indeed, the Clark Amendment heralded America's official withdrawal of military support for South Africa in Angola.[319] It is noted that during the course of my interview with Dr Barnard, he did not deviate from his view cited in his expostulation noted above.[320]

It is submitted that South Africa's 1977 decision to discontinue safeguards negotiations was directly linked to its being stripped of its role on the Board of Governors of the IAEA in 1979. South Africa's withdrawal begged the questions as to whether uranium was being enriched for a nuclear weapon programme and whether enriched uranium was being illegally traded. On 8 June 1977, the Soviet Union discovered South Africa's nuclear silos, which were situated at Vastrap in the Kalahari Desert. The fact that the Soviet Union and the United States of America jointly co-operated on this matter, and were unanimous in their condemnation of South Africa's nuclear proclivities, gave cause for pause. The interview with Mr Pik Botha revealed that South Africa's ally (the United States) in the proxy Cold War in Angola and its enemy (the Soviet Union) were in

[318] Barnard, Neil. 1983. 'The Role of National Intelligence in International Relations'. Lecture delivered in the CR Swart Auditorium, University of Orange Free State, Bloemfontein. No 16. 1.
[319] Stockwell, John. 1978. *In Search of Enemies*. New York: WW Norton & Company. 43.
[320] See also Barnard op cit (1983).

consensus that South Africa's nuclear inclinations constituted a threat to world peace. Alarm was expressed by both the United States of America and the Soviet Union about this development. The message of alarm was conveyed by US Ambassador Extraordinary Mr William B Edmondson to Mr Pik Botha, the Minister of Foreign Affairs in South Africa at the time.

The researcher's view is that Mr Pik Botha's subsequent warning and communication with Prime Minister BJ Vorster about the mutual alarm from both the United States and the Soviet Union on this matter led to the creation of soft law. It was quite clear that there would be enormous international consequences if South Africa conducted a nuclear test or operational deployment of nuclear weapons. The United States and Soviet Union (by implication) hinted at the possibility of anticipatory self-defence being used to remedy nuclear escalation. South Africa's renegade nuclear weapons status at that time could have quite feasibly eclipsed the significance of the proxy war in Angola for both the United States of America and the Soviet Union, and might in an extreme scenario even have led to joint United States–Soviet Union military co-operation against South Africa if it were deemed to be a threat to world peace. The matter of the nuclear silos also helped to consolidate the decision by the IAEA to reject South Africa's membership of the Board of Governors. In substantiation, Annette Seegers notes that in 1977 the United Nation Security Council implemented "a mandatory arms embargo against South Africa, including in its justification reference to South Africa being on the threshold of producing nuclear weapons".[321]

The *South Atlantic Double Flash* incident occurred on 22 February 1979. South Africa was suspected of having conducted some type of nuclear test in the South Atlantic, but this was never proved. Whether true or false, this incident arguably consolidated the IAEA's decision to unseat South Africa from the Board of Governors.

[321] Seegers, Annette. 1996. *The Military in the Making of Modern South Africa*. London: IB Taurus. 206.

The relationship between South Africa and the IAEA from 1981 to 1984 was particularly fractious. In September 1981 the Board of Governors of the IAEA resolved to exclude South Africa from all involvement in the Committee on Assurance of Supply of Enriched Uranium. Abdul Minty in his analysis of South Africa's relationship with the IAEA pointed out:

"Further investigations of the World Campaign revealed that South Africa's membership of the IAEA was of greater importance to the apartheid regime than was first expected. The IAEA confirmed that South Africa was a member of several special working groups on uranium. In one category of six groups established jointly by the IAEA and the OECD, South Africa was a member of all six and served as the chairman of two. It therefore played a central role within all of these groups and it was remarkable that this was permitted when everyone knew of South Africa's illegal occupation of Namibia and the plunder of its uranium resources … On 17 September 1982, a letter was addressed to the General Conference, repeating the request to exclude South Africa from the Working Groups. The UN Special Committee against Apartheid sent a supporting cable to the IAEA and stated that it was 'most concerned that the South African regime is enabled though these groups to obtain nuclear technology and maintain close relationships with nuclear experts in other countries'. It called for immediate action to exclude South Africa from IAEA Working Groups and joint Working Groups in which the IAEA participates."[322]

The *Uranium Red Book* incident also occurred during the period from 1981 to 1983. This matter is discussed under a separate sub-heading in this chapter. The essential point relating to the *Uranium Red Book* incident is that South Africa used the IAEA's international publication network to propagandise for the recognition of the Bantustan states. These Bantustan states were constitutional fictions and recognised by no states in the world except South Africa itself. The *Uranium Red Book* incident confirmed that South Africa's pariah recognition status was entangled with its nuclear weapon status.

Annette Seegers commented: "Of course, South Africa was not alone in trying to break into the nuclear weapons club. Indeed, observers pointed out that those trying hardest to get into inside the door were a group of

[322] Op cit Minty at 212.

pariah states."[323] This observation is congruent with my assertion that threshold nuclear states most frequently have severe constitutional recognition problems and therefore choose to follow the path of nuclear proliferation in order to try (usually unsuccessfully) to compensate for this absence of recognition, which in turn often has a genesis in the absence of political leaders' appreciation of and buy-in to the general principles of international customary law.

In 1982 South Africa passed the Nuclear Energy Act 92 of 1982, which rendered it illegal to convey any information relating to the country's uranium reserves without the consent of the government. I interpret this municipal law as being promulgated in an attempt to circumvent, negate and eclipse the safeguards and inspectorate duties and obligations of the IAEA. It served only to harden attitudes from the IAEA and the United Nations, with ever more resolutions, sanctions and embargoes being ratified. It is contended that the sanctions regime imposed on South Africa created a commercial incentive for persons involved in trading uranium and nuclear hardware and software to operate outside the scope of the IAEA, in an unregulated and illegal market.

It is the researcher's view that these sanctions actually had a twofold effect. They unquestionably created a persecution mentality, which led to significant nuclear proliferation, and probably also created a siege mentality. The sanctions also led to the creation of a climate that enhanced the possibility of a favourable prognosis for a negotiated settlement in South Africa. It would be dangerous and naïve to hold a simplistic view on the efficacy of these sanctions. It is quite conceivable that a highly-threatened and fanatical regime might have used a sanctions regime to escalate tensions by deploying nuclear armaments. The deployment of sanctions is therefore a gamble. In South Africa it undoubtedly contributed to a moderate view and a negotiated settlement. That was partially because the leadership was sober and thoughtful. Many

[323] Op cit Seegers at 207.

other nuclear threshold states do not have the privilege of excellent leadership like this, and some may attempt the unexpected. The literature of that time offered hardly a whisper indicating consent between Pretoria and the IAEA on acceding to the NPT and complying with the IAEA's safeguards regime. Hints of that consent are, however, discovered in the testimony of the expert respondents.

In August 1984 South Africa and the International Atomic Energy Agency resumed the negotiations that had been broken off in 1977 concerning safeguards.[324] It is acknowledged that "one swallow does not signify a summer", but this resumption of negotiations indicated a silent acquiescence to the authority of the IAEA in international law. This was at the time of the early phases of the establishment of the Koeberg nuclear power station outside Cape Town, and South Africa needed peaceful international nuclear co-operation in order to ensure the success of this electrical energy project. The IAEA had the means and wherewithal to expedite the peaceful usage of nuclear materials to the benefit of South Africa. For this reason, meetings between South Africa and the IAEA were resumed. Later, on 29 November 1984, South Africa, France and the International Atomic Energy Agency reached an agreement on the export and reprocessing of high-level radioactive waste from the Koeberg nuclear power station. The researcher regards this as an indication that the relationship between South Africa and the IAEA was slowly being reconstituted and edging towards consent under customary law.[325] The reality started dawning on the political leadership in South Africa that the peaceful use of nuclear energy to power the national electrical grid and economy was of much greater day-to-day strategic value and importance to South Africa than the military nuclear programme. By 1984 it was starting to become clear that the Soviet Union, Cuba and South Africa all wanted to extricate themselves from the war in Angola.[326]

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[324] Masiza, Zondi. 1993. 'A Chronology of South Africa's Nuclear Program'. *The Nonproliferation Review*, 40–41, Fall.
[325] *The Star*, Johannesburg (author not specified). 1984. 'International Nuclear Waste Dump Considered'. 29 November.
[326] Op cit Crocker.

At the same time as South Africa's relationship with the IAEA was improving, its relationships with Great Britain, the United States of America and West Germany (FRG) deteriorated, and nuclear co-operation agreements with them were terminated.[327] The path towards achieving consent on nuclear regulation was often rocky. South Africa conflicted with these important allies on nuclear norms. The pattern of constituting nuclear democracy by acceding to the Treaty on the Non-Proliferation of Nuclear Weapons in South Africa was as envisaged by Heinz Klug: irregular, fraught, and often crisis driven. It was energised by the real world problems of war and peace.[328]

In 1985 President PW Botha was informed by his advisors that ARMSCOR was engaged in a serious weaponisation and miniaturisation process, which included advanced missile development for the deployment of nuclear warheads. According to testimony offered by Professor Stumpf, Mr PW Botha was appalled by this information, and exercised his right as president of South Africa and Chairman of the Witvlei Committee to call a meeting with the top management of ARMSCOR responsible for nuclear weapons. He instructed that the nuclear weapons programme should be terminated forthwith. The ARMSCOR management pleaded that the nuclear project should not be wound down because of the job losses that would ensue. Mr PW Botha granted a reprieve, but prohibited any further weaponisation. The scientists saw that the writing was on the wall and soon started seeking alternative employment.

After 1987 it seemed as though there was a clear trajectory towards South Africa's accession to the Treaty on the Non-Proliferation of Weapons. On 31 January 1987 the Atomic Energy Corporation issued a statement indicating that South Africa had reached a binding undertaking with the

[327] Op cit Masiza (1993) at 41.
[328] Klug, Heinz. 2000. *Constituting Democracy, Law, Globalism and South Africa's Political Reconstruction*. Cambridge, UK: Cambridge University Press.

United States that it would observe the spirit and the letter of the NPT and adhere to the Nuclear Suppliers Group Guidelines in the conduct of its affairs.[329] This agreement with the United States was important and anticipatory of South Africa's accession to the NPT. (This was confirmed by Mr Pik Botha during the course of his interview and is referred to later on in this chapter.) My view is that South Africa was effectively bound by the NPT at that point, although it had not formally acceded to it. It was locked into a consistency arrangement. If it repudiated its binding undertaking with the US and declined to uphold the spirit and the letter of the NPT, it would have been in breach of agreement with the United States and suffered from serious credibility problems. Having agreed to abide by the spirit and the letter of the NPT with the United States, what motivation could conceivably and coherently justify South Africa's not formally acceding to the NPT in the form of a multilateral arrangement? Its signature would simply change the bilateral agreement with the United States into a multilateral treaty with many states.

In August 1987 South Africa failed to reach a Safeguards Agreement with the IAEA on the Valindaba facility.[330] This failure to reach agreement foreshadowed the stringent requirements that would be imposed upon South Africa by the International Atomic Energy Agency during the period of technical accession to the NPT and relinquishment of the nuclear arsenal, which later included the safeguarding process itself and the Statement of Opening Inventory. South Africa was able to make some compensatory progress in the same month in 1987, and ratified two international nuclear safety conventions.[331] This state conduct can again be interpreted as a general indication of acquiescence to the IAEA's customary regime.

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[329] Fisher, David. 1990. 'South Africa as a Nuclear Supplier'. In WC Potter (ed). *International Trade and Nonproliferation: The Challenges of the Emerging Suppliers*. Toronto: Lexington Books. 273.
[330] Masiza, Zondi. 1987b. 'South Africa Suspension Vote'. *Nuclear Engineering International*, 8:3.
[331] Masiza, Zondi. 1987a. 'IAEA Headed for a September Vote on South African Suspension'. *Nucleonics Week*, 5, 12 August.

Zondi Masiza observed that the West placed intense pressure on President PW Botha to make a public declaration that South Africa would accede to the NPT. Mr Botha was a stubborn man, and this type of pressure only made him more obdurate. The pressure which arose from the West for South Africa to accede to the NPT was intended to obviate attempts by the Group of 77 to deprive South Africa of its rights and privileges as a member of the IAEA. The reason for the West taking this stance was that there was a fear that leverage to direct and influence South Africa's nuclear regulatory regime would be lost if it were divested of its IAEA membership privileges.[332] (This contention was corroborated by Mr Pik Botha and to an extent by Professor Stumpf during the course of their interviews.) With the knowledge of hindsight, I believe that the decision reached by the West to keep South Africa within the ambit of the IAEA was the wiser alternative, as exclusion could have resulted in South Africa's becoming increasingly adept in an unregulated and illegal system of nuclear proliferation.

In August 1989 Mr Pik Botha led a delegation to the headquarters of the IAEA in Vienna to discuss the matter of South Africa's accession to the Treaty on the Non-Proliferation of Nuclear Weapons with the United Kingdom, the United States and the Soviet Union.[333] This meeting was ceremonially important and portended both consent and acquiescence. On 16 October 1989 South Africa sent Dr Hans Blix, who was then the Director-General of the International Atomic Energy Agency, a letter confirming that it wished to accede to the NPT provided that various terms and conditions were met specifically relating to South Africa's being permitted to market its uranium on the international market subject to IAEA safeguards.[334] This letter signified unequivocal state consent for accession to the NPT, and as a corollary to that, the obligation for South Africa to relinquish its nuclear arsenal *opinio juris sive necessitatis*. Settled practice was becoming the norm – *usus*.

[332] Op cit Masiza (1993) at 43.
[333] Op cit Fisher at 279.
[334] Loc cit.

An obvious indication of the existence of customary law on nuclear weapons policy is evidenced when a Bill is signed into an Act. On 18 May 1993 the South African parliament passed the Non-Proliferation of Weapons of Mass Destruction Act 87 of 1993, which obliged the state to forgo designing and building nuclear weapons. The signature on this Act denoted formal state acceptance of the customary norms relating to the non-proliferation of nuclear weapons. The journey to this destination was long and complicated. The pre-1980 period is much more difficult to interpret from a customary law perspective because clues relating to the evolution of *usus* and *opinio juris sive necessitatis* are often quite obscure and need to be uncovered. The literature is particularly scanty in this regard and the respondents filled in some useful and interesting omissions that existed in the literature. The reader will note that there were intermittent moments of 'thaw' and 'frosting' in the relationship between South Africa and the IAEA over the period. A careful reading of the respondents' feedback will reveal that South Africa seemed to be generally inclined towards accession and relinquishment, even in the fraught period during which international customary law held sway.

4.3 An Analysis of the Respondents' Understanding of the Legality of South Africa's Nuclear Weapons Policy

It has already been argued that between 1987 and 1988 the state accepted an obligation to be bound by the NPT *opinio juris sive necessitatis* on at least four public occasions. Firstly. South Africa concluded a bilateral agreement with the United States which included inter alia a commitment to honour and uphold the spirit of the NPT. Secondly. South Africa ratified two nuclear treaties during the course of 1987 which were sponsored by the IAEA. Thirdly, Mr Pik Botha, the Minister of Foreign Affairs, led a South African delegation to the IAEA headquarters to explore the state's putative accession to the NPT in 1989. Finally, in 1989 an official letter from the South African state was sent to Dr Hans Blix indicating that South Africa was prepared to accede to the

NPT provided that certain terms and conditions were met. *Usus* and *opinio juris sive necessitates* are the two most important requirements for a customary rule to exist.[335] The state actively displayed its commitment to the NPT at this time, and there is hardly a problem of proof that South Africa had a customary intention to accede to the NPT with regard to the above four examples. The interviews with the respondents revealed that in their meetings and conferences with high officials, they personally created the 'soft law' which converted into an acceptance of customary law.

The essential contention of the customary law argument is that South Africa was bound by the NPT without ever having signed it. The literature review and secondary research leads one to the plausible conclusion that this obligation initially began to arise in 1977. The respondents' testimony differs from the literature. It indicates that the customary obligation to accede to the NPT was reached much earlier than is evidenced by the literature. This is an important point, because a state may have considerable pre-accession normative obligations which may extend for some years before formal accession to the NPT takes place. I do not believe that the respondents consciously held the view that South Africa was bound by the NPT although it had not yet been signed. My personal theory is that there appears to have been a conflict between the minds and hearts of the respondents on this question. Their positivist legal minds were convinced that "[t]here is no law that says we are bound to accede to the Treaty on the Non-Proliferation on Nuclear Weapons". Their legal hearts, on the other hand, asserted with emotion: "We are guided by the principles of natural law and *jus cogens* and have an obligation *erga omnes* to get rid of these weapons if we want to be humane." The respondents did, however, generally accept an obligation to be bound by the NPT *opinio juris sive necessitates*.

[335] Op cit Dugard (2007) at 29–38.

4.4 Mike Louw's Contention that South Africa's Nuclear Crisis Signified a Breach of International Customary Law

The analysis will now proceed to reflect on South Africa's recognition crisis, which can be understood broadly as a crisis arising as a result of South Africa's not playing fairly with regard to international customary law. The question of state recognition was deeply connected to the decision to relinquish the nuclear arsenal and to accede to the Treaty on the Non-Proliferation of Nuclear Weapons. This in turn had implications for the respondents' interpretation of the legality and morality of South Africa's nuclear weapons. An opinion is offered by Mike Louw, who succeeded Dr Neil Barnard as Director of the National Intelligence Service. It will be recalled that the Martens Clause established the notion of the 'dictates of public conscience' for connecting natural law to international humanitarian law. In his testimony, Louw offers an eloquent lived-understanding of how the Martens Clause related to the 'dictates of public conscience' insofar as South Africa's possession of the nuclear arsenal was concerned. Furthermore, he assessed the legality of South Africa's nuclear possession and deterrence in accordance with the dictates of public conscience:

"I knew that South Africa was in a position that was morally unsustainable. It was morally totally corrupt. If you could not act morally, then you could at least try to act legally. But even that option was diminishing.

In the 1960s grand apartheid failed. In the intelligence service we had to deal with a progressively deteriorating situation. We were involved in, and being sucked into, an escalating military conflict, in Angola and South West Africa. We were engaging with the military might of the Soviet Union.

It was clearly a 'no-win' situation for us. The questions arose: 'How can we get out of this situation? What can be done?' As I got older and more mature, I realised that we could not become victorious by military means. ARMSCOR[336] had developed atomic weapons, and South Africa was a rising military power. In spite of this nuclear power, I experienced a sense of helplessness. There was a deep futility about possessing power in a military

[336] ARMSCOR – the Armaments Corporation of South Africa – became increasingly powerful as the threats to national security intensified. Bertsch and Shaw make a similar contention. See Bertsch, Kenneth & Shaw, Linda. 1984. *The Nuclear Weapons Industry*. Washington DC: Investor Responsibility Research Center.

sense. It was counter-productive. It resulted in South Africa drawing more fire. We were regarded as dangerous and hated. We were perceived as being a threat towards world peace. My basic instinct was that what we were doing was unjust and indefensible."[337]

Mike Louw's general contention was that South Africa was acting contrary to *jus cogens* and had an obligation *erga omnes* to rid itself of these nuclear weapons and accede to the NPT. Mr Louw's feedback at the time that he recalled his feelings in this regard was of a society that was characterised by an absence of normative order and respect for international customary law. The view that he presented was one of comprehensive pessimism which would abate only when South Africa discovered the courage to overcome its fears and enter the twofold process of relinquishing its nuclear arsenal and acceding to the Treaty on the Non-Proliferation of Nuclear Weapons, at the same time developing the courage to negotiate on a democratic non-racial democratic constitution. Flouting of South Africa's nuclear arsenal before the international community could have readily degenerated into a perceived act of international aggression, particularly if the nuclear weapons had been tested or, in an extreme scenario, used operationally. Indeed, the passive policy of nuclear deterrence by South Africa, if it had become public, could even have been construed as an act of international aggression. Secondly, apartheid itself was subsequently deemed to be a crime against humanity, and there was an obligation *erga omnes* for South Africa to rid itself of the dual millstones of nuclear weapons and apartheid. Mr de Klerk possessed the wisdom, bravery and leadership to convert this obligation *erga omnes* into action.

As a result of South Africa's embracing a new normative order which embraced international customary law and integrating it into the practical constitutional negotiations, the recognition crisis afflicting South Africa was ultimately dissolved, and the country was accepted among the community of nations once again.

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[337] Louw, as cited in Heald, Geoffrey Ronald. 2006. 'Learning Amongst Enemies: A Phenomenological Study of the South African Constitutional Negotiations From 1985 to 1998'. PhD submitted to University of Witwatersrand, Johannesburg, South Africa. 224–225.

4.5 Mr de Klerk's Reflections on the Obligation *Erga Omnes* to Relinquish the Nuclear Arsenal and Accede to the Treaty on the Non-Proliferation of Nuclear Weapons

Mr de Klerk's response offers both a thesis and synthesis to the antithesis raised by Mr Louw. Mr Louw lamented about the moral and legal vacuum that afflicted South Africa during the heyday of apartheid. There was an absence of receptiveness for the normative value of international customary law as it pertained to South Africa's two constitutional crises: (1) the nuclear arsenal, and (2) the apartheid constitutional framework. (The first crisis was unknown and unspoken, and the second crisis was in the commons.) Mr de Klerk provided answers to the questions posed by Mr Louw and revealed that respect for and buy-in into a moral and international framework of customary law might be achieved through the acceptance of both *jus cogens*[338] (which consists of peremptory norms from which no derogation is permitted) and obligations *erga omnes*[339] (which South Africa owed to the international community to be able to accede to the Treaty on the Non-Proliferation of Nuclear Weapons). Mr de Klerk was able to create goodwill and trust (comity) at sufficient depth to enable the credibility of the constitutional negotiations to be accepted and granted positive international recognition status.

The starting point was the trust and comity between the inspectors and the inspected. De Klerk recalled in his preamble to this interview that:

"I became President of South Africa in September 1989. I started to address the issue of nuclear relinquishment on the fringes before the fall of the Berlin Wall. I requested that verifying investigations should be conducted into the precise status of the South African nuclear programme. I needed to understand its precise status (*in limine* clarification). I needed to understand whether the country needed to change its course on nuclear armaments. I also needed to understand the practical and pragmatic implications of reversing the direction of the nuclear weapons process."

[338] Op cit Dugard (2007) at 43.
[339] Loc cit.

Phenomenological reduction

Mr de Klerk was assessing the nature of South Africa's obligations *erga omnes* to the international community to relinquish the nuclear arsenal and accede to the NPT. Negotiations should be wisely conducted so as to ensure that the democratic constitutional settlement in South Africa would be achieved in a stable and wise manner.

"The fall of the Berlin Wall opened up a vitally important window of opportunity for South Africa, which was entrapped in political mire at that time (*ratione temporis*). The collapse of the Berlin Wall removed the rationale for the USSR's expansionist policy into Africa."

Phenomenological Reduction

The term '*syzygy*' was used by Aristotle in his book entitled *Rhetoric* to denote 'the alignment of the cosmic forces'. In modern-day parlance, 'syzygy' usually relates to the matter of perfect timing (the time being ripe.) Mr de Klerk seems to be asserting that the fall of the Berlin Wall created a rare moment of syzygy for South Africa, as it signalled the end of the Soviet Union's involvement in Angola and therefore removed the requirement for security guarantees from the United States if South Africa were to accede to the Treaty on Non-Proliferation of Nuclear Weapons. It also opened up the space for him to negotiate with the communists, because communism was no longer a threat. The falling away of the requirement for security guarantees meant that South Africa's request for a quid pro quo became increasingly tendentious, avaricious and opportunist. There was an obligation *erga omnes* not to pursue this unjustifiable reciprocity. That would create complications and very risky patterns of behaviour.

In addition, the military scenario in Namibia had been resolved via the successful implementation of United Nations Resolution 435. The Cubans were withdrawing from the African continent.

In a very short period of time, the assessment of military threats and risks changed fundamentally. There was a basic change in the geopolitical equation in Africa towards the better. South Africa was no longer subjected to a foreign threat with the implosion of international communism. The disappearance of the hostile military threat to South Africa

opened up an opportunity to address the issue of our nuclear arms in the most direct and fundamental way. In military terms it was quite clear that there was no justification for retaining the nuclear weapons.

The realisation that any possible arguments in favour of having nuclear weapons were no longer valid coincided with our South African constitutional initiative. The relinquishment of the nuclear arsenal opened up the opportunity to get South Africa away from being a country that was torn apart by sanctions (*jus cogens* and *de lege ferenda – the 'New' South Africa*).

Emotionally, I have never supported nuclear weapons. It was as fundamental as that. I never liked the idea of South Africa having such a capability."

Phenomenological Reduction

Mr de Klerk would appear to subscribe to a natural law position on the legality of nuclear weapons. They are contrary to *jus cogens* and should be declared illegal per se.

"I believe in non-proliferation. [Mr de Klerk articulated both a *jus cogens* and an *erga omnes* obligation to disarm the nuclear deterrent and accede to the NPT.]

… For that reason, when I made the public announcement that South Africa had relinquished its nuclear bombs, I expressed the hope that Africa would become the first continent to be completely free of all atomic armaments.[340]

It is my conviction that nuclear weapons should be relinquished by all countries and that this principle should not just apply to 'rogue countries'.[341] Those countries that have developed atomic weapons 'legally' should also be placed under pressure to actively divest themselves of that capacity in a responsible and well-thought-out way.[342]

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[340] This is indeed what happened when the Treaty of Pelindaba was concluded, and the continent of Africa was declared a nuclear-weapons-free zone.

[341] It has been inferred that Mr de Klerk deemed that he regarded nuclear weapons as being illegal *per se*, and this assertion confirms that assertion. This is also congruent with Paragraph F of the *Dispositif* of the ICJ's Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons in Armed Conflict: 'Unanimously, there exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all aspects under strict and effective international control.'

[342] Mr de Klerk, in this concession that accepts that certain countries which have developed nuclear weapons legally should also be obliged *erga omnes* to accede to the NPT, would by a process of logical deduction be conceding to a legal positivist perspective interpretation of international law. Mr de Klerk does not differentiate between Nuclear-Weapons-States and Threshold Nuclear States in this regard, and contends that all States should be obliged to relinquish nuclear weapons and accede to the NPT.

I am not one of those that do not believe a country should have weapons per se, one of the 'wild ones' …[343] I was at a conference recently where there were some people who had those beliefs. That is not what I believe. Countries need arms and weapons, but they don't need weapons of mass destruction."[344]

Mr de Klerk couched his decision to relinquish the nuclear arsenal and accede to the NPT with an insistence that a state does have the inalienable right to self-defence, and other military weapons are not precluded from usage. This position, of course, has the authority of the United Nations Charter. Rabinder Singh and Alison Macdonald offer an authority for this interpretation of the law. As they confirm:

"Article 51 of the Charter reserves a State's rights to self-defence. The right is additional to the provisions of Article 42. A State does not require a Security Council resolution in order to defend itself by force, but even the right to self defence is subject to action by the Security Council, as is clear from Article 51:

'Nothing in the present charter shall impair the inherent right of the individual or collective self-defence if an armed attack occurs against a member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security. Measures taken by Members in the exercise of this right of self-defence shall immediately report to the Security Council and shall not in any way affect the authority and responsibility of the Security Council under the present Charter to take at any such time such action as it deems necessary in order to maintain or restore international peace and security.' "[345]

Mr de Klerk continued:

"Weapons of mass destruction create more problems than they are ever likely to solve. I draw the line against weapons of mass destruction.[346] PW's strategy was never to confirm that we had an arsenal of nuclear weapons and never to deny that we had them.

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[343] Mr de Klerk therefore logically would be supportive of the concepts of *jus ad bellum* and *jus in bello*. He is not an idealistic pacifist.

[344] Interview with FW de Klerk at the Offices of the FW de Klerk Foundation in Plattekloof, Cape Town on 4 October 2007.

[345] Singh, Rabinder & Macdonald, Alison. 2002. 'Legality of the Use of Force Against Iraq'. Opinion Public Interest Lawyers, Matrix Chambers, Gray's Inn, London. 7. 10 September.

[346] Mr de Klerk is a practical man and apart from their usage being presumptively illegal, their danger, storage, cost of upkeep, political ramifications, environmental hazards, humanitarian effects, and general extreme level of associated risk make them immensely impractical. In addition, Mr de Klerk presented a case which is congruent with the logic of the prospective illegality of nuclear weapons into the future. The argument is not congruent with the logic of antecedent legality.

His approach was one of ambiguity. It was part of PW's strategy to keep the world guessing as to whether we had a nuclear deterrent or not.[347]

In retrospect, I firmly believe that I did the right thing, especially when I assess the present situation in Iran and Iraq, and the intensely complicated problems that the issue of weapons of mass destruction is creating.[348]

We had very little international support before we started the negotiations for a constitutional transition. I foresaw that the decision to relinquish the arsenal of nuclear weapons would be very helpful in achieving the lifting of international sanctions.[349] The ANC were indeed violently opposed to the lifting of sanctions. Early on in my tenure as new leader of my party I went on an international tour, and I met with Maggie Thatcher and Helmut Kohl at the start of the negotiations here in South Africa."[350]

Mr de Klerk clearly took the Article VI obligations of the NPT seriously. The Article VI obligation states:

"Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to a cessation of the nuclear arms race at an early date and to disarmament under strict and effective international control."[351]

De Klerk's concluding comment was that the reason he relinquished the nuclear arsenal was to achieve state recognition for the constitutional changes that he had enacted in South Africa. The recognition afforded by the United States to the constitutional changes was a vitally important cornerstone of the international credibility that would be accorded to the process. The United States took the lead in this regard, which resulted in other countries following and according the constitutional negotiations recognition.

"We had extensive discussions about the political transition in South Africa. I remember very clearly when I at a later stage stood in the *R*ose *Garden* with President George Bush senior and he announced that he accepted that the constitutional negotiations in South

[347] This is in fact shown to be the official nuclear weapons policy of the Witvlei Committee.
[348] Mr de Klerk's acceptance of the obligation *erga omnes* to relinquish the nuclear arsenal and accede to the NPT prevented a doctrine of anticipatory self-defence being exercised against South Africa and arguably prevented an international war from occurring in South Africa.
[349] The realisation that South Africa was indeed negotiating in good faith was ultimately sufficient for the barrage of sanctions to be dropped.
[350] Op cit De Klerk.
[351] Treaty on the Non-Proliferation of Nuclear Weapons, Article VI.

Africa were irreversible and my satisfaction that sanctions were on their way out.[352] There was an immediate sea-change in the quality of the international relationships with the key countries in the West after President Bush's announcement."[353] [354]

Mr de Klerk remained true to the beliefs and principles he had professed. He relinquished the nuclear arsenal because he believed that it should not exist. He subscribed to the principle that other Nuclear-Weapons-States should do the same and thereby comply with the obligations imposed by the NPT. Mr de Klerk implemented the destruction of the South African nuclear arsenal.[355] [356]

4.5.1 Professor Stumpf Verifies Mr de Klerk's Rationale for Relinquishing the Nuclear Arsenal and Acceding to the NPT

Professor Stumpf recalled that:

"At his first meeting in September 1989, where I was asked to be present (only two weeks after he had taken office), De Klerk stated that his Government would do two major things to make 'South Africa a respected member of the international community again'. Firstly, the political process would be reversed to [become] a full democracy, and secondly, the nuclear weapons programme would be reversed so that SA can accede to the NPT as a Non-Nuclear-Weapons-State (NNWS)'.[357]

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[352] This meeting took place on 24 September 1990 at the White House. This is interesting because Mr de Klerk is asserting that there was a normative obligation on the part of the United States of America to recognise reciprocally the changes that had been initiated by South Africa to its approach to international customary law. This gesture of US state recognition was soon emulated by other countries, and South Africa was re-accepted as a member of the international community of nations.

[353] In this citation from Mr de Klerk, it is again clear that relationships of trust with Thatcher, Kohl and Bush were vital to the success of the nuclear relinquishment process in South Africa.

[354] The first process that De Klerk initiated to ensure South Africa's accession to the NPT prior to accession was to call for an accurate inspection of the nuclear weapons. De Klerk was clearly able to identify a syzygy opportunity for the constitutional change that would be enhanced by the nuclear relinquishment and accession to the NPT, and justified by the reversal of Soviet military policy and the conclusion of hostilities in Angola, together with the peaceful transition to independence of Namibia.

[355] See Proceedings of a Symposium held at The American Academy of Arts and Sciences 13–15 January 1983. 'The Nuclear Weapons Freeze and Arms Control'. Center for Science and International Affairs, John F Kennedy School of Government, Harvard University.

[356] See Wander, Thomas, Kirk, Elizabeth & Arnett, Eric (eds.). 1988. 'Technology and Arms Control for the 1990s'. Program on Science, Arms Control, and National Security. Washington DC: The American Association for the Advancement of Science. 13–14 October.

[357] The corollary to this would be that South Africa would not be a respected member of the international community if it did not design a new Constitution, relinquish the bomb, and accede to the NPT.

The actual instruction was conveyed in a written directive: 'Dismantle the six devices, re-melt the HEU and return it to the AEC, and advise the Government on the timing of accession to the NPT as a full NNWS'.[358]

The last device was fully dismantled and the HEU re-molten [*sic*] and cast in June 1991, about two weeks before South Africa signed the NPT as a Non-Nuclear-Weapons State. This was legally the only way a State other than the Big Five could enter the NPT. If South Africa [had] acceded to the NPT without having fully dismantled the devices, it would immediately have broken the NPT at the moment of accession."[359]

Professor Stumpf's testimony serves as confirmation of the veracity of Mr de Klerk's rationale for relinquishing the nuclear arsenal and acceding to the Treaty on the Non-Proliferation of Nuclear Weapons. Stumpf's explanation is that Mr de Klerk accepted the obligation *erga omnes* to relinquish the nuclear arsenal and accede to the NPT. It was anticipated that this action would create a climate of goodwill and reciprocity. The logical consequence of this improved climate which related to South Africa's acceptance of international customary law into its state conduct would be re-admission to and recognition as an honourable member of the community of nations. The matter of achieving positive state recognition constituted the essential logic underpinning this decision. It is noted, incidentally, that Mr de Klerk deemed it essential for South Africa to prove to the IAEA that its internal regulatory and legal framework within the ministries, companies, agencies and organisations associated with nuclear relinquishment and accession were conducted with integrity. It was also imperative that those persons who were accorded the necessary formal authority from the President to proceed with the relinquishment and accession processes were able to prove to the leadership in the Atomic Energy Corporation (AEC), ARMSCOR and the South African Defence Force (SADF) that they were duly authorised to relinquish the nuclear arsenal and accede to the NPT. Had this formal authorisation not been provided, it is possible that the entire accession process might have been stillborn.

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[358] It is an important procedural formality to note that De Klerk's instruction to relinquish the nuclear arsenal and accede to the NPT was issued in the form of an unequivocal written directive.
[359] Interview with Professor Waldo Stumpf at the University of Pretoria, Minerals Science Building, Pretoria on 18 October 2007.

4.5.2 The Matter of Deterrence

In my view South Africa's approach towards nuclear deterrence should be understood as an evolving cyclical policy, rather than as static and absolute. Pretoria was confronted by two different deterrent options. The first was an external deterrence option that revolved around attempting to derive a deterrent quid pro quo for relinquishment and accession from the IAEA and the Extra Team (which consisted of nuclear scientists from the United States, the United Kingdom and Russia who were responsible for conducting the oversight audit of the relinquishment and accession). Attempts to derive a tangible deterrent quid pro quo for relinquishment and accession were singularly unsuccessful, although intangible reciprocal benefits were received in the form of the discontinuation of sanctions, goodwill, and international recognition for the constitutional transition.

South Africa possessed a second deterrent option which it wisely did not pursue. It could have used deterrence as an internal option to the nuclear relinquishment and accession to derive a quid pro quo from the African National Congress (ANC) during the course of the constitutional negotiations. Thankfully, this option was never even contemplated, because it was considered to be extremely high risk and inappropriate. The matter was of such high risk and sufficiently inflammatory that it could even have scuppered the constitutional negotiations and placed the country at grave risk, even perhaps of civil war. The enactment of deterrence was never permitted to escalate beyond phase one of the Witvlei policy ("neither confirm nor deny South Africa's nuclear weapons policy").

It is contended that South Africa's approach towards deterrence changed significantly within phase one of the Witvlei policy. This was because of the reality of fundamentally changing circumstances in the Southern African region. The matter of neither confirming nor denying possession of nuclear weapons was never publicised. But it was also hardly a watertight

secret, particularly among various countries' intelligence services and senior political leadership, who, Mr Pik Botha informed, always had a very good approximate idea of South Africa's developmental status. A careful reading of the Witvlei policy shows that it holds that deterrence is an escalatory matter pertaining to ever-higher degrees of threat, counter-threat and reprisal.

The intended policy of deterrence changed as South Africa edged from war into peace. The goals and intended benefits of the policy of deterrence under war were different from what they were under peace. Even when the nuclear weapons were in the process of actually being relinquished, one could argue that there was an 'element of deterrence in the act'. The relinquishment act created a reciprocal obligation among other nations to grant South Africa's constitutional negotiations the dignity of legitimacy and to start unwinding the international sanctions and embargoes that existed at the time – *erga omnes.*

It has been observed that a serious security threat to South Africa arose from the Soviet Union during the period from 1975 to 1986 because of the war in Angola. The policy of nuclear deterrence was passively pursued at that time to mitigate the Soviet security risk. Had the Soviet Union escalated the war in Angola, the deterrence policy directed that South Africa should formally notify the United States of America about its nuclear capabilities. This step was never reached. Deterrence itself created a series of deeper risks to the security of the state. The prime risk was that South Africa's nuclear arsenal might be internationally exposed in the world media and create panic amongst friends and enemies alike. Such panic could have imploded the constitutional negotiations and in turn degenerated into racial civil war, together with an international escalation of the conflict along similar lines to what happened in Iraq in 1989 to 1990. Such an escalation might have involved the use of certain other devastating weapons of mass destruction.

The first part of the cycle of nuclear deterrence from 1975 to 1986 was rationalised by the large asymmetry in military nuclear capacity that existed between the Soviet Union and South Africa. I call this the 'war-time deterrence phase'. The quantum and quality of military nuclear hardware was skewed in the USSR's favour. The policy of deterrence (1975–1986) developed in the context of the war that was being waged in Angola. It is often forgotten that at the same time that war was being waged, peace was also being explored, and *real politik* dictated that negotiated frameworks such as United Nations Resolution 435 should be considered. The existence of the policy of deterrence was based on a deep sense of military insecurity and isolation. The atmosphere of belief that existed then led to a presumption that the very survival of the South African state was at stake.[360] This perception of crisis was referred to in the propaganda of the time as the 'total onslaught'. The reasoning underpinning the wartime policy of deterrence was basically that 'desperate times require desperate measures'. South Africa did attempt to use its ambiguous policy of deterrence (phase 1) to exact concessions in terms of the supply of enriched uranium for Koeberg nuclear power station and other matters during this period.

Mr Pik Botha offers an interesting commentary on his meeting with President Ronald Reagan and General Alexander Haig about how this was achieved, and I infer that this meeting resulted in the creation of soft law, which subsequently became more sophisticated and was modified into international customary norms. I think that the speculation as to whether or not South Africa indeed possessed, or did not possess, nuclear weapons may possibly have given Pretoria access to influential international audiences (and concessions). Some of these concessions were no doubt tangible, while others were intangible. An example of a tangible deterrent benefit was that Mr Pik Botha was able to reestablish the supply of enriched uranium for Koeberg nuclear power station after it

[360] One of the questions posed in the ICJ's Advisory Opinion on the Legality of the Threat and Use of Nuclear Weapons in Armed Conflict was: "Could nuclear weapons be used lawfully in armed conflict in the extreme case when the very survival of a State is at stake?" The answer to this question in the South African case was, "Under no circumstances."

had been cut off by the Carter administration. Another possible deterrent benefit is that the nuclear-weapons-states rallied against the non-aligned states to try to ensure that South Africa retained its membership of the IAEA. South Africa's continued membership of the IAEA smoothed the way to negotiate accession to the NPT. One could also argue that South Africa's possession of a nuclear arsenal and other weapons of mass destruction, including chemical and biological weapons of warfare, might have discouraged the Soviet Union from escalating the war in Angola.

The second phase of the deterrence cycle started in 1986 and lasted until late 1989. This can be understood as 'South Africa's peacetime deterrence phase', where Pretoria attempted to gain both material and intangible payoffs for voluntarily relinquishing the nuclear and acceding to the NPT. I call this the 'quid pro quo phase'. In my view, the policy of deterrence during this second phase was remarkably unsuccessful. Very few quid pro quos were achieved, and the pressure from the IAEA, the United States, the United Kingdom and the Soviet Union in rejecting South Africa's overtures was relentless. The third deterrent phase was a period that lasted from late 1989 until 10 July 1991 (which marked the day of South Africa's accession to the Treaty on the Non-Proliferation of Nuclear Weapons).

4.5.3 Mr de Klerk's Decision Not to Use South Africa's Nuclear Weapon's as a Deterrent Negotiation Strategy with the International Atomic Energy Agency and Accessory Powers

During this final short period Mr de Klerk realised that there was little point in South Africa's attempting to negotiate a deterrent quid pro quo for relinquishing the nuclear arsenal and acceding to the NPT. South Africa had an obligation *erga omnes* to do so if it wished to be recognised as a respected member of the community of nations. South Africa's relinquishment and accession were regarded as a necessary corrective action to legitimate South Africa's constitutional recognition. This induced further reciprocal obligations *erga omnes*: abandonment of apartheid;

ending of the sanctions campaign; reintegration of the Bantustans into South Africa; and readmission to the international community of nations. I call this 'the international customary law phase'. Mr de Klerk officially recognised that certain norms of behaviour could not be derogated and these norms were subsequently codified into the Constitution – *jus cogens*.

Mr de Klerk's contention was that South Africa would have been discredited in the eyes of very important allies and international public opinion had it attempted to derive a quid pro quo in exchange for relinquishing the nuclear arsenal and for acceding to the Treaty on the Non-Proliferation of Nuclear Weapons. The pursuit of a quid pro quo might have been perceived as a Faustian compact with Mephistopheles himself and analogous to extortion. It would almost certainly have raised questions of both morality and legality. In the interview, Mr de Klerk asserted that he had not sought a deterrent quid pro quo. Professor Stumpf and Dr Barnard claimed that Mr de Klerk authorised Mr Pik Botha to seek a quid pro quo at the meeting held with the IAEA in Vienna in November 1989, with representatives from the United States, the United Kingdom and Russia. Dr Barnard informed that he lamented to Mr de Klerk about the fact that Mr Botha was not able to achieve a significant material deterrent trade-off for accession to the NPT. He mentioned that it was on the basis of this differing view of what benefits could be derived from deterrence that Mr de Klerk replaced him with Professor Wynand Mouton as the oversight auditor of the nuclear relinquishment and accession process. One might deduce from this episode that Mr de Klerk acknowledged that a quid pro quo might arise as a windfall. When it was realised that it would not work, he decided not to waste his time on this issue. He would not be diverted from his purpose, which was to negotiate a new democratic Constitution. Mr de Klerk stated:

I specifically did not seek any tangible quid pro quo that would benefit South Africa and the direction where it was going by using our capability as a pawn. I sought to create an atmosphere and culture of trust from within the international community. I was seeking

their trust and support for the sincerity of our constitutional transition, and the creation of a new South African society.[361]

Mr de Klerk confirmed that he specifically had not sought a tangible quid pro quo in exchange for South Africa's nuclear relinquishment. This does not preclude gaining an intangible quid pro quo – *erga omnes* in the form of international recognition, which would be facilitated by abandoning apartheid and writing a non-racial democratic constitution which was of the highest legal elegance. Mr de Klerk used the term 'pawn' to denote the use of the nuclear weapon capability as a bargaining chip. He did not engage in this type of game playing, because it would have created mistrust, which would have discredited the constitutional transition. South Africa's apartheid policies and nuclear policies had placed it in a situation where it was a pariah, and Mr de Klerk set about changing this. The reciprocity that Mr de Klerk sought was trust in the sincerity and depth of the constitutional change that was being negotiated.

Professor Stumpf also commented about the 1989 meeting with the IAEA in Vienna and collaborated with Barnard that no deterrent quid pro quo was achieved.

"Some political return for accession to the NPT was explored on a number of occasions by Mr Pik Botha on behalf of the Government. (I was present at one such meeting with him in Vienna in November 1989), but the three Accessory Powers to the NPT (USSR, US and UK) were adamant that accession must come first before any quid pro quo could be considered. At that meeting even an offer to close the HEU plant unilaterally (which Mr Pik Botha took with him from Mr de Klerk), did not result in any promise of visible returns on the international front. The three superpowers were actually 'rock hard' and did not budge. But Mr Pik Botha would be in a better position to explain this."[362] [363]

[361] Op cit De Klerk. Mr de Klerk did, of course, achieve very significant 'intangible' quid pro quo for this action in the form of international recognition; unwinding of sanctions and cancellation of embargoes against South Africa. My interpretation of the deterrent quid quo pro scenario is that Mr de Klerk initially afforded Mr Pik Botha with a mandate to trade the Y Plant at the November 1989 meeting with the IAEA, US, UK and USSR in Vienna. He saw that this would not work and dropped the notion. International recognition and normative acceptance of South Africa's bona fides in terms of international customary law was the most valuable benefit that could be achieved, and was all the more valuable because it arose unsolicited.

[362] Op cit Stumpf.

Had South Africa gained a quid pro quo for accession, rewarding this might have created a dangerous precedent for prospective proliferators who might perceive that they would be able to use their nuclear capabilities to extort and bribe the United Nations and others into power and influence – *ex injuria non oritur jus*. This would be a dangerous practice with potentially escalatory implications. It is the researcher's view that the accessory powers were correct and wise in their decision to refuse to grant this deterrent trade-off.

Heald: "You mentioned that you attended a meeting with Pik Botha in Vienna. You said that the Russians were there, the Americans were there and the Brits were there. Your words were that 'they were rock hard'?"[364]

Stumpf: "Let me talk about that …"[365]

Heald: "What was their agenda at this meeting in Vienna, and how were they pushing you?"[366]

Stumpf: "Let me explain. When the NPT was created in the 1960s it only included the three Superpowers, who were then members of the NPT ... the USA, UK and the Soviet Union. They were called the three Accessory Powers. At that point France and China had not yet become Accessory Powers. That only came much later. Those three were called the Accessory Powers because they acceded to the NPT right at the beginning. Many of the negotiations happened between them …

That is why I said you must get to Pik Botha, because he will tell you about all the discussions that he had around our nuclear programme. He will tell you about our political capabilities, programmes, political situation and processes over many years, from the time before I got involved in September of '89 onwards.

South Africa had its back against the wall at that time. We were isolated internationally. We were in a corner with sanctions and all that. We had no credibility. South Africa had tried over many months and indeed, some years, to exact some quid pro quo from an offer to dismantle the nuclear programme. Could we at least get some support in the UN? Lifting of sanctions?

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[363] See The Harvard Study Group: Carnesale, Albert, Doty, Paul, Hoffman, Stanley, Huntington, Samuel, Nye, Joseph & Sagan, Scott. 1983. *Living with Nuclear Weapons*. Toronto: Bantam Books.
[364] Op cit Stumpf.
[365] Loc cit.
[366] Loc cit.

Pik Botha and I had many meetings. Dawie de Villiers was there. (He was my Minister then.) Pik Botha was there, and a few officials were there. Neil van Heerden was there. In all those meetings I was just a small fish listening to all these big people talking. Pik jumped around and tried ...

Before we went to Vienna, there was a meeting where the matter of achieving a quid pro quo was discussed. FW said: 'Don't tell them now that we are going to dismantle the nuclear weapons,' because he did not want the news to leak out. But he did say: 'Offer to them that we will close the Y Plant.' Now that was the enrichment plant where the HEU was made. The Y Plant had been the focus of attention from the US for many years.

Earlier on in Vienna, Pik tried to solicit some political concession and support from the UN. We tried to seek some concessions from the UN, like lifting a few sanctions here and there. They were rock hard. They would not budge. They said: 'No, you accede to the NPT as a non-nuclear- weapon state, and then we will talk about a system of help.'

Pik then made the offer that we would consider closing the Y Plant. Although the relinquishment did not lead to direct benefits, it did lead to indirect benefits, of that I am sure. That is something that Pik maybe can clarify."[367]

Professor Stumpf presented an important insight into how South Africa's request for a quid pro quo for rolling back the nuclear arsenal and acceding to the NPT was rejected. The Accessory Powers developed a unified stance against rewarding South Africa's nuclear weapons adventure. Any watering down of that determined stance and granting of nuclear trade-offs would have signalled to other proliferating countries that they could attempt the same. To condone bilateral side-deals with prospective proliferators might have incrementally undermined the integrity of the Treaty on the Non-Proliferation of Nuclear Weapons, and thereby contributed towards nuclear proliferation.[368]

Professor Waldo Stumpf attended the meeting that Dr Barnard referred to in Vienna, and his viewpoint is that Mr de Klerk did initially seek a

[367] Loc cit.
[368] See Draft Paper by Blum, Gabriella. 2006. 'Does International Law Need More Universal Law? A Multifaceted Approach to Multilateralism and Bilateralism in International Treaty-Making' at 1–2. 26 September. She comments: "For universalists, multilateralism is both the cause and the effect of a transition from anachronistic notions of sovereignty and self-aggrandizement – epitomized in bilateral, power-based pacts – to a more enlightened international society that might merit description as a community, a global village, a neighborhood, a family of nations."

deterrent trade-off and quid pro quo from the Accessory Powers for South Africa's accession to the NPT, but this stance was changed when the attempt failed.

4.5.4 Mr de Klerk's Decision Not to Use South Africa's Nuclear Weapons as a Deterrent Negotiation Strategy with the ANC

It would have been unwise for Mr de Klerk to have opened up the issue of the intended relinquishment of the nuclear arsenal and accession to the NPT with the ANC. There would have been no conceivable deterrent benefit from such action. This gesture would possibly have fatally poisoned and complicated the constitutional negotiations. Deterrence was therefore rather ineffective in South Africa's external negotiations with both the IAEA and the Extra Team. It is recalled that on 22 December 1982, the African National Congress planted and detonated four bombs in Koeberg nuclear power station. The damage caused by this explosion was quite extensive.[369] Given this precedent, it would have been extremely risky to share information on nuclear weapons and use it as a deterrent tool with the ANC.

Professor Stumpf recalled that:

"De Klerk never considered using nuclear deterrence as a negotiation tactic with the ANC. Just imagine the damage that this hot potato could have done in derailing an already very difficult process of power handover.

Secondly, I personally do not believe Mr Mandela would have had the immediate international stature that he had if he had 'some nukes in his back pocket'.

Overall, I think that Mr de Klerk's decision was the right one: 'Get these things out of the way as soon as possible so that political transition can proceed as smoothly as possible.'

Although I respect Mr Malan's point of view, I think that it was unrealistic at the time to think of any quid pro quo (arms contracts and so forth). There would just not have been any takers! South Africa would have been in a corner with nowhere to go!"[370]

[369] Op cit Masiza (1993) at 40.
[370] Op cit Stumpf.

Phenomenological Reduction

Stumpf claims here that if FW de Klerk had used the nuclear weapons as a negotiation tactic with the ANC, he would have been presenting them with a poisoned chalice. The essential point is that De Klerk negotiated in good faith with the ANC. This is a practical case where it is evident that he contributed to Mr Mandela's success and to the successful conclusion of the constitutional negotiations.

The relinquishment process was conducted in camera and without the involvement of the ANC and Mr Mandela because of the risk of creating distrust in the constitutional negotiations. South Africa would have arguably retained its pariah international recognition status had it used these weapons as a deterrent negotiation tool in the internal negotiations with the ANC. It was judged that the exclusion of the ANC from all involvement in the nuclear relinquishment and accession process would protect the constitutional settlement from unnecessary national and international negotiation pressure. It was believed that the constitutional negotiation process itself was too fragile to open up this additional and very complicated aspect of the negotiations. In addition, the legal process of relinquishment and accession might have had serious unintentional political consequences, rendering the ANC and Mr Mandela politically accountable for these weapons, in the eyes of the world. Suffice to mention that this international scrutiny would have been withering and would have arguably rendered the constitutional negotiations null and void.

4.5.5 Internal Disagreement About about the Value of Deterrence as a Negotiation Instrument

Dr Barnard investigated the matter of the internal leadership conflict that arose from the search for a quid pro quo in response to South Africa's relinquishment of its nuclear arsenal:

"FW de Klerk knew about this nuclear weapons programme, because he had been the Minister of Energy Affairs and this matter naturally fell under his remit.[371] At the time of the relinquishment, Dr Dawie de Villiers had assumed leadership of the Ministry of Energy. Pik Botha was involved in international negotiations on this matter in 1988 and 1989.

I was part of a furious internal struggle with the Department of Foreign Affairs and ARMSCOR during this period. We were not sure whether we should seek to accede to the Treaty on the Non-Proliferation of Nuclear Weapons or not.

This 'furious internal struggle' appears to have revolved around the degree to which deterrent trade-offs could be achieve by virtue of the relinquishment and accession to the NPT. Dr Barnard held the view that much more could have been achieved by using the process of deterrence to its full effect, and he lamented that this was not done. Doubt as to whether or not South Africa should accede to the NPT related to the fact that South Africa had just emerged from a war, and the security situation was far from resolved.

"There was a very important meeting in Vienna ... in November 1989. Pik Botha, Dawie de Villiers and Jannie Roux were in attendance, together with some guys from ARMSCOR. It was a very tough meeting.

We agreed to accede to the Treaty on the Non-Proliferation of Nuclear Weapons at this meeting. I felt that we should get some recognition for this ... the Americans should give some recognition to our internal negotiation process. I felt that we needed to at least get some recognition from the US for the constitutional negotiations which we were showing all the signs of embarking upon in earnestness."[372]

"Pik Botha had been trying for many years to please the Americans. We started dismantling the nuclear capability after we returned from Vienna. I explained to FW de Klerk that I was disappointed in Pik Botha for not being more effective in gaining a quid pro quo. Thereafter, FW appointed Professor Wynand Mouton in charge of this

[371] Mr de Klerk as President of South Africa would presumably have been Chairman of the Witvlei Committee.
[372] Interview with Dr Neil Barnard at the Chameleon Restaurant in Plattekloof, Cape Town on 29 October 2007. Dr Barnard in this paragraph states that he felt that an intangible quid pro quo of recognition should have been granted for this accession. This recognition came eventually and could not be hurried. It followed its own pace.
The meeting alluded to was held at the head office of the International Atomic Energy Agency in Vienna, and involved the US, UK and USSR. They refused to grant South Africa any quid quo pro.

relinquishment process, and I was sidelined. I explained to FW that I had a close relationship with President PW Botha and that he must choose people that he is comfortable with."[373]

It appears as though Mr de Klerk sidelined Dr Barnard from this process on the basis of his views on deterrence, that the relinquishment of the nuclear arsenal could be used as pawn – a bargaining chip. Mr de Klerk rejected this view. Indeed, the person who took Dr Barnard's place, Professor Mouton, held that the nuclear weapons were absolutely useless.

The essential feature of that 'furious internal struggle' was about gaining 'some recognition' for the relinquishment and accession decision. It is my view that Dr Barnard's approach towards nuclear deterrence would have fitted more closely into phases one (the war time deterrence phase) and two (the peacetime phase) of the deterrent cycle mentioned above, and not fitted in well with phase three – the *erga omnes* phase. The United States was not prepared to grant a quid pro quo, presumably on the basis of *ex injuria non oritur jus*.

In contrast to Dr Barnard, Professor Mouton held the view that nuclear weapons were of absolutely no value. He did not see any deterrent value in them whatsoever. This view corresponded more closely with Mr de Klerk's perspective at that particular stage in South Africa's transition. Professor Mouton contended that:

"The central question to ask about the nuclear weapons is, 'What can you do with the things?' The answer, I think, is that you can do absolutely nothing with them. They are absolutely useless.

All the documentation relating to the nuclear weapons was brought to a central point and we made one hell of a fire with a blow-pipe to destroy them. It took two days to burn all the documents. We burnt the whole blooming lot.

The bombs were of the Hiroshima type. They were essentially very simple".[374]

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[373] Op cit Barnard (2007).
[374] Interview with Professor Wynand Mouton at his apartment at Gordon's Bay in the Strand in Western Cape on 30 October 2007.

The contrast between Professor Mouton's interpretation of the utility of deterrence and Dr Barnard's view of the same matter could not have been starker. Professor Mouton saw no utility whatsoever in deterrence, while Dr Barnard saw potential utility in the strategy. Mouton seemed to regard nuclear weapons as having no place whatsoever in state conduct and therefore designated them as being utterly useless. I interpret this as meaning (for Professor Mouton) that antecedent illegality extends to all conceivable contexts, and that nuclear weapons are illegal per se. Professor Mouton's view of deterrence was well suited for phase three – *the erga omnes* phase of the nuclear relinquishment and accession. Pretoria was compelled to enter two sets of audit reviews on its nuclear status. The first round of audit reviews was with the IAEA and the second with the Extra Team, which included nuclear scientists and experts from the United States, United Kingdom and Russia who double-checked on the IAEA's adjudication to make sure that nothing slipped through. Had Professor Mouton used these two vitally important meeting forums to try to secure a deterrent quid pro quo, he would have discredited the integrity of the entire process of nuclear relinquishment and South Africa's accession to the NPT.

It was only by *not* pursuing a quid pro quo that the reward of positive international recognition and an end to sanctions and embargoes would arise. Silence and restraint led to rewards; noisy negotiations and demands would have complicated matters and led to mistrust. My supposition therefore is that Professor Mouton would accept that "[t]he UN Charter provides the framework for modern international law".

Article 2(4): 'All Members shall refrain in their international relations from the threat or use of force against territorial integrity or political independence of any state, or in any manner inconsistent with the Purpose of the United Nations.'"[375]

It was because Professor Mouton saw no value in perpetuating the nuclear arsenal that Mr de Klerk appointed him to the task of Oversight

[375] United Nations Charter, Article 2(4).

Auditor in South Africa's nuclear relinquishment and accession process. An individual who foresaw deterrent value in the nuclear arsenal might have been tempted to delay the relinquishment and accession.

4.5.6 The Irrationality of the Policy of Deterrence

At this stage I intend to explore Dr Barnard's interpretation of the legality of nuclear deterrence in greater depth by analysing his testimony.

Dr Neil Barnard stated:

"Let me briefly explain two fundamental points. Nuclear weapons are not military weapons. They are psychological weapons of deterrence in the power play of international politics. They have not been used in the field of battle since Hiroshima and Nagasaki. A nuclear bomb is an extreme psychological weapon of deterrence.

No one has really developed these weapons in the field of battle as you typically would do with other conventional weapon types. Nuclear weapons are used to intimidate opponents".[376]

The essential point made by Barnard is that nuclear weapons are weapons of terror and threat. They are not intended to be used as weapons of war, although the right to use them is constantly reserved. Their power arises from their non-use. From a legal perspective, I cannot see how one can segregate the threat of deterrence from a subsequent act of usage, whether it is in the form of testing or operational deployment. It is contended that the deterrent threat of nuclear weapons is illegal in terms of international law under the Geneva Convention.

The Solomon Islands in their testimony before the ICJ on the Advisory Opinion on the Legality of the Use of Nuclear Weapons provided an authority for this contention:

"Any use of nuclear weapons would prima facie violate international humanitarian law. The threat of their use must be considered as totally incompatible with the solemn obligation undertaken by States under Article I of the Four Geneva Conventions of 1949

[376] Op cit Barnard (2007).

and Article I(I) of the 1st 1977 Additional Protocol to respect, and ensure respect, of the four Conventions and the Protocol."[377]

A number of questions arise from Dr Barnard's comments. The first is, what is the role of state responsibility in the matter of nuclear deterrence? In this regard it is apposite to cite Ian Brownlie, who defers to the authority of Judge Huber in the *Spanish Zone of Morocco* claims.[378] He states:

Judge Huber commented thus:

"Responsibility is the necessary corollary of a right. All rights of an international character involve international responsibility. If the obligation in question is not met, responsibility entails the duty to make reparation."[379]

Can nuclear deterrence, the ultimate extreme weapon of fear, ever be invoked with responsibility? This would seem to be a rhetorical question. Huber's contention that responsibility and right are corollaries is instructive. Could the threat to annihilate a city, or state or people ever be a responsible act? Could the act of annihilation be a right? I do not believe this is so. In my view, Huber's maxim leads to the logical deduction that a nuclear weapon can never be lawfully deployed because it would displace both right and responsibility and render any military usage of nuclear weapons illegal per se.

The essence of Barnard's argument is that 'what is sauce for the goose should be sauce for the gander'. His contention is that if the nuclear-weapons-states can legally embark on nuclear proliferation via an arms race, and also abide by a strategy of nuclear deterrence in conflict with and in breach of their disarmament obligations laid out under Article VI of the NPT, why then can the threshold nuclear states not also legally assume a nuclear deterrent posture? Barnard expanded upon his argument above:

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[377] Written Observations of the Solomon Islands re: General Assembly Question, para 310 at 25–26.
[378] *Spanish Zone of Morocco Claims*: Translation, French text, RIAA ii 615 at 641.
[379] Brownlie, Ian. 2003. *Principles of International Law*. Sixth Edition. Oxford: Oxford University Press.

"There are another two points that I wish to make. Uninformed critics will say that we spent millions on a weapon that could never be used in anger."

Phenomenological Reduction

For Barnard, any operational usage of a nuclear bomb would be per se illegal. If usage is illegal, then surely the threat of use must also be illegal. I interpret Dr Barnard as having a positivist perspective on the legality of deterrence as articulated by the United States, United Kingdom and France before the ICJ. These countries are nuclear-weapons-states. International law would seem to be interpreted differentially, with one set of rules applying to the nuclear-weapons-states and another set applying to the non-nuclear-weapons-states. Barnard's implicit presumption that nuclear deterrence is lawful because it is accepted as such by the nuclear-weapons-states does not necessarily apply to a threshold state and cannot be blandly generalised.

"The point is that the nuclear arsenal is a weapon that can never be used in anger. Its mere presence is sufficient.

The question of 'whether nuclear weapons can ever be used in war' is a brutally stupid question. Nuclear weapons cannot ever be used in war. The nuclear weapon is not a military weapon. It is a psychological weapon and signifies a psychological capability or incapability. It serves a very powerful psychological capacity in a community. It creates a feared psychological standing.

Think of Israel. Israel is effectively saying to the Accessory Powers – the Nuclear-Weapons-States: 'You are not the only ones that can drive a smart car like a Mercedes Benz. I do not have to drive that pedestrian Kia car that you are imposing on me. I can drive a Mercedes Benz as well.'

The development of the nuclear bomb in South Africa was never intended to be used militarily. In the US the development of nuclear weapons is currently following a very dangerous pattern. I made this assessment after Israel was wrong-footed by Hezbollah in Lebanon last year. The United States are now starting to seriously develop 'mini-nukes' to blow up basements, and warrens, and underground places that are used as fortresses for guerrilla warfare. This could start a new process of massive proliferation. Mini-nukes are extremely dangerous. They could create a terribly dangerous world.

One question that you need to raise with Professor Wynand Mouton (and he is a good man) is: 'Was all the money that was spent on this programme worthwhile?' As South Africans, we were fighting a revolutionary war that required gaining hearts and minds. The monstrosity of a nuclear bomb would never win hearts and minds. It would achieve the opposite. If the bomb were dropped we would have had to discover the answer to the question: 'Who do we kill and who don't we kill?' You know what? You could never know the answer to this question. Nuclear weapons are very indiscriminate.[380] You could not drop a nuclear bomb on Soweto.[381]

Unfortunately the South African nuclear programme was left in the hands of the military people who did not understand how to use its power, which was psychological and political power. It was not about military power.

We started dismantling the nuclear capability after we returned from Vienna."[382]

Barnard asserted in the paragraphs cited above that a nuclear weapon has only one justifiable function and that is to serve the purpose of nuclear deterrence by creating fear. Finally, he views the 'mini-nukes' that are currently being developed to be extremely dangerous, and believes that they could evolve into a threat towards world peace. His reasoning appears to be that they could miniaturise a deadly nuclear war, and provide enormous proliferation dangers. They could be an ideal terrorist weapon, in terms of their miniature scale. Dr Barnard assessed the *dolus* implications of deploying a nuclear bomb – that is, the intention to inflict harm, together with the foreseeable consequences of such intended harm. My inference is that he effectively contended that nuclear weapons could never be deployed because of *dolus*.

Barnard asserted that the NPT is applied in a most discriminatory manner which is biased towards the nuclear-weapons-states at the expense of the non-nuclear-weapons-states. For him, it is as though two sets of international law apply to nuclear weapons. A lenient set of laws applies to the nuclear-weapons-states, which are permitted to possess nuclear weapons, apply the policy of nuclear deterrence, and even possibly use

[380] Prins, Gwyn (ed.). 1983. *Defended to Death – A Study of the Nuclear Arms Race from the Cambridge University Disarmament Seminar*. Harmondsworth: Penguin Books.
[381] Stumpf used the identical terminology in his interview.
[382] Op cit Barnard (2007).

them in armed conflict. The non-nuclear-weapons-states are allowed no such privileges and powers. There is consequently a flaw in the enactment of the NPT, reflected in a fundamental absence of reciprocity.

Jonathan Granoff offered a commentary that is apposite to Dr Barnard's reflections on the discriminatory nature of the NPT, which allows the Nuclear-Weapons-States to proliferate nuclear weapons and does not allow the NNWS to have the same recourse.

"Many norms are universal and have withstood the test of human experience over long periods of time. One such principle is that of reciprocity. It is often called the Golden Rule: 'Treat others as you wish to be treated.' It is an ethical and moral foundation for all the world's major religions. Several states sincerely believe that this principle can be abrogated and security obtained by the threat of massive destruction.

The Canberra Commission highlighted the impracticality of this posture. Nuclear weapons are held by a handful of states which insist that these weapons provide unique security benefits, and yet reserve uniquely to themselves the right to own them. This situation is highly discriminatory and thus unstable; it cannot be sustained. The possession of nuclear weapons by any state is a constant stimulus to other states to acquire them."[383]

The legal inference that arises from Barnard's exposition is that the application of the NPT is discriminatory and there exists an obligation *erga omnes* on the Nuclear-Weapons-States in terms of the principles of reciprocity to relinquish their nuclear arsenals and abide by the NPT. His argument is that the NPT is in its essence both morally and legally flawed, and has led to the problem of threshold nuclear states acting outside the NPT.

Charles Moxley explored the irrationality of the policy of deterrence. His reflections about the *Zelter* case will be briefly presented in order to place Barnard's testimony into perspective.

"One can wonder and dispute whether law is relevant – whether Great Britain, the United States or other nuclear states care about the requirements of the law. But the

[383] Granoff, Jonathan. 1999. 'Nuclear Weapons, Ethics, Morals and Law'. Presentation for Nuclear Nonproliferation Treaty Prepcom, New York. May. [Online]. Available: http://www.wagingpeace.org/articles

requirements of the law, at least as defined by the ICJ, are beyond reasonable dispute. Yet now the Scots High Court comes along and, purporting to apply the ICJ decision, emasculates it.

If the policy of deterrence were simply innocent, threatless possession of weapons whose use was recognized as irrational and not tenable, perhaps the risk of use would diminish. But, it is not; deterrence is a policy of threatening overwhelming, disproportionate, and indiscriminate damage – threatening that, to be effective, must be credible, backed up by weapons procurement, personnel training, contingency planning, pre-targeting, and weapons placement and alertness evidencing the resolve, on a virtually instantaneous basis, to actually use these weapons. The notion that deterrence may be unthreatening because we independently recognize the unusability of these weapons is contrary to the nature of deterrence and hence illusory. Deterrence is a Faustian bargain promising at best only to delay the suicidal apocalypse it portends."[384]

The excessive and indiscriminate use of force could not be justified under international law as it simply contravenes the United Nations Charter, which provides the framework for the use of force in international law. South Africa is party to the Charter.[385]

The discrimination between the nuclear-weapons-states and the non-nuclear-weapons-states should be opposable *erga omnes* against all other legal persons, irrespective of their legal consent.

4.6 The Respondents' Chronology: The Discovery of the Vastrap Nuclear Test Site in the Kalahari Desert (April 1977)

It is my contention that the most important set of events underlying South Africa's decision to relinquish its nuclear arsenal and accede to the Treaty on the Non-Proliferation of Nuclear Weapons occurred as far back as April 1977, when South Africa accepted an obligation to be bound by the USSR and US (*opinio juris sive necessitatis*) and discontinue developing the nuclear weapon test site located at Vastrap in the Kalahari Desert. This eventually led to settled practice (*usus*) in 1985, when President PW

[384] Moxley, Charles. 2001. 'Unlawfulness of the United Kingdom's Policy of Nuclear Deterrence – Invalidity of the Scots High Court's Decision in Zelter'. *Disarmament Diplomacy*, 58(1):17, June.
[385] International Committee of the Red Cross. 2005. 'Rules of International Humanitarian Law and other Rules Relating to the Conduct of Hostilities Collections of Treaties and Other Instruments'. Revised and Updated Edition. 19 Avenue de la Paix, Geneva, Switzerland.

Botha instructed that ARMSCOR should cease its nuclear weaponisation process, and effectively run down the nuclear weapons programme from that moment onwards. In an extraordinary testimony offered by Mr Pik Botha, we learn that the Soviet Union and United States of America were unified in their agreement that South Africa's proclivity towards developing nuclear weapons was a threat to world peace, and that they would address this matter accordingly, if need be by means of anticipatory self defence. It will be recalled that Iraq's invasion of Kuwait was deemed by the United Nations Security Council as an act of aggression and legitimated the allied invasion of Iraq. Accordingly, it authorised the use of force against Iraq in terms of Resolution 678 (1990)[386] The same principle in international law could feasibly have been extrapolated to South Africa's nuclear ambitions. The US issued South Africa with a formal warning that they would do whatever was necessary to stop the nuclear weapons programme. It was apparent that the nuclear test site would only exacerbate South Africa's pariah recognition status and the intensity of sanctions. South Africa's nuclear weapons posture would alienate friends and enemies alike. Mr Botha informed that he communicated his disquiet to Prime Minister John Vorster in a most direct manner. In consequence, the Vastrap test site was shut down. My view is that the closure of Vastrap was a highly significant, but little appreciated, legal event. It marked the beginning point of *usus* – the settled practice of winding down the entire nuclear weapons programme in terms of international customary law.

In his testimony, Mr Pik Botha recalled the US–Soviet Union discovery of the nuclear test site at Vastrap in the Kalahari Desert and the US–South African interaction on this matter. Mr Botha reached a policy decision to roll back the site. This policy decision can be seen as 'soft law' in the making.

"In April 1977 the US Ambassador, William B Edmondson, urgently requested a meeting with me. This was shortly after he arrived in South Africa and he had only been stationed

[386] Greenstock, Jeremy. 2003. 'British Attorney General's Advice to Blair'. Global Policy Forum. 7 March. © 2005. [Online]. Available: http://www.65.181.175.195/component/content/article/168/36072.html

here for a few months. He asked to meet with me urgently at my offices at the Union Buildings in Pretoria.[387]

The Ambassador had one of those large cases, which had zip folders or folios in it. There is a French word to denote it … a *portmanteau*. I remember this meeting vividly. I was immediately struck by the Ambassador's sombre mood. This was reflected in the Ambassador's unsmiling facial expression. (You get different types of facial expressions, serious, laughing, worrying, confused, and so forth.) The Ambassador was looking really severe. 'Hy was *op sy bakkies*.'[388] He opened his suitcase, which had the files in it. He selected 12 or more photographs and placed them in front of me on my desk. The photographs were of a huge, indeed, a gigantic rig, deployed over the earth in the Kalahari Desert.

The Ambassador explained to me that these photographs were actually taken by a Soviet satellite and that the Russians had passed them over to American intelligence and requested the Americans to follow up with South Africa.[389] The photographs were of the Vastrap Nuclear Test Site situated in the Kalahari Desert.[390] The Russians actually went to the Americans with this information. South Africa's relationships with the Soviet Union were extremely antagonistic at that time.[391] [392]

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[387] Zondi Masiza asserts in the *Nonproliferation Review*, Fall 1993 at 38 that the Soviet Union discovered these nuclear silos on 8 June 1977. There is consequently a difference of opinion regarding recollection of the precise date. The researchers' view is that this type of inaccuracy is inevitable over a period of nearly 40 years. The central facts about which there is consensus are that the Soviet Union discovered the silos with their satellite technology; they reported this to the United States notwithstanding the fact that these two countries were engaged in a proxy war with each other in Angola at that time; and that Ambassador Edmondson summonsed Mr Pik Botha to a meeting and was extremely concerned. He demanded that South Africa should immediately stop its nuclear weapons programme.

[388] Translation: 'He was deadly earnest.'

[389] See Myrdal, Alva. 1980. *The Game of Disarmament – How the United States and Russia Run the Arms Race*. Nottingham: Spokesman Publishers.

[390] See Blackwell, Robert & Larrabee, Stephen. 1989. *Conventional Arms Control and East West Security*. Institute for East-West Security Studies. Durham: Duke University Press.

[391] The Soviet Union had collaborated with the United States in developing a joint approach towards closing down South Africa's nuclear weapons programme. This is entirely congruent with the principles contained in the Strategic Arms Limitation Treaty (SALT) that pertained at that time. It is interesting that David Albright attributes the discovery to either 'Western or Soviet Intelligence' rather than to the verified fact that it was Soviet intelligence. He stated that "[s]ome South African officials have said that they believed that Western or Soviet intelligence discovered the shed and that this exercise convinced Western powers that South Africa was serious about nuclear weapons. This in turn led them to start putting pressure on the Soviet Union and Cuba to withdraw from Angola. Whatever the case, during the mid-1980s the South African nuclear weapons program was under the twin pressures of budget cuts and heightened requirements." Albright, David. 1994. 'South Africa and the Affordable Bomb'. *Bulletin of the Atomic Scientist*, 50(4):13, July/August.

[392] Hans Blix placed the Soviet obligation to inform the US about South Africa's nuclear weapons capability in perspective: "The IAEA must have access to information from sources besides where the inspections are conducted. If the State itself does not declare nuclear installations, we must learn through other sources where to look. The nuclear inspection teams sent to Iraq this year [1991] have been provided with such material from Member States, through the Special

The US Ambassador was very serious, but he spoke tactfully. He asked me: 'What do you think that constructed rig is doing in that part of your country?' I knew immediately what it was. It clearly was a large nuclear test site. I could see that. The SADF worked on a 'need-to-know' basis, so I had not been informed about this particular development.

It was clear to me that something more than farming was taking place in the Kalahari Desert. I said to the Ambassador: 'They (the *Boere*)[393] might be drilling for water.' This at least elicited a smile from him.[394]

He said, 'I respectfully disagree with your assessment. Our experts and technicians have pored over these photographs and studied them meticulously. They have confirmed that there is no place on God's earth that you would need a drill of that size to get water. The official US government view is that it is a nuclear weapons test site intended for exploring and exploding a nuclear device'."[395]

Mr Botha referred to the matter of the nuclear test site in the previous exposition. In the following commentary, he reflects upon the pressure to conduct nuclear tests that he was subjected to by the militarists. Concepts often lead to action. The nuclear test site begged the question of a nuclear test, and that was extremely dangerous. Botha explained that he sometimes had to counteract considerable enthusiasm among the military establishment, who were in favour of conducting nuclear tests:

"The idea in South Africa's military establishment was that in a dénouement, South Africa would show that it had the ability to use this weapon as a deterrent, to put pressure on the West to off-set the USSR's power play in Southern Africa. The military wanted to use it as a penetrative political tool. I did not share that sentiment and assessment with them. I thought that it was naïve and simplistic thinking.

Commission designated suspected sites for inspection. Our inspectors cannot comb through every inch of a State's territory blindly searching for nuclear material and installations. We need and receive information from supplier States in exports of such material. In a system where the IAEA was informed by Member States of relevant data obtained through national technical means, satellite cameras and other intelligence-gathering activities, I see no reason why a special unit in the Agency should not receive selective information from a Member State's national satellites. These are used for national security and preventing nuclear proliferation is surely a national security activity. Such information would allow our inspectors to identify targets that require special inspections." Blix, Hans. 1991. 'Inspections in Iraq'. Statement to the US Senate Foreign Relations Committee, Washington DC. 23 October. 3..

[393] Translation from Afrikaans into English: 'Boere' means farmers.

[394] This was indeed a very serious political situation, between South Africa, the United States of America and the Soviet Union. Botha defused the tension at a personal relationship level with the use of humour.

[395] Interview with Mr Pik Botha in Pretoria North on 18 February 2008.

During a meeting in the 1980s, I attended a meeting with the military. They were considering testing a bomb in the Kalahari. I vehemently opposed this crazy notion and said that I had made a commitment on South Africa's behalf to the President of the United States of America that South Africa would not test the bomb. I said that we would stop producing the seventh bomb.

Tactical offensive nuclear strategies were never contemplated, planned or foreseen by South Africa. We always knew that there would be massive retaliation from the nuclear powers. In practice the government never went further than Phase One".[396]

In practice, the government did not ever go further than Phase One of its nuclear strategy. The reader will notice that the starting point of this discussion was the discovery of the latent nuclear test site at Vastrap in the Kalahari Desert. The midpoint of this exposition was Mr Botha's reflections about the pressure that he was subjected to by the militarists to conduct a nuclear test shot in the Kalahari Desert after the Vastrap incident. The third and final phase is expounded on by Professor Stumpf, who speculated about what type of situation might possibly have arisen that could have conceivably resulted in Pretoria authorising the deployment of a nuclear weapon in armed conflict.

Stumpf asserted that:

"The only feasible scenario that could have possibly triggered an operational nuclear option was a full invasion by 75 000 Cuban troops in Angola into South Africa. No other conflict, whether internal or on our or on Namibia's borders could have triggered such an action that South Africa would have hurt itself far more than any gains achieved.[397] Just ask yourself: 'where would these devices have been used in anger without hurting ourselves or inviting massive retaliation?'[398] Mr PW Botha was wise enough to fully grasp

[396] Op cit Botha. The official policy was that the nuclear weapons were never intended for use. But Botha is now highlighting the fact that there were in fact powerful voices in the SADF who would have liked to have used these weapons. These paragraphs demonstrate how fragile the policy of deterrence was and that, had the voices in the SADF prevailed, there would have been a nuclear test. This would have totally compromised Botha's undertaking to President Reagan.
The paragraphs also deal with what Moxley (2000) regards as one of the causes of nuclear proliferation, which is the natural competitiveness of humans. This competitiveness leads directly to the escalation of conflict.
[397] The scenario that Stumpf is projecting is the one where the very survival of a State is at stake.
[398] The massive retaliation that is anticipated would render this illegal.

this, even if some individuals in the security establishment might have wanted otherwise, but they were not in charge! Don't give them credibility if it is not warranted.

Consider the three-point strategy by Mr PW Botha: that was the only official one, no matter what others may have wanted or wished.[399] We followed all international nuclear agreements to the letter. It is as simple as that. They (Iraq, Iran and North Korea) did not."[400]

The scenario that Professor Stumpf highlights is one in which the very survival of the state is at risk, as was considered by the ICJ in its Advisory Opinion on the Legality of Nuclear Weapons. Professor Stumpf's scenario, in my view, is not far-fetched. It would not have been unrealistic for an army of 75 000 Cubans, Russians and East Germans to amass on South Africa's borders. Much larger armies have amassed on the borders of other states during times of war. South Africa would not have been able to invoke the doctrine of necessity to justify the deployment of a nuclear weapon in armed conflict even when the very survival of the state was at stake. Professor Stumpf asserted that the tactical deployment of a nuclear bomb would have resulted in a massive retaliation. An operational and tactical use of nuclear weapons was therefore never a logical option. Professor Stumpf's essential reasoning related to the legal question of affirming necessity and balancing that with state responsibility (South Africa's, in this instance) to wrongful actions. In this regard, John Dugard asserted that the defence of necessity probably occasions the greatest difficulty in practice, as it is the defence most open to abuse.

"In order to bring it to acceptable limits art 25 provides:

1. Necessity may not be invoked by a State as a general ground for precluding the wrongfulness of an act not in conformity with international obligation of that State unless the act:"[401]

[399] Op cit Stumpf. Stumpf is asserting that there were interest groups that might have benefited from South Africa's failing to relinquish its nuclear arsenal and accede to the NPT. This would have been a civil war scenario, which was quite plausible at the time.
[400] Op cit Stumpf.
[401] International Law Commission's Draft Articles on State Responsibility of States for Internationally Wrongful Acts: Report of the International Law Commission (2001). GAOR 56th Session. Supplement No 10 (A/56/10)29.

Ad 1 South Africa could not feasibly have proffered a justification 'in terms of necessity' to drop a nuclear bomb on 75 000 Cubans invading South Africa.

"a. is the only way for the state to safeguard an essential interest against a grave and imminent peril; and"[402]

Ad 1a Nuclear bombs would not have been the only way to safeguard South Africa from Cuban attack.

"b. does not seriously impair an essential interest of the State or States towards which the obligation exists, or of the international community as a whole."[403]

Ad 1b The deployment of a nuclear bomb would have impaired state obligations that are congruent with accession to the NPT, the deployment of such weapons, and other treaty obligations.

"2. In any case, necessity may not be invoked by a State as a ground for precluding wrongfulness if:
   a. The international obligation of a question excludes the possibility of invoking necessity;"[404]

Ad 2a It not foreseeable that South Africa could have invoked necessity as justification for dropping a nuclear bomb, because this would have created a threat to world peace, and the possibility of invoking necessity would have been totally far-fetched.

"b. the state has contributed to the situation of necessity."[405]

Ad 2b South Africa would have contributed to creating the situation of necessity. This means that necessity could not have been invoked. Had South Africa dropped a nuclear bomb during the course of the Angolan war, it would have created a *force majeur*e. The act alone would almost inevitably have constituted a crime against humanity.

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[402] Loc cit.
[403] Loc cit.
[404] Loc cit.
[405] Op cit Dugard (2007) at 266–267.

It is difficult to conceive of any situation whatsoever which would have been authorised by the United Nations. It is also difficult to conceive of any situation in which such deployment of a nuclear weapon would have been *jus in bello* – the law governing how war is conducted and prosecuted.

Stumpf, like Barnard, asserted that any conceivable military tactical usage of nuclear weapons would constitute a crime against humanity. It would also invite and indeed legitimate massive retaliation, including a Security Council-authorised invasion of South Africa, because any military usage of these weapons would have been in breach of the United Nations Charter and deemed a threat to world peace.

Stumpf: "It is absolutely inconceivable that somebody might use these things in a tactical way and destroy half the world. I once said to an American: 'You know, you have got thirty thousand warheads. Is it not good enough for you to destroy the world once over? Why do you want to destroy it ten times over?'

It is completely out of all proportion and does not make sense. It is a crazy situation that the world is in …

Could you imagine the ramifications that would have arisen had South Africa dropped a nuclear bomb on Maputo or in Angola? There would have been an outraged international outcry! In two weeks Johannesburg, Durban and Cape Town would not have been there.[406] They would have been flattened in retaliation.

I think that PW Botha realised this."[407]

Heald: "There would also have been Nuremberg Trials."[408]

Stumpf: Absolutely, absolutely, and I think that that probability gave him some credibility.[409] [410]

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[406] See Brodie, Bernard. 1986. *Escalation and the Nuclear Option*. Princeton, NJ: Princeton University Press.
[407] Op cit Stumpf. This is effectively the identical argument that Barnard and Mouton raised. There could be no lawful use of nuclear weapons.
[408] Loc cit.
[409] Loc cit.
[410] Falk, Richard, Kolko, Gabriel & Lifton, Robert Jay (eds.). 1971. *Crimes of War – A Legal, Political, and Psychological Inquiry into the Responsibility of Leaders, Citizens and Soldiers for Criminal Acts in Wars*. New York: Vantage Books.

Stumpf conceded that individuals have duties and obligations to comply with accepted norms of behaviour, and that a transgression of these rules might invoke a tribunal, which would be imposed under international law. It also invokes the legal question of the extent of state responsibility for wrongful actions.

Ian Brownlie observed:

"International law imposes duties of certain kinds on individuals as such, and these national and international tribunals may try persons charged with crimes against international law including war crimes and genocide. The International Military Tribunal at Nuremberg and many national tribunals did not admit pleas by accused persons charged with war crimes that they had acted in accordance with their national law."[411]

He furthermore contended that:

"In a considerable number of countries, municipal courts, in dealing with cases of war crimes and issues arising from belligerent occupation, for example, the validity of acts of administration, of requisition, and transactions conducted in occupation currency, have relied upon the findings of the International Military Tribunals at Nuremberg and Tokyo, as evidence, even conclusive evidence, of the illegality of the war that resulted in the occupation."[412]

The Treaty on the Non-Proliferation of Nuclear Weapons itself provides clear authority in support of Stumpf's assertion that the nuclear arsenal could not been deployed tactically.

The NPT states in the Preamble that:

"Recalling that, in accordance with the Charter of the United Nations, States must refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any State, or in any other manner inconsistent with the Purposes of the United Nations, and that the establishment and maintenance of international peace and security are promoted with the least diversion armaments of the worlds economic and human resources."[413]

[411] Op cit Brownlie at 35.
[412] Op cit Brownlie at 51.
[413] Treaty on the Non-Proliferation of Nuclear Weapons.

The researcher's view is that any conceivable military usage of nuclear weapons by the South African Defence Force would have been deemed to be ethnic cleansing by the ICJ and an act of genocide in terms of the Genocide Convention of 1948.[414]

4.6.1 The United States of America Invoke a Warning of Anticipatory Self-Defence if South Africa Proceeds with Nuclear Testing (1977)

The United States and Soviet Union had the authority of the United Nations Charter to back up their disquiet. Article 51 of the United Nations Charter would have been relevant to Ambassador Edmondson's warning. It reads thus:

"Nothing in the present Charter shall impair the inherent right of individual or collective self-defence, if an armed attack occurs against a member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security. Measures taken by members in the exercise of this right to self-defence shall immediately be reported to the Security Council and shall in no way affect the authority and responsibility of the Security Council under the present Charter to take at any time such action as it deems necessary in order to maintain or restore international peace and security."[415]

South Africa's construction of a nuclear weapon silo at Vastrap was clearly a provocative gesture and could have been construed as signifying an act of aggression. This could have legitimated a decision on the part of the USA and USSR to engage in anticipatory self-defence against South Africa although this matter is indeed controversial.

John Dugard confirmed that there is little consensus among legal scholars as to whether article 51 allows anticipatory defence or not. He points out:

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[414] The following cases, conventions and treaties would have become relevant to the legality of the use of nuclear weapons had South Africa deployed a nuclear bomb during the war in Angola: *Genocide Convention, Provisional Measures (Bosnia & Herzegovina v Yugoslavia (Serbia and Montenegro)* 1993 ICJ Reports 3; *Genocide Convention, Preliminary Objections*, 1966 ICJ Reports 595; *Nuremberg Judgment* (1947) AJIL Reports; *Attorney-General of the Government of Israel v Eichmann* (1961) 36 (ILR); *Guatemala Genocide Case* (2003) 42 ILM 683; *Peruvian Genocide Case* (2003) 42 ILM 1200.

[415] United Nations Charter Article 51.

"One school argues that art 51 permits force to be used in self-defence if, and only if, an armed attack occurs. Another argues that the customary-law right of anticipatory self-defence is preserved by the phrase 'inherent right' in art 51, and that in the context of modern weaponry it is ridiculous to argue that the drafters of the Charter could have intended to exclude such a right."[416]

The point is that, although improbable, South Africa might have invited a military intervention had it persisted with the nuclear weapons programme and conducted nuclear tests. In the following citation offered by Mr Botha, the seriousness with which the United States and Soviet Union regarded South Africa's development of these nuclear silos is highlighted. It was quite clear from the testimony of Mr Botha that neither the United States nor the Soviet Union would bow down to South Africa's nuclear weapon ambitions:

Mr Botha continued:

'The US[417] was now formally warning South Africa that it would under no circumstances countenance this nuclear test site'.[418] I listened attentively to what the US ambassador had said to me and I explained to him that I valued his concern and his assessment, and I assured him that I would take steps to terminate the operation.

After this meeting I immediately informed Prime Minister John Vorster about it. Instructions were issued to stop all activities at Vastrap forthwith.[419] I ascertained that John Vorster knew about Vastrap. I warned him: 'This is going to have incalculable and serious repercussions for South Africa.' (Repeats sentence.) [420] 'It would invigorate and intensify the sanctions campaign and compound South Africa's political isolation and pariah status.' "[421] [422]

[416] Op cit Dugard (2007) at 507.
[417] And therefore by implication the Soviet Union as well.
[418] Ambassador Edmondson was instructing South Africa with the active support and in fact upon the initiative of the Soviet Union to dismantle and discontinue its nuclear programme. This instruction was made under compulsion. It was made as far back as April 1977. The official seeds of South Africa's nuclear relinquishment could be asserted to reside in this incident.
[419] Mr Botha accepted the obligation *erga omnes* to demolish the nuclear silos, and the obligation was enacted.
[420] The establishment of the nuclear silos was contrary to the ethos of international customary law and would have enhanced South Africa's pariah status if retained.
[421] President John Vorster complied with the US/USSR insistence that the nuclear test site at Vastrap should be disbanded.
[422] Op cit Botha.

The remainder of this discussion about the United States of America Invoking a warning of anticipatory self-defence against South Africa will be devoted to conducting a brief legal analysis of this matter in the light of the bombing by Israel in 1981 of the Osirak nuclear power station in Iraq in anticipatory self-defence. Israel had for some time developed a growing fear that Iraq was developing a nuclear arsenal under the pretext of peacetime nuclear energy creation at Osirak. The building of the Osirak nuclear power station, as in the case of the Vastrap nuclear silos, was interpreted as an act of aggression, and Israel blew up the power station in anticipatory self-defence. Fortunately for South Africa, the United States and Soviet Union did not invoke the doctrine of anticipatory self-defence in the case of the Vastrap nuclear silos.

Dr Hans Blix, in reflecting upon the Israeli bombing of Osirak, puts it thus:

"In 1981, one country demonstrated clearly that the safeguards inspections performed by the IAEA in Iraq did not give it confidence. In a spectacular raid, Israel planes destroyed the Iraqi research reactor at Osirak, which had not yet started to operate. Israel was unanimously condemned by the IAEA, and in a resolution unanimously adopted on June 19, 1981, the Security Council described the action as a serious threat to the entire safeguards system."[423]

It is recalled that South Africa broke off safeguards negotiations with the IAEA in 1977. Had South Africa maintained these safeguard negotiations and associated agreements, it could perhaps have prevented and pre-empted acts of anticipatory self-defence from being brought against it. The Israeli case makes it very clear that South Africa would have been powerless to countermand the United States and Soviet Union had they decided to engage in anticipatory self-defence and pre-emptively bombed all of its suspect nuclear installations.

Singh and Macdonald cited Professor Antonio Cassese, President of the International Tribunal for the Former Yugoslavia, as follows:

[423] Blix, Hans. 2004. *Disarming Iraq: The Search for Weapons of Mass Destruction*. London: Bloomsbury. 19.

"One particularly relevant example (of anticipatory defence) is the international reaction to an Israel bombing on an Iraqi nuclear reactor: When the Israel attack was discussed at the Security Council, the USA which implicitly indicated that it shared the Israeli concept of self-defence. In addition, although it voted for the SC resolution condemning Israel (resolution 487/1991), it pointed out after the vote that its attitude was only motivated by other considerations, namely Israel's failure to exhaust peaceful means for the resolution of the dispute. All the other members of the SC expressed their disagreement with the Israeli view by unreservedly voting in favour of the operative paragraph 1 of the resolution, whereby the SC strongly condemned the military attack by Israel in clear violation of the Charter of the UN and the norms of international conduct. Egypt and Mexico expressly refuted the doctrine of anticipatory self defence. It is apparent from the statement of these states that they were deeply concerned that the interpretation they opposed might lead to abuse. In contrast, Britain, while condemning the Israel attack as a grave breach of international law, noted that the attack was not an act of self-defence. Nor could it be justified as forcible measure of self protection."[424]

Singh and Macdonald confirmed that:

"Article 51 of the Charter reserves states' rights to self-defence. This right is additional to the provisions of Article 42. A state does not require a Security Council resolution in order to defend itself by force, but even the right to self-defence is subject to action by the Security Council, as is clear from the terms of Article 51:

'Nothing in the present Charter shall impair the inherent right of individual or collective self-defence if an armed attack occurs against a member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security. Measures taken by Members in this right to self-defence shall not in any way affect the authority and responsibility of the Security Council under the present Charter to take at any time such action as it deems necessary to maintain or restore international peace and security.'"[425]

Acts of the nature of the anticipatory self-defensive attack by Israel against Iraq are condemned by the United Nations Security Council. This condemnation did not deter Israel from bombing Osirak. Equally, South Africa's nuclear weapons programme was both provocative and passively aggressive. It could plausibly have resulted in major unintended

[424] Op cit Singh and Macdonald at 9–10.
[425] Op cit Singh and Macdonald at 7.

consequences, including the invocation of the doctrine of anticipatory self-defence.

4.6.2 The South Atlantic *Double-Flash* Incident of 22 February 1979

Two years after the nuclear test site at Vastrap in the Kalahari Desert was uncovered by the US and the Soviet Union, the South Atlantic *Double-Flash* incident occurred. It took place during the course of the Carter administration. The facts are that on 22 February 1979 the CIA recorded a double-flash incident. This was initially taken as an indicative signal of a nuclear test shot being conducted in the South Atlantic Ocean. Suspicion was directed at South Africa, which was alleged to have conducted a nuclear test and questioned as to whether or not it had. The allegation has never yet been proved or disproved, because no nuclear fallout accompanying the explosion was detected. The researcher sourced the CIA file on this matter by conducting an electronic search.[426] This search revealed that while part of the information is available, the remainder of the CIA file on the South Atlantic *Double-Flash* Incident is still classified, and therefore not all the facts on this matter have yet been presented. The matter remains unresolved to this day.

Nuclear tests that are conducted in times of peace raise very similar hazards and risks to nuclear bombs that are dropped as an act of war. South Africa would have created a grave international danger to world peace if it had conducted nuclear tests. The danger could have manifested itself in a breakdown in US–Soviet trust and co-operation on the matter of nuclear weapons. Testing might have resulted in the deployment of deterrent nuclear weapons, as happened at the time of the Cuban Missile Crisis, and the danger of escalation was intrinsic to any such putative nuclear test.

[426] Directorate of Intelligence: Central Intelligence Agency. 1983. 'New Information on South Africa's Nuclear Program and South Africa–Israeli Nuclear and Military Cooperation'. Washington DC. 30 March. Approved for release 5 July 1996. [Online]. Available: http://www.foia.cia.gov/docs

The events surrounding the South Atlantic *Double-Flash* incident were briefly referred to by Mr Pik Botha. In the citation below, Mr Botha denied that South Africa had conducted the alleged test. He alluded thus to the *Double-Flash* incident:

"The so-called double-flash incident on the 22/2/79 justifies mention. A US satellite recorded signals suggesting that a nuclear explosion had occurred over the South Atlantic Ocean, and there were some suspicions that it was a South African fissionable device. This is simply not true.

It is important to place on the record that there were no signs of radioactive fallout after this explosion. The double-flash might have been some other phenomenon and might not have been nuclear. I was most certainly not aware of any involvement of South Africa in that event. I was assured by the Department of Defence that they were not involved in the event.[427]

Year by year the meetings with the DOE [Department of Energy] continued, and the political pressure on South Africa increased inexorably.[428] I attended meetings in Vienna, and my officials attended the meetings in Washington. Sometimes we held meetings in Pretoria.

Towards the latter part of the 1980s the political pressure on South Africa increased markedly. This was in those turbulent months just before PW Botha resigned from his position of President of South Africa."[429]

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[427] Op cit Botha. The *Double-Flash* incident has been much discussed. If South Africa was party to this test shot, why did they not admit it? They had nothing to lose. They had revealed the entire nuclear weapons programme to the inspectorate.
Had South Africa tested a nuclear device, it would surely have made sense for them to admit that they had done so to the IAEA and the Extra Team, since they were acceding to the NPT.
Had South Africa been involved in this incident, the only reason that the researcher can conceive of for not admitting any involvement in the double-flash incident may have been to protect other nations which may have been involved in this nuclear test. These may have been threshold states and/or accessory states.

[428] Mr Pik Botha immediately discussed the inexorable pressure that South Africa was subjected to in the light of the South Atlantic *Double-Flash* incident. Notwithstanding the fact that no proof has yet been provided confirming that South Africa conducted a test shot, the perception remains that South Africa was somehow or other involved in this matter.

[429] The Department of Energy (DOE) was an institution with considerable political power. Although its focus was on nuclear non-proliferation, it could exert political power way beyond the nuclear realm, within the State Department itself. This intensification of pressure correlated with the growing certainty that there would be a change of government in South Africa. It raised the concern in the USA about the security of the nuclear arsenal being bequeathed to an unproven liberation movement.
The purpose of the pressure was to induce South Africa to accede to the NPT, to relinquish its nuclear weapons, and for the whole of Africa ultimately to accede to the Pelindaba Treaty.

The South Atlantic *Double-Flash* incident, probably at a perceptual level at least, and South Africa's being compelled to vacate its seat on the Board of Governors of the IAEA contributed to the strained relationship that South Africa had with this organisation.

4.6.3 The *US Spy Plane* Incident (April 1979)

It is my contention that the discovery of the Vastrap nuclear silo, the anticipatory warning, the South Atlantic *Double-Flash* incident, and the *US Spy Plane* incident should be regarded together as indicative of how the possession of nuclear weapons led to the erosion of international customary law, and paradoxically inspired the aspiration towards a higher normative order in the longer term. This erosion of the normative order was manifested in South Africa's withdrawal from safeguard negotiations with the International Atomic Energy Agency and its subsequently being unseated from its role on the Board of Governors of the IAEA, while its affirmation was ultimately manifested in the relinquishment of the nuclear arsenal and accession to the NPT. The *US Spy Plane* incident is interesting, because it replicated (on a very small scale) the *U-2 Spy Plane* incident which had occurred twenty-nine years previously on 1 May 1960, when Francis Gary Powers was shot down in his U-2 aeroplane for allegedly spying on the USSR. The *US Spy Plane* incident raised important questions of sovereignty, comity, the accepted rules of mutual conduct between states, and countermeasures.

Mr Pik Botha recalled the incident thus:

"South Africa was under severe and constant pressure from the United States to relinquish its nuclear weapon capability over many years. The US exerted this pressure on us all the time.[430] I believe that the United State's and other countries' intelligence services knew full well that South Africa was indeed capable of producing a nuclear device.

[430] Botha immediately refers to the severe and constant pressure that South Africa was placed under by the USA to relinquish its nuclear weapon capability. This emphasis is constant throughout his text. Was the relinquishment of the weapons and its accession to the NPT thrust upon South Africa? Was South Africa pushed or did it jump?

I clearly recall that the US Embassy in Pretoria had an aircraft of its own and it flew over Pelindaba, which was where the HEU was created. Our intelligence service detected a camera in its nose and that it could serve as a spy-plane.

As a result of this exposure, some senior US officials were declared *personae non gratae*. This resulted in a tit-for-tat, and the US expelled some of our staff from our embassy in Washington DC."[431]

The *U-2 Spy Plane* incident represents a much more serious precedent, but the essential facts in both incidents are analogous. On 1 May 1960 Francis Gary Powers was flying a U-2 spy plane over the Soviet Union near Sverdlovsk. This was during the period just prior to the Cuban Missile Crisis, when the Cold War was intensifying. The Soviets shot the U-2 down, captured Powers, and sentenced him to ten years' imprisonment. The Soviet Union complained vehemently to the United Nations Security Council, alleging that the US venture was an act of aggression in terms of international law. The Security Council rejected the Soviet Union's

[431] The *Time Magazine* of 23 April 1979 reported about the incident as such (in 'Carter's Desperate Crusade: A Crisis with South Africa and Pakistan over Nuclear Weapons'):
"Like mushrooms after a spring rain, nuclear plants have sprouted all over the globe. The reason is clear: as the price of oil becomes ruinously expensive, and oil's availability more uncertain, most nations must take steps to acquire alternate sources of energy. But the spread of this potent technology has also led several countries to try to acquire nuclear weapons on their own. Persuading them not do this has become a desperate diplomatic crusade of the Carter Administration. Washington's opposition to expanding the nuclear club is often at odds with other vital US objectives and subjects the White House to charges of fumbling or incompetence. South Africa and Pakistan last week became cases in point.
In a toughly-worded statement read on prime-time television in South Africa, Prime Minister PW Botha announced the expulsion of several members of the American mission in Pretoria for aerial espionage. A grim-faced Botha told South Africans that a twin-engine Beechcraft turboprop used by US Ambassador William B Edmondson had been converted for use as a spy plane by the installation of an aerial-survey camera under the seat of the co-pilot. The Prime Minister charged that the embassy aircraft was engaged in a systematic program of photography of vast areas of South Africa, including some of our most sensitive installations. Botha's disclosures seemed designed both to embarrass the Carter Administration at a time when the US is pressing South Africa to accept a United Nations plan for the independence of Namibia, and to deflect attention from his scandal-ridden government at home.
The State Department flatly refused to deny the charges, and Secretary of State Cyrus Vance said that 'no apology' would be issued, as the South African Prime Minister had demanded.
The following day, Willem Retief, South Africa's *Charge d'Affaires*, was summoned to the State Department and told that two of his mission's military attaches were being ordered to leave the US within a week, in direct retaliation for the expulsion of three American defence attaches.
The brusque US response to Botha's charges, as well as the refusal to deny that espionage was involved, reflected the Administration's worries about South Africa's nuclear capacity.
In 1977 US and Soviet aerial reconnaissance photos provided evidence that the South Africans were preparing to test a nuclear device in the Kalahari Desert. Despite Pretoria's assurances that 'it does not have and does not intend to develop nuclear explosives', President Carter declared at the time that the US would continue to monitor very closely South Africa's nuclear development."

resolution.[432] South Africa would arguably have been entitled under international law to shoot down this aircraft because of the violation of its sovereignty and breach of comity. Such a gesture would, of course, have been inappropriate, dangerous and inflammatory, but nonetheless it would have probably been lawful in a narrow sense. The conduct would have escalated sanctions, undermined South Africa's recognition status, and acted counter to the prospect for a peaceful negotiated settlement.

The *US Spy Plane* incident involved foreign military personal exercising their governmental functions within South African airspace. This incident was therefore conducted contrary to Article 2(7) of the Charter of the United Nations Charter and to South African municipal law. It was a clear violation of South Africa's sovereignty.

John Dugard provided authority for this by virtue of this observation:

"South Africa, like other states, zealously guards against any attempt on the part of other states to exercise their governmental functions within its territorial limits. Foreign police officers may not make arrests in South Africa and foreign governments may not enforce their sovereign acts through South African courts. Any intervention in the domestic affairs of South Africa by other states or international organisations will be resisted as a violation of the prohibition on foreign intervention that receives recognition in Article 2(7) of the Charter of the United Nations."[433]

Reciprocal countermeasures were used by both the United States and South Africa in the case of the *US Spy Plane* incident.

The promulgation of the Nuclear Non-Proliferation Act 1978[434] in the United States and the consequent ban on delivering enriched uranium to South Africa can be described as a countermeasure. (So, too, can the Clark Amendment, which prohibited US military support to South Africa in

[432] 'The U2-Airplane Incident'. 1960. US Department of State Vol X, Part 1, Frus, 1958–60. E. Europe Region, Soviet Union, Office of the Historian. May–July. [Online]. Available: http://www.mtholyoke.edu/acad/intrel/u2.htm
[433] Op cit Dugard (2007) at 148.
[434] Nuclear Non-Proliferation Act of 1978 [HR 8638], 92 Stat. 120. Approved 10 March 1978 (US) (as amended by Public Law 99-661 [National Defense Authorization Act for Fiscal Year 1987, 2638], 100 Stat 3816. Approved 11 November 1986).

the Angolan war, be understood as a countermeasure.) These countermeasures were indicative of the escalatory dangers associated with nuclear weapons and the very real risks of reprisals and escalation of conflict that are contained therein. Fortunately they did not involve the use of force. John Dugard makes this point:

"The term 'countermeasures' is used to describe self-help not involving the use of force. Countermeasures must be distinguished from retorsion – that is, unfriendly conduct which does not violate an international obligation even though it may be a response to an internationally wrongful act. Acts of retorsion may include a limitation of normal diplomatic relations, a trade embargo not in violation of a treaty obligation, or the termination of an aid programme."[435]

Dugard expressed concern about the danger of the abuse of countermeasures, and contended that certain members of the International Law Commission (ILC) would have preferred not to include any provision in the Draft Articles on State Responsibility in case this could be construed as approval. His concern was that they could degenerate into a puerile pattern of tit-for-tat.

It is clear that the matter of countermeasures needs to be very finely balanced. Dugard observed that the ILC ultimately decided to include a section on countermeasures, while at the same time making it clear that such measures were to be limited to special circumstances and subjected to strict control.

4.6.4 The Meeting between President Ronald Reagan, General Alexander Haig and Mr Pik Botha on Koeberg – The *Eastern Greenland* Case

4.6.4.1 Acts of Retorsion and Countermeasures: 1981–1982

It will be shown in the following testimony from Mr Pik Botha that South Africa's development of a nuclear arsenal caused sufficient concern in the United States of America to invoke US countermeasures which then

[435] Op cit Dugard (2007) at 280.

escalated into acts of retorsion when diplomats were expelled from the respective host countries. Normal diplomatic relations between the United States and South Africa were limited for the period of the dispute, and an enriched uranium trade embargo was placed on South Africa. Mr Pik Botha conceded in his submission that the Koeberg nuclear power station, constructed to serve the peaceful purpose of domestic electrical supply creation, was also used incidentally as a convenient foil or camouflage, together with Pelindaba, to legitimate the pursuit of the nuclear weapons programme.

Mr Botha contended that:

"Pelindaba's capacity to produce highly enriched uranium (HEU) was actually quite an open secret. Pelindaba had the most massive monolithic chimney structure. This begs the question: 'Why might a country require a massive chimney structure at a nuclear facility which was not being used as a power station?' The enrichment plant was then producing low-grade enriched uranium for peaceful energy-related purposes.

At the same time Koeberg nuclear power station in the Western Cape was in an advanced phase of development as a peaceful nuclear energy project. My recollection is that construction on the Koeberg nuclear power station commenced somewhere around 1977, if I am not mistaken. Construction reached its peak in the early eighties.

Jimmy Carter was elected President of the USA at the beginning of 1977 – or was it 1978? At the time when Carter assumed the Presidency, Koeberg nuclear power station was in an advanced phase of construction. The Koeberg nuclear power station lent some credibility to South Africa's nuclear programme. South Africa could use Koeberg as a foil to assert that what they did at the Pelindaba nuclear facility was being conducted for peaceful energy-related purposes.

The West knew about these nuclear developments."[436]

In the following citation offered by Mr Botha, the reader will notice that Mr Botha afforded Mr Ronald Reagan, the President of the United States of America at that time, certain undertakings relating to South Africa's nuclear intentions with respect to providing a guarantee that the United States would be informed prior to South Africa's conducting any nuclear

[436] Op cit Botha.

test. In my view, an excellent example of the evolution of *usus* occurred when South Africa a few years later, on 31 January 1987, concluded an agreement that it would abide by the spirit and the letter of the NPT with the USA. This incident also served as an equally good example of the principle of *opinio juris sive necessitatis*. The reader should carefully note the various undertakings that Mr Pik Botha provided to Mr Ronald Reagan; including that no nuclear tests would be conducted without informing the United States first, and other similar assurances. Soft law was being created which would in due course convert into an adherence to international customary law. These undertakings would clearly have been binding in terms of international law. The *Eastern Greenland* case provides authority for this assertion.[437] The Norwegian Foreign Minister had accepted Danish title to Eastern Greenland in an informal agreement. This informal agreement was held to be binding under international law. For this reason, I contend that Mr Pik Botha's seemingly informal undertakings were indeed binding under international law. In fact, the enactment of these undertakings as displayed by the relinquishment of the nuclear arsenal and accession to the NPT proved that Pretoria regarded Mr Botha's undertakings as binding.

The agreement that was reached between Mr Botha and Mr Reagan also involved recognition by America of South Africa's rights to the usage of nuclear energy for civilian purposes. It involved both a waiver and an estoppel of US rights under the Nuclear Non-Proliferation Act and resulted in the resumption of a supply of enriched uranium to energise the Koeberg nuclear power station.

Mr Botha effectively used the meeting with President Ronald Reagan and General Alexander Haig to make a claim to rectify an alleged breach of international law, insofar as the United States had halted an agreement to supply HEU to run the Koeberg nuclear power station, and declined to deliver enriched uranium that had already been paid for. The purpose of

[437] *Eastern Greenland Case*, 1993, PCIJ, Ser.A/B, No 53, at 52.

the agreement was to revalidate the previous agreement that had existed between the United States and South Africa to enrich uranium for civilian usage, and resulted in South Africa achieving a waiver from America's Nuclear Non-Proliferation Act.

Mr Botha continues:

"As a result of this Peace Accord, there was a reduction in political pressure, and the stress and strains inherent to South Africa's relationships with Mozambique diminished.[438] [439] In South Africa, the peaceful production of nuclear energy was used as a diversion to establish a nuclear weapons programme.

America's Nuclear Non-Proliferation Act interrupted the delivery of fuel elements which were required by Koeberg nuclear power station. This Act created a very serious situation for South Africa, because it could have starved it of domestic energy.[440] [441]

The stand-off was resolved only in 1981, when Ronald Reagan was inaugurated as President of the USA. I was received by him in the Oval Office very soon after he assumed the Presidency and requested discussions about US–South African relationships. The topics of discussion included the war in Angola.

South Africa's nuclear status was not mentioned as a topic of discussion in the preceding vetting meetings. To the chagrin of General Alexander Haig, who was Secretary of State, I made a direct appeal to President Ronald Reagan during our actual meeting to have the nuclear restrictions levied by the US on South Africa lifted, so that the French could

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[438] Op cit Botha. The Nkomati Peace Accord was a sign of a changed and more conciliatory approach towards the regional conflicts. It rendered South Africa's nuclear weapons programme increasingly irrelevant.

[439] Treaty on the Non-Proliferation of Nuclear Weapons. Article IV states that:
"1. Nothing in this Treaty shall be interpreted as affecting the inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination.
2. All the Parties to the Treaty undertake to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy. Parties to the Treaty in a position to do so shall all co-operate in contributing alone or together with other States or international organisations to the further development of the applications of nuclear energy for peaceful purposes, especially in the territories of non-nuclear-weapons States Party to the Treaty, with due consideration for the needs of the developing world."

[440] South Africa's nuclear weapons programme came at a very high potential cost. The message was clear. If it continued with its nuclear weapons, it would not receive energy to run the economy.

[441] In the *Nicaragua Case*, 1986 ICJ Reports at paras 244–245 it was found that the discontinuation of US aid to Nicaragua, reduction in the sugar quota and a trade embargo against Nicaragua were not a violation of the principle of non-intervention.

deliver the required enriched elements in order for Koeberg nuclear power station to function.

General Haig interjected when I made this request to Ronald Reagan and said: 'I did not clear this matter of nuclear supplies with Mr Botha, Mr President.' (The protocol in the Foreign Ministry was that Foreign Ministers should clear the entire agenda with the Secretary of State before meeting with the President of the USA.)

Fortunately President Ronald Reagan came to my rescue and he said to General Haig: 'I invited the Foreign Minister to raise any matters that he considers important.'

I thanked President Reagan and then continued by saying: 'If this matter is not resolved, Koeberg nuclear power station will not be able to supply South Africa with its electricity and it will end up as a white elephant.' I made the point to Ronald Reagan that the first nuclear power station in Africa would end up being a white elephant because of the Nuclear Non-Proliferation Act that had been promulgated in the USA. I also said: 'Power stations don't grow like mushrooms overnight.'[442]

General Haig warned President Ronald Reagan that South Africa was suspected of being in the process of developing a nuclear bomb. He said that the US could not afford to be associated with any activity even vaguely condoning activity of this nature.

President Reagan then looked to me for an appropriate reply. I said to him: 'Mr President, it is true that South Africa does have the capacity to build a nuclear device. This capacity may act as a deterrent to the Soviet Union's expanding involvement in the war in Angola and regional conflicts.'[443]

I appealed to Ronald Reagan not to remove this deterrent capability. I could see that I struck the right chord with President Reagan. He was a person who was in favour of all forms of deterrence against the USSR.[444]

General Alexander Haig again interjected. He said that there could be serious and unintended consequences for the US if they supported South Africa's appeal. I assured President Reagan: 'South Africa would never test a nuclear device without informing and consulting with the US government.'[445]

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[442] The civilian nuclear power project was used as a partial foil for the military nuclear project.
[443] Mr Reagan succumbed to Mr Pik Botha's deterrent argument, which was very weak in terms of international law.
[444] See Krepon, Michael. 1989. *Arms Control in the Reagan Administration*. Lanham: University Press of America.
[445] Dugard op cit (2007) at 409 informs: "In practice the Department of Foreign Affairs is principally responsible for the drafting and negotiation of foreign treaties. In order to provide the other party with evidence that the person entering into the treaty has the necessary authority to act on behalf of his state, he must produce an appropriate 'full powers' – i.e. a document designating him as an authorized person – unless it is obvious from his office that he enjoys this power. Thus,

As a result of this meeting, the restriction on the supply of uranium was rescinded against the French and this allowed Koeberg nuclear power station to come into operation."

Phenomenological Reduction

Botha was able to use his relationship and rapport with Ronald Reagan effectively to gain a waiver of the application of the Nuclear Non-Proliferation Act of 1976. In this process, the caution to President Reagan offered by Secretary of State Alexander Haig was overridden. Haig's caution to Reagan was in fact that he should adhere to the Nuclear Non-Proliferation Act. Botha was able to use Africa's energy vulnerability weakness as a bargaining chip to induce this waiver.

The war in Angola and the implicit use of nuclear weapons as a deterrent against Soviet expansion was a second aspect of Botha's argument to secure the required enriched uranium from the US. At the time, the legality of nuclear deterrence had not been clarified by the International Court of Justice. In any case, South Africa was merely mimicking the US's deterrent approach. But in the case of South Africa, the weapons were not intended for usage. Haig's concern that "there could be serious and unintended consequences for the US if they supported South Africa's appeal" was correct. An agreement to waive the Nuclear Non-Proliferation Act for the special circumstances could have abrogated the USA's non-proliferation policy.

It would appear as though Mr Reagan granted this concession on the basis of Mr Botha's personal assurance that 'South Africa would never test a nuclear device without informing and consulting with the US government'. Botha was later placed under extreme pressure by the SADF and ARMSCOR to test a nuclear device. He was able to withstand this pressure, but a weaker person might not have been able to do so. The

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heads of state or government, foreign ministers, and heads of diplomatic missions are not required to produce 'full powers'."

essential conclusion is that Reagan trusted Mr Pik Botha and for this reason acceded to his request.

"In 1977 South Africa was denied its seat on the board of the International Atomic Energy Association. Egypt took its place. In 1980 South Africa was barred from participating at the international nuclear conference of the IAEA in India.[446] This was ironic, as India had exploded a test bomb four years previously and it was not a member of the NPT.[447] In 1978 President PW Botha drafted a three-phase nuclear weapons strategy".[448]

John Dugard cites the findings of the Court in the *Nuclear Tests* case.[449]

"It is well recognised that declarations made by way of unilateral acts, concerning factual or legal situations, may have the effect of creating legal obligations. … When it is the intention of the State making the declaration that it should be bound according to its terms, that intention confers on the declaration the character of a legal undertaking, the State being thenceforth legally required to follow a course of conduct consistent with the declaration. An undertaking of this kind, if given publicly and with intent to be bound, even though not made within the context of international negotiations, is binding."[450]

Mr Botha served President Ronald Reagan with an undertaking that South Africa would never test a nuclear device without giving the United States prior warning. It is contended that the obligation was binding in law. This undertaking, although apparently insignificant, prefaced a second deeper commitment to the United States that took place six years later on 31 January 1987. That was when the AEC on behalf of South Africa agreed with the United States that it would abide by the spirit and the letter of the NPT with respect to its nuclear dealings.[451]

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[446] South Africa was isolated from very important international conferences. It would appear that its military nuclear capabilities played an important contributory role in that international isolation.
[447] It would appear that there was little legal logic and consistency relating to India's nuclear weapons capacity and its hosting of the IAEA conference. It probably was condoned because India's nuclear weapons capability was seen as being aligned with the US's strategic concerns in China. It provided a deterrent effect on China's burgeoning nuclear weapons capability.
[448] Op cit Botha.
[449] *Nuclear Tests Case*, 1974 ICJ Reports 253 at 267–268.
[450] Op cit Dugard (2007) at 41.
[451] Op cit Masiza (1993) at 43.

4.6.5 The *Uranium Red Book* Incident – South Africa's Recognition and Nuclear Weapons Policy Converge (1982–1983)

The *Uranium Red Book* incident is an important albeit barely noticed event. Its importance resides in the fact that it provides the first evidence that South Africa's nuclear weapons programme was directly interlinked with its international recognition crisis, which included the non-recognition of the Bantustans, which were a cornerstone of the apartheid constitution. This incident, which is contained in archival sources in the literature, converges in a significant way with the testimony offered by the respondents and in particular Mr de Klerk, who clearly indicated the linkage between international recognition and accession to the NPT.[452] South Africa's relationship with the IAEA entered into a destructive phase of mistrust in 1982, and as extraordinary as it may seem, South Africa attempted to use the platform offered by the IAEA to access signatories to the NPT to bolster recognition of the Bantustan states. These states constituted a small but significant component of South Africa's geographical territory. They were constitutional fictions and the physical manifestation of the apartheid policy, and were recognised only by South Africa and themselves. (South Africa without any fuss re-integrated these fictitious states into South Africa during the constitutional negotiations.) Pretoria was compelled to re-integrate these territories into South Africa in order to assure that the new constitution was imbued with international credibility and gained international recognition.[453]

Abdul Minty explained how the recognition of South Africa's Bantustan states was brought into the policy domain of the International Atomic Energy Agency in 1982. He recalled that there was a technical book entitled the *Uranium Red Book*, which had been published by the IAEA for the advice of its members. In the 1982 edition, an allusion was made in it to 'the Republic of Bophuthatswana' as being 'a newly independent African state'. This reference was untrue, as the Republic of

[452] Op cit Minty at 205–220.
[453] Ebrahim, Hassen. 1998. *The Soul of a Nation: Constitution-Making in South Africa*. Cape Town: Oxford University Press.

Bophuthatswana was a fictitious state recognised by South Africa alone. This abuse of the good name and services of the IAEA's publication continued for two years, until it was discovered that Bophuthatswana was being portrayed as a duly recognised state and not an apartheid fiction. An instruction was passed by the IAEA that this misrepresentation should be corrected in the next edition, due to be published in December 1983. In that subsequent edition of the *Uranium Red Book*, the problem was compounded when not one, but three Bantustan states were camouflaged along with Swaziland and Lesotho and entered into this IAEA publication under the guise of being legitimate recognised states.

According to Abdul Minty, this propagandistic information on these fictitious South African states was allegedly included by Dr PO Toens, who was the head of the Atomic Energy Board in South Africa at the time. Dr Toens was responsible for the publication of the *Uranium Red Book* for the IAEA. Toens allegedly engaged in this illegal activity in order to attempt to facilitate international recognition for the Bantustans and the apartheid policy, by stealth and through the offices of the IAEA, which has a truly global network of states with whom it is in regular interaction. (South Africa's attempts to gain recognition for these fictions had all been singularly unsuccessful up to that time.) A United Nations Security Council-endorsed organ of nuclear science was used to disseminate apartheid propaganda, and became an instrument which was used illegally in an attempt to mitigate South Africa's self-created recognition crisis. Dr Toens achieved this by "stretching the universality principle contained in the statute of the IAEA".[454] In discussing the recognition issue, John Dugard commented thus:

"The collective non-recognition of the Bantustan states on the ground that their creation and continued existence violated peremptory norms of international law resulted in their invalidity."[455]

[454] Op cit Minty at 214.
[455] Op cit Dugard (2007) at 102.

4.6.6 The Nkomati Peace Accord 1984: Could there be an Appetite for Negotiated Settlements in South Africa?

It is evident from Mr Botha's commentary cited above that the retention of the nuclear arsenal would have exacerbated South Africa's pariah recognition status. The legal status of South Africa's nuclear arsenal, the wars in Angola and Mozambique, Namibia and Zimbabwe's independence, and the constitutional developments were complex themes that were deeply interconnected.

Mr Botha puts it thus:

"Jimmy Carter became President of the USA in January 1977, and held this position for four years until Ronald Reagan was elected as President of the United States of America at the beginning of 1981. South Africa was then under a constant international political barrage. We were under continuous pressure with respect to the war in Angola, the constitutional status of Namibia, the conflict in Mozambique, the crisis in Rhodesia, and our own internally deteriorating domestic circumstances.[456]

Certain countries that were serving on the Security Council gave us a draft document that became Resolution 435 and culminated in the independence of Namibia, on the basis of an internationally-supervised election.

The conflict in Rhodesia increased the pressure on South Africa for internal change, and South Africa was in turn impelled to put pressure on Ian Smith to negotiate a constitutional settlement for the country that would subsequently become Zimbabwe.

South Africa's relationship with Mozambique had degenerated into animosity. At that time, there was much anxiety about this complex set of crises. Further complications arose from South Africa being placed under increasingly intense pressure to sign the NPT.[457]

In early 1980 South Africa faced an even greater compulsion for constitutional change, as a consequence of Robert Mugabe being inaugurated as President of Zimbabwe. At that

[456] The pressure that Botha is referring to in this instance was not pressure to relinquish the nuclear arsenal. It was political pressure because of the complexities and the regional conflicts and internal constitutional crisis.

[457] South Africa's regional conflicts within Angola, Namibia, Mozambique and Rhodesia/Zimbabwe created a highly pressurised situation which was intensified by the US's insistence that South Africa should accede to the NPT.

time, I started the negotiations with Samora Machel in Mozambique that led to the Nkomati Peace Accord."[458]

The Nkomati Peace Accord was intended to counteract military escalation and reprisal and counter-reprisal cycles between South Africa and Mozambique. This treaty was intended to be an instrument to reduce regional military tensions, which might have included, in an extreme scenario, the invocation of nuclear deterrence. It was the first use of treaty law that was aimed at breaking the military stalemate in the region. It achieved a fair measure of success.

John Dugard discussed the Nkomati Peace Accord while considering the matter of the use of force by states:

"Suggestions during the apartheid era that neighbouring states were permitted to allow the ANC and PAC to operate from their territories, on the grounds that the prohibition on support for armed bands did not extend to forces engaged in the struggle to overthrow apartheid, led the regime to enter into non-aggression pacts with Swaziland and Mozambique in which the prohibition on support for armed bands was reiterated, the Nkomati Accord of 1984, between South Africa and Mozambique, provided in art 3 that:

'The High Contracting Parties shall not allow their respective territories…to be used as a base … by another state, government, foreign military forces, organisations or individuals which plan or prepare to commit acts of violence, terrorism or aggression against the territorial integrity or political independence of the other or may threaten the security of its inhabitants.'[459]

Mozambique had as much to gain from this Accord as South Africa, as the South African government had secretly permitted the Mozambique rebel group RENAMO to operate in its territory. Similar non-aggression agreements were entered into between South Africa and the Bantustan states."[460]

Dugard maintained that:

"The degree of control to be exercised by the state in order for conduct to be attributed to it arose in the *Nicaragua Case*. Here the question was whether violations of international

[458] Op cit Botha.
[459] Op cit Dugard (2007) at 505.
[460] Loc cit.

humanitarian law committed by a rebel group operating against the government of Nicaragua – known as the contras – might be attributable to the United States."[461]

The same question that arose in the *Nicaragua* case was begged in the case of South Africa's support of the rebel group RENAMO in Mozambique's civil war, and equally their support of ANC and the armed struggle in South Africa.

4.6.7 Mr PW Botha Stops ARMSCOR'S Weaponisation Programme: Shutting-Off of the Development of Nuclear Weapons – the 1985 Meeting

The term 'weaponisation' as it pertains to nuclear weapons includes 'pre-nuclear testing' in a research laboratory. Weaponisation is one of the applied research processes that occur contiguously with the gradual development of a deliverable nuclear bomb. Weaponisation includes inter alia the miniaturising of cumbersome non-deliverable nuclear components, including miniaturising nuclear explosive devices, and involves the iterative improvement of delivery systems. For this reason the researcher decided to include the weaponisation process in the pre-testing phase of the development of a nuclear bomb, which itself is a subset of nuclear testing.

Professor Stumpf confirmed that Mr PW Botha was deeply opposed to South Africa's nuclear weaponisation process and that it was when further weaponisation and testing were contemplated that he curtailed the nuclear programme:

"Mr PW Botha had always been adamant that they would never be used as a tactical deterrent, even if some members of the security establishment may have had such ideals.

Firstly, use of any such device (that would literally have to be dropped out of the door of a large aircraft, as they were never designed for delivery) by South Africa would have invited massive retaliation by the Superpowers, and South Africa's major cities would

[461] Op cit Dugard (2007) at 275.

have been flattened within two weeks, and secondly the conflict in Southern Africa at that time was of a dispersed type and very much of an internal one.[462]…

Where would South Africa have used such weapons without harming itself? Although a lot of negative things have been said about Mr PW Botha (and I am not a fan of his), he was realistic enough to know that any military intentions with the devices would have destroyed South Africa at the time.[463] For that I think one should give credit where credit is due, at least in academic circles."[464]

"They were only devices suitable for testing and the weapons were not deliverable glide-bombs." [465] … My comment on PW Botha is based solely on his role in rolling back South Africa's nuclear weapons programme. Very few people are aware of this. My commentary is not based on the political aspect of this process, because politics is outside of my domain of expertise.

I need to correct your thinking on an important matter. I was never part of the development of South Africa's nuclear weapons programme. I got involved at a very late stage in its relinquishment.

My predecessor (Wynand de Villiers) at the AEC was obviously in the Chair until I took over. De Villiers had been part of the build-up process over many years. Now, he is unfortunately dead. He died some years ago – he was a heavy smoker. He was head of the AEC when I was brought in on the dismantling side of the nuclear weapons programme. De Villiers was first of all the Chairman, and then later the non-executive Chairman, of the AEC. (It was a part-time job for him in the non-executive Chairman role.)

It follows that I had many discussions with him about the dismantling process. I needed to have an in-depth understanding of the entire process."[466]

Professor Stumpf confirmed that although some members of the military establishment might have had ideals of a tactical deterrent usage of nuclear weapons, their view did not hold sway. Implicit in Stumpf's

[462] Op cit Stumpf. Stumpf's stated concerns are about the escalatory potential of nuclear weapons, their lack of proportionality, and their indiscriminate nature. All of these matters were raised before the ICJ in the Advisory Opinion. In this regard Stumpf's view converges with that of Barnard, Mouton, De Klerk and Botha.
[463] The anticipated retaliation would have been disproportionate.
[464] Mr Pik Botha made a similar observation in his interview.
[465] Stumpf's critique of the research proposal revealed to the researcher that there is a pervasive factual inaccuracy in the literature on South Africa's nuclear weapons status. This inaccuracy is characterised by: exaggeration of South Africa's technological advancement, incorrect dates, incorrect technical specifications, incorrect understanding of the nuclear chain of command; and incorrect understanding of the structured and legal role of the IAEA and the remit of the inspectors.
[466] Op cit Stumpf.

argument is the submission that the wars in which South Africa was involved at that time were not the right types of war for the deployment of this type of weapon. Had they been deployed in the course of these regional wars, this deployment would *not* have been *jus in bello* – it would have been contrary to international humanitarian law, because the waging of such a war would have annihilated civilians and non-combatants. South Africa arguably did have the right to go to war – *jus ad bellum*; but this right is in itself acknowledged by the laws of war as they pertain to *jus in bello*.

Professor Stumpf confirmed that the processes of nuclear relinquishment and accession to the NPT were set in motion at least as long ago as 1985, and that President PW Botha was the person who precipitated this. It is also clear that the dismantlement process was the opposite to that of weaponisation. Professor Stumpf recollected that:

"De Villiers told me that at all of the meetings that he attended with President PW Botha, PW was always adamant that these nuclear devices would never be used in war. De Villiers explained to me that PW Botha was absolutely horrified at some point when the ARMSCOR people start talking in that direction.

De Villiers informed me that he had attended a decisive meeting in 1985. It was at this meeting that the future of this whole nuclear weapons programme was decided. This was the key 1985 meeting.

Wynand de Villiers told me that that the meeting was called to review the entire nuclear weapons programme in South Africa. He explained to me that at that point the ARMSCOR people had started thinking about how to expand this nuclear technology into more sophisticated deliverable devices. They also started assessing how to miniaturise them into missiles and so forth. ARMSCOR had already started on some paper work and designs capable of sophisticated deliverable devices.

Evidently, PW Botha came to hear about ARMSCOR's plans and was deeply alarmed. He said. 'Let's have a meeting to decide where this matter of the nuclear arsenal is going.'

Wynand de Villiers actually said to me that at that meeting PW almost exploded. He was actually very angry, and he was known for his anger and temper. He told the ARMSCOR

people: 'You guys are crazy!' He said: 'There is no way that we can ever use these devices in a military context.'

I have to say that I agree with this logic for the following reasons: Where would we have used the nuclear bombs? They could not feasibly be used in the bush war. They could not throw them on Soweto or destroy Johannesburg. These nuclear bombs simply did not make sense.

PW Botha actually ordered that this nuclear weapons programme should be immediately curtailed. He stated that it would never be allowed to go beyond (the then) current six-and-a-half devices. At that point there were about four or five nuclear devices.

Then the ARMSCOR people said to PW: 'What do we do with all our people who will lose their jobs? We have lots of people that are doing paperwork and making designs.'

PW eventually relented. He said that ARMSCOR could continue with the nuclear programme until they had made the seventh device, but thereafter there would be no further work and the programme would end then. He said that the ARMSCOR employees who were involved in the nuclear weapons programme could carry on with 'some paperwork ... nothing else'.

PW Botha should be given credit for this. He was realistic enough to have realised that there was no way that he could use these things.

Another point is that in 1985 the ARMSCOR employees who had been involved in the nuclear weapons programme started gradually moving out of this programme. Engineers and scientists were able to judge for themselves that this process was going nowhere. They started looking for other work elsewhere. They started moving out of ARMSCOR slowly, to seek employment in areas involving the design of conventional weapons and so forth".[467]

A nuclear programme is also an economic and financial programme, and the nuclear scientists naturally had personal career objectives. It was when these career plans were curtailed that the nuclear scientists sought work elsewhere. One can therefore deduce that the reason the nuclear programme was extended until 1989 was because it offered a form of social job provision, until the scientists were able to find alternative employment.

[467] Loc cit.

It would appear that there was a danger of an internal 'bandwagon' effect developing at ARMSCOR, where a powerful group of scientists might have developed tactical nuclear weapon proclivities. Professor Stumpf emphasised the concerns about the disproportionate, indiscriminate, and escalatory nature of nuclear weapons, which would render their usage illegal in terms of natural law.

Professor Stumpf referred to the danger of a pre-test nuclear weaponisation process developing its own momentum and then spiraling out of control. The testing scenario could then have slipped into testing, field usage and deployment. PW Botha understood this danger and stopped it. Professor Stumpf stated that extreme reprisal and escalation risks would have been associated with any military usage of nuclear weapons, testing of nuclear weapons and possession of such weapons. The rules of proportionality, neutrality, necessity, and discrimination would all have come under threat had these weapons been deployed in any way whatsoever.[468] Stumpf identifies all these themes in his expostulation (as do all the other respondents in theirs) with varying degrees of emphasis and differing degrees of nuance.

4.7 Conclusion

In this chapter the respondents' understanding of the legality of South Africa's nuclear policy was explored by analysis of their testimony, together with phenomenological reduction and literature research. In South Africa, the evolution of agreed-upon customary norms on the legality of nuclear weapons took place over a long period of time, at least from 1977 to 1991. The evolution of the higher customary norms on the legality of nuclear weapons took place in a polarised society and in the context of war and peace.

[468] Moxley, Charles J. 2000. *Nuclear Weapons and International Law in the Post Cold War World*. Lanham, MD: Austin & Winfield. 1–7.

The general themes of this analysis were:

- The legality of military usage;
- The legality of deterrent usage of South Africa's nuclear arsenal;
- The legality of possession of nuclear weapons; and
- The legality of testing of nuclear weapons.

These questions could not be neatly disaggregated and were articulated by the respondents as bonded themes. The reader will have noted that the respondents' views often differed from one another and so should be cautious about making generalisations. The respondents afforded an ambiguous justification on the legality of South Africa's nuclear weapons programme. This ambiguity was manifested in the unanimous view that any actual military usage of nuclear weapons would have been illegal, *a malum*, a crime against humanity, and therefore contrary to international humanitarian law per se. This insight was offered in the form of a moral or ethical argument and presented in the form of natural law – *jus cogens*.

But on the other hand, the respondents contended that South Africa's limited policy of nuclear deterrence was lawful. The respondents deemed that any military usage of nuclear weapons would be illegal. The respondents seemed to infer that a State might lawfully possess nuclear weapons and use this possession as an ambiguous threat to signify possible preparedness to deploy the weapons as a part of *real politik*. They did not appear to construe the deterrent threat as being illegal, because the nuclear-weapons-states had possessed them for years, and there was *usus* in deterrence (on the part of the nuclear-weapons-states). The respondents' view on nuclear deterrence seemed to correspond with a narrow interpretation of the *Lotus* case, namely; that what is not expressly prohibited is permissible. They subscribed to a natural law corollary that the escalation of deterrence into actual operational usage would be illegal per se, but did not present the concepts of deterrence and usage as causally connected. The respondents therefore justified South Africa's use of nuclear weapons as a limited instrument of deterrence. The

basic line of reasoning was that the Big Five Nuclear-Weapons-States, which included the Accessory Powers to the NPT, used nuclear weapons for deterrent purposes, so why could other states such as South Africa not do the same? South Africa's attempt to derive a tangible deterrent quid pro quo for nuclear relinquishment and accession does not appear to have been successful, but it did derive various intangible benefits of creating goodwill, trust and therefore may have contributed directly to the withdrawal of sanctions and international embargoes. It probably did therefore set the stage for inverting South Africa's pariah status into a more positive international recognition. I inferred from the respondents that any nuclear testing would have been extremely provocative and tantamount to an act of aggression. For this reason, my inference is that they regarded nuclear testing as illegal and in breach of international customary law.

I inferred that similar logic applied to the possession of nuclear weapons. One could quibble about whether it was legal in a limited sense, but it was unquestionably highly provocative and might have been construed as a symbolic act of aggression.

Table 4.1 offers a synopsis of the researcher's interpretation of the respondents' understanding of the legality of South Africa's nuclear weapons policy as inferred from the interviews. This synopsis is impressionistic and derived by inference from the contents of the interviews and is subject to criticism and correction. The legal themes that were reflected upon included: legality of any military usage; deterrence; possession and testing.

Table 4.1: A Synopsis of the Respondents' Understanding of the Legality of South Africa's Nuclear Weapons Policy

Respondent	Neil Barnard	Pik Botha	FW de Klerk	Mike Louw	Wynand Mouton	Waldo Stumpf
Military usage	Per se illegal	Per se illegal	Per se illegal	Per se illegal	Per se illegal	Per se illegal
Deterrence	Legal, but iniquitous. Should be able to derive maximum tangible gain	Legal (Mr Botha used the deterrent argument to get a reprieve from USA)	Legal, but iniquitous. Should not seek maximum tangible gain	Per se illegal	Legal, but futile	Legal, but futile
Possession	Perhaps legal, but highly provocative. Should be obligation on NWS as well as NNWS to relinquish. Should be universally illegal	Currently legal, but highly provocative. Should be an obligation to relinquish	Currently legal, but NWS should have obligation to relinquish. The method of relinquishment needs to be very carefully discovered. Should be universally illegal (Treaty of Pelindaba)	Per se illegal	Currently legal, but should be obligation to relinquish	Currently legal, but should be obligation relinquish
Testing	Per se illegal	Per se Illegal – an act of gross irresponsibility	Per se Illegal	Per se illegal	Per se illegal	Per se illegal

Chapter Five

The Logic Underlying the Decision to Relinquish the Nuclear Arsenal and Accede to the Treaty on the Non-Proliferation of Nuclear Weapons

5.1 Introduction

This chapter will explore the logic underlying the decision to relinquish the nuclear arsenal and accede to the NPT. In essence, it addresses the 'why' question. In this regard, it presents a commentary on state recognition in South Africa and the concerns that existed relating to state continuity in the light of the transition to a non-racial constitutional democracy. It will be shown that the relinquishment of the nuclear arsenal and accession to the NPT constituted an important feature of that transition. Mr de Klerk was concerned about codifying the rules relating to the succession of the State as they pertained to inter alia the NPT in order to ensure juridical security with respect to South Africa's international relations.[469] Mr de Klerk's concerns under international law could be broadly categorised by the themes raised in certain articles of the Vienna Convention on Succession of States in Respect of Treaties[470] as they related to the 'new' South Africa's "position with respect of the treaties of the predecessor State";[471] "participation in treaties in force at the date of the succession of States";[472] "participation in treaties not in force at the date of the succession of States;"[473] and "participation in treaties signed by the predecessor State subject to ratification, acceptance or approval".[474]

Secondly, the views or animus of the respondents will be presented together with phenomenological reductions in order to clarify the logic underlying the decision to relinquish the nuclear arsenal and accede to the

[469] Vienna Convention on Succession of States in Respect of Treaties. Signed at Vienna 23 August 1978. Not yet entered into force.
[470] Op cit Vienna Convention.
[471] Loc cit Article 16.
[472] Loc cit Article 17.
[473] Loc cit Article 18.
[474] Loc cit Article 19.

Treaty on the Non-Proliferation of Nuclear Weapons. These will lead towards a conclusion.

The most important reason underlying South Africa's decision to relinquish its nuclear arsenal and accede to the NPT was that this was deemed by Mr FW de Klerk to be an absolutely necessary, but not sufficient, step that should be taken in order to pave the way for the successful negotiation of South Africa's constitutional transition.[475] South Africa's racial policy of apartheid effectively accorded it the recognition status of a 'pariah state'. This deteriorating international recognition status was acquired incrementally over a period of many years. The comprehensive international sanctions and trade embargoes that were levied against South Africa were emblematic of this pariah status. Mr de Klerk took the decision to relinquish the nuclear arsenal and accede to the NPT because he calculated that this action would mitigate the risks of a break-down in state continuity and juridical security both during and after- the constitutional transition. Had Mr de Klerk not taken great care in relinquishing the nuclear arsenal and acceding to the NPT, the stark truth is that South Africa could have become a failed state.

According to John Dugard, a failed state has the following legal status:

"An existing recognised state may descend into anarchy and lawlessness to such an extent that it ceases to meet the requirements of statehood expounded in the Montevideo Convention. It retains its territory and population but lacks an effective, central governmental authority.

Warlords control parts of the state. But the state itself, without a central government, is unable to maintain order or to provide the most basic services for its people. Such a state may be described as a 'juridical state' in the sense that it exists only as an international legal person with no substance to back its claim to statehood. Alternatively, it may be described as a 'failed state' ... International law cannot be blamed for the break-down of government authority in a state, but it can be blamed for maintaining the appearance of

[475] The de-aggregation of the 'why' and 'how' questions into two separate chapters was structured for reasons of clarity. It is a fact that these two questions are actually interrelated. The 'why' and the 'how' questions are in fact inseparable, and dialectically interrelated. For this reason, the reader should regard Chapter Five and Chapter Six as presenting a logical continuum.

statehood by continuing to accept such an entity as a state; and for allowing such an entity to continue to function at the international level through membership in international governmental organizations. Moreover, international law can be blamed for accommodating the failed state by relaxing the requirement of effectiveness – effective government – as a requirement for statehood, for allowing legality to replace effectiveness."[476]

This spectre of failed statehood articulated by Professor Dugard above was the labyrinth that Mr de Klerk negotiated to avoid its becoming a reality and manifesting itself in South Africa. It is noted that South Africa's northern neighbour, Zimbabwe, circa 2010 fits quite solemnly into these failed state criteria and that the reality of failed statehood has close proximity.

John Dugard makes the additional point that:

"Changes in government do not affect the personality of the state or its rights and obligations of its predecessor, however it came into existence…The core question confronting the matter of recognition was 'does the government actually represent the government and does it warrant recognition?' "[477]

For this reason it is argued that the ANC would have had an obligation *erga omnes* under international customary law to relinquish the nuclear arsenal and accede to the Treaty on the Non-Proliferation of Nuclear Weapons had they been bequeathed these weapons. Furthermore, it is obvious that the question of international recognition of the ANC would have been vastly complicated by their possession of a nuclear arsenal. Its status as a national liberation movement was as yet unproved in its transition to statehood.

Dugard cited Oppenheim thus:

"A government which is in fact in control of the country and which enjoys the habitual obedience of the bulk of the population with a reasonable expectancy of permanence,

[476] Dugard, John. 2007. *International Law: A South African Perspective* (with contributions by Bethlehem, Daniel, du Plessis, Max & Katz, Anton). Third Edition. Lansdowne: Juta & Co Ltd. 109–110.
[477] Op cit Dugard (2007) at 111.

can be said to represent the state in question and as such to be deserving of recognition ..."[478]

In South Africa, the majority of the population became habitually and increasingly disobedient under the civil disobedience campaigns which were manifested in strikes, mass action, violence and the programme of making the country ungovernable. Mr de Klerk was preoccupied with the continuity of the South African state. He was very worried about a constitutional hiatus developing between the old Constitution and the new. There was concern about the absence of the assured protection and juridical security under an interim government.

This preoccupation was manifested in inter alia the Constitution of the Republic of South Africa, Act 200 of 1993 (the interim Constitution) and in the intense concern about interim governmental issues which was in its essence a structure created to ensure constitutional continuity during the negotiated settlement. The ANC sought to draft a new Constitution in an elected constituent assembly after an interim government had been installed. Mr de Klerk opposed this, because the ANC left unstated the question of what constitutional principles would prevail to guide the interim government. This is the constitutional vacuum to which Mr de Klerk refers in his animus, and it can be understood as the practical manifestation of his concern about juridical security.[479]

The ANC set out these principles in the proposed 'Transition to Democracy Act', which consisted of a discussion document suggesting amendments to the South African Constitution, intended to lead to the establishment of an interim government.

Ian Brownlie has this to say on the issue of state continuity:

[478] Loc cit.
[479] Ebrahim, Hassen. 1998. *The Soul of a Nation: Constitution-Making in South Africa*. Cape Town: Oxford University Press. 59.

"The term 'continuity' of States is not employed with any precision, and may be used to preface a diversity of legal problems. Thus it may introduce the proposition that the legal rights and responsibility of states are not affected by changes in the head of the state, or the internal form of government. This proposition can, of course, be maintained without reference to a concept of continuity or succession, and it is in any case too general, since political changes may result in a change of circumstances sufficient to affect particular types of treaty relation. More significantly, legal doctrine tends to distinguish between continuity (and identity) and state succession. The latter arises when one international personality takes the place of another, for example by union or lawful annexation. In general, it is assumed that cases of state succession are likely to involve important changes in the legal status and rights of the entities concerned, whereas if there is continuity, the legal personality and the particular rights and duties of the state remain unaltered. Unfortunately, the general categories of continuity and state succession and the assumption of a neat distinction between them, only makes a difficult subject more confused by masking variations of circumstance and the complexity of the legal problems that arise in practice. Succession and continuity are levels of abstraction unfitted to dealing with specific issues …

Further, political and legal experience provide several examples of situations in which there is continuity but the precise circumstances, and the relevant principles of law and good policy, dictate solutions which are only partially conditioned by the element of continuity. Legal techniques may well entail relying on continuity in one context, but denying its existence in another."[480]

Brownlie's commentary cited above will be shown to be of general contextual relevance to Mr de Klerk's logic underlying the decision to relinquish the weapons and accede to the NPT.

5.2 State Recognition

There are many countries with exceptionally poor and indeed atrocious human rights records which have been recognised and admitted by the United Nations. The abuse of human rights has not been used as a basis for the retraction of UN recognition. In recent times, particularly since the collapse of the Soviet Union, there have been suggestions, particularly by the European Community, that a priority criterion for statehood should be

[480] Brownlie, Ian. 2003. *Principles of International Law*. Sixth Edition. Oxford: Oxford University Press. 80.

that only those states which afford respect to human rights should be afforded recognition.[481]

South Africa's constitutional transition took place at the same time as did the Soviet Union's dissolution, and it was influenced by a similar set of constitutional values and optimism that prevailed at the time. One of the core purposes of the South African constitutional negotiations was to establish a framework for the pre-eminence of human rights inscribed in a Bill of Rights. This would contribute to changing South Africa's stigma of being regarded as a pariah state into being acknowledged as a respected member of the community of nations. Had South Africa retained its nuclear arsenal, its policy of apartheid, and opposition to state independence, its jaundiced international recognition status would have remained unchanged, because respect for human rights and self-determination are requirements for effective and organised government. There is no legal duty for a state to recognise another that complies with the criteria of statehood. The recognition of a state is a considered political and legal decision.[482]

John Dugard asserted:

"While it would be ridiculous to deny the statehood of North Korea, which it has demonstrated in its capacity to enter into relations with other states by entering into diplomatic relations with over fifty other states, it would be equally ridiculous to accord statehood to an entity which produces no evidence of such a capacity other than its government structure – as was the case with Bophuthatswana and is the case with the Turkish Republic of Northern Cyprus. In the final analysis, therefore, recognition does play a role in the creation of a state."[483]

Dugard contended further:

"No rules are prescribed for the act of recognition. Usually it will take the form of a public declaration by the recognising state which is conveyed to the claimant state. In some

[481] Op cit Dugard (2007) at 88.
[482] Op cit Dugard (2007) at 92.
[483] Op cit Dugard (2007) at 93.

cases it may be implied from the conduct of the recognising state, but such an inference should not be drawn too readily."[484]

This absence of proscribed rules does not diminish the importance of state recognition. For Mr de Klerk, the symbolic moment when South Africa's changed recognition status was acknowledged was when he met with Mr George W Bush (Senior) in the Rose Garden at the White House in Washington DC. At that historic meeting, Mr Bush pronounced that the changes in South Africa were irreversible.[485] This was interpreted by Mr de Klerk to be indicative of a practical manifestation of a new and positive form of state recognition that would in due course be attributed to South Africa.

John Dugard[486] outlined the trajectory of South Africa's pariah recognition status thus:

"Initially South Africa was attacked for its discriminatory treatment of Indians. Later, after the National Party came to power on the platform of apartheid, South Africa became a symbol of racial injustice in a world committed to racial equality and decolonisation. South Africa's protests that her racial policies were a domestic issue that fell outside the jurisdiction of the United Nations at first received the support of Western States, but after the police shooting of peaceful demonstrators at Sharpeville in 1960, this support disappeared, and apartheid was regarded as a matter of international concern, as a violation of the clauses in the Charter promoting human rights, and later as a crime against humanity. In the ensuing thirty years, South Africa became a pariah state against which a wide range of United Nations-sponsored measures were taken, including a mandatory arms embargo in 1977 and exclusion from participation in the General Assembly of the United Nations in 1974."[487]

Mr de Klerk's intention was to invert this pariah status. That was a key motivating force behind his decision to relinquish the nuclear arsenal and to accede to the Treaty on the Non-Proliferation of Nuclear Weapons. This

[484] Loc cit. The reader will recall that this matter of the failed recognition attempt with regard to Bophuthatswana came into prominence in the preceding chapter in the analysis of the *Uranium Red Book* incident, which involved South Africa's using the International Atomic Energy Agency's international publication and membership to promote recognition of this phantom state.
[485] Interview with FW de Klerk at the Offices of the FW de Klerk Foundation in Plattekloof, Cape Town on 4 October 2007.
[486] Op cit Dugard (2007) at 88 and 96.
[487] Op cit Dugard (2007) at 20.

initiative can be understood as a proactive attempt by Mr de Klerk to secure a new and positive form of state recognition for South Africa. It was Mr de Klerk's view that South Africa's constitutional settlement would lack the necessary international approval and legitimacy if these nuclear weapons were retained and if South Africa were not to accede to the Treaty on the Non-Proliferation of Nuclear Weapons.

The five Accessory Powers (United States of America, Soviet Union, United Kingdom, the People's Republic of China, and France) were *ad idem* that South Africa's possession of a nuclear arsenal was a threat to world peace. Mr de Klerk clearly understood that retaining these weapons could effectively veto the legitimacy of the constitutional transition.

This is a new research finding and no such finding based on an expert research sample has been reported in the literature pertaining to South Africa's constitutional transition. The imperative to create a new and credible Constitution in South Africa was therefore the inspiration behind the relinquishment of the nuclear arsenal and accession to the NPT. If South Africa had retained its nuclear arsenal, and not acceded to the NPT, the credibility of Mr Mandela would have been compromised. Mr Mandela's presidency would have been hobbled in the controversial legal, moral, political and military quagmire of nuclear possession and nuclear threshold statehood. North Korea, Iran and Iraq have all had experience of this demeaning international recognition status.

The African National Congress (ANC), like the National Party government of South Africa, had experienced recognition challenges. It was listed as a terrorist organisation in the United States of America even after it had become the democratically-elected government of South Africa. In fact, Mr Mandela's name was taken off a United States list of terrorist travellers only in 2008.

It would have been very difficult for the ANC, which was a national liberation movement prior to becoming the government of South Africa, to

pursue an internationally-legitimate constitutional settlement while retaining a nuclear-proliferating capability. The ANC was accorded a specific type of legal personality in terms of international law. Had it been involved in nuclear proliferation, it would have proscribed its legal authority as a national liberation movement, accorded by the Nuclear Weapon States and the United Nations. No national liberation movement would be legally permitted to possess nuclear weapons.

Brownlie explained that:

"Exile governments may be accorded considerable powers within the territory of most states and be active in various political spheres. Apart from voluntary concessions by states and the use of exile governments as agencies for illegal activities against lawfully established governments and states, the legal status of exile governments is consequential on the legal community it claims to represent, which may be a state, a belligerent community, or non-self-governing people. *Prima facie* legal status will be established more readily when its exclusion from the community of which it is an agency results from acts contrary to *jus cogens*, for example, an unlawful resort to force.

It is my view that the ANC's bombing of Koeberg nuclear power station during the period of construction and prior to its becoming operational created lasting international suspicion as to its good faith.[488] The decision by the leadership of the ANC to bomb a civil nuclear power station situated on the outskirts of metropolitan Cape Town surely created considerable alarm amongst the IAEA; the General Assembly of the United Nations; the Security Council and many individual states and gave credence to the ANC's being cast as a terrorist organisation. Had significant mortality and nuclear fallout accompanied this bombing, I am quite confident that this incident would have converted into a major long-term recognition problem for this mass democratic movement, from which they might not have ever recovered.

Ian Brownlie discussed the legal status of belligerent and insurgent communities:

[488] The bombing took place on 22 December 1982.

"(c) Belligerent and insurgent communities

In practice, belligerent and insurgent bodies within a state may enter into legal relations and conclude agreements valid on the international plane with states and other belligerents and insurgents. Sir Gerald Fitzmaurice has attributed treaty-making capacity to parastatal entities recognised as possessing a definite if limited form of international personality, for example insurgent communities recognised as having belligerent status – *de facto* authorities in control of specific territory. This status of the particular belligerent community may be affected by the considerations offered elsewhere as to the principle of self-determination and the personality of non-self governing peoples. A belligerent community often represents a political movement aiming at independence and secession."[489]

This citation from Ian Brownlie shows that the ANC as an insurgent movement did have the necessary legal personality to be involved in the relinquishment and accession decision. It was not involved in these matters because its credentials of *diligentia quam in suis* were unproved, and South Africa's nuclear relinquishment and accession were matters too weighty to be delegated to unproved novices.

5.3 The Reasons the Decision was Reached to Relinquish the Nuclear Arsenal and to Accede to the NPT: Mr FW de Klerk's Testimony and Animus

The term animus refers to an intention or a state of mind. In this analysis Mr de Klerk's animus as it related to the decision to relinquish the nuclear arsenal and accede to the NPT will be explored. Mr de Klerk's predominant focus in his interview was to address the question of why he had reached the decision to relinquish the nuclear arsenal. This decision was reached because South Africa's possession of a nuclear arsenal would have prevented, or significantly obstructed, his mission to negotiate a non-racial and democratic Constitution.

[489] Brownlie, Ian. 2003. *Principles of International Law*. Sixth Edition. Oxford: Oxford University Press. 63.

The essential reason for this was contained in the search for international trust. In the Preamble to the Treaty on the Non-Proliferation of Nuclear Weapons, one of the aims of the NPT is stated as:

"Desiring to further the easing of international tension and the strengthening of trust between States in order to facilitate the cessation of the manufacture of nuclear weapons, the liquidation of all their existing stockpiles, and the elimination from national arsenals of nuclear weapons and the means of their delivery pursuant to a Treaty on general and complete disarmament under strict and international control."[490]

Mr de Klerk effectively enacted the intention of the Treaty on the Non-Proliferation of Nuclear Weapons, as cited above.

5.3.1 To Have Retained Possession of Nuclear Weapons While Actively Advocating a Peaceful Negotiated Constitutional Settlement would have Signified a Cynical and Opposite Intent

Mr de Klerk was uncomfortable with nuclear weapons. He did not see any place for their ever being used except in a limited deterrent sense. This discomfort had moral, legal and practical origins. A decision to retain these weapons would have begged the questions: Why and for what purpose were they retained? What would be done with these weapons in South Africa, and would they have been proliferated in the international weapons market? This would have been *petitio principii*.

Mr de Klerk was sincerely pursuing a peaceful and inclusive constitutional settlement. The retention of the nuclear arsenal and non-accession to the NPT would have signified that he was not pursuing this constitutional settlement in good faith. This is substantiated by Mr de Klerk's decision not to bequeath the nuclear arsenal to the ANC. He actually protected Mr Mandela from the odious pariah state recognition connotations of the new South Africa being born a threshold nuclear state. South Africa's nuclear weapons had very rapidly become a military relic of the pre-Berlin Wall phase of the Cold War. For Mr de Klerk, the notion that agreements are

[490] Treaty on the Non-Proliferation of Nuclear Weapons.

binding and need to be implemented in good faith was a basic moral value as far as the accession to the Treaty on the Non-Proliferation of Nuclear Weapons was concerned – *pacta sunt servanda*.

The inappropriate and obsolete deterrent power of the South African nuclear arsenal was manifest to Mr de Klerk at a time when hitherto sworn enemies were coming together after many years of bitter conflict, laying down their differences, and seeking to negotiate a new shared Constitution. There could be no *pacta sunt servanda* if the ominous threats of nuclear weapons were to be included in the constitutional transition, as this would have implied the desire to revert to the previous apartheid order rather than the pursuit of an unknown, risky and shared future together. There is, of course, another doctrine, which is a much better analogy than *pacta sunt servanda*, given that there was no pact. This is contained in Article 18 of the Vienna Convention on the Law of Treaties 1969 and concerns the "obligation not to defeat the object of a treaty prior to its entry into force".[491] In this regard:

"A State is obliged to refrain from acts which would defeat the object and purpose of a treaty when:

(a) it has signed the treaty or exchanged instruments constituting a treaty subject to ratification, acceptance or approval, until it shall have made its intention clear not to become a party to the treaty; or
(b) it has expressed its consent to be bound by the treaty, pending the entry into force of the treaty and provided that such entry into force is not unduly delayed."[492]

It is recalled that South Africa had acquiesced in a bilateral agreement concluded with the AEC (on behalf of South Africa) and the United States on 31 January 1987 that it would abide by "the spirit and the letter of the NPT".[493] It is my contention that this bilateral agreement signified compliance with Article 18(a) of the Vienna Convention on the Law of

[491] The Convention entered into force on 27 January 1980 and 91 states became parties.
[492] Treaty on the Non-Proliferation of Nuclear Weapons.
[493] Masiza, Zondi. 1993. 'A Chronology of South Africa's Nuclear Program'. *The Nonproliferation Review*, 35–55, Fall. 43.

Treaties. Ian Sinclair asserts that "there is some inchoate authority for the Proposition that States which have signed a treaty subject to ratification must observe certain restraints on their activity during the period preceding entry into force, particularly if these activities would render the performance by any party of the obligations stipulated impossible or more difficult".[494]

It will be shown in the next chapter dealing with how South Africa relinquished its nuclear arsenal that it showed great restraint in its approach towards accession to the NPT. Ian Sinclair's 'inchoate authority' was coherent in the instance of South Africa's relinquishment and accession. South Africa had signalled an intention to be bound by the Vienna Convention on the Law of Treaties in terms of Article 18(b) from the time when the nuclear weapons silos were discovered at Vastrap in the Kalahari Desert on 8 June 1977, although I concede that the latter argument is more tendentious. The cumulative observations that were offered in the previous chapter in terms of international customary law about South Africa's intention to accede to the NPT, over the years and in the context of various crises in its international relations, signal that there was a growing, but unconscious, compliance with Article 18(b). This gives further credence to the assertion I have made that South Africa was bound by the NPT long before it had signed it.

Mr de Klerk recalled that:

"I was never enthusiastic about South Africa having atomic bombs. I always felt deep down that there were many more negatives than positives in having nuclear arms. When I became the President of South Africa, I immediately realised that I had to address the issue of South Africa's nuclear status as a priority.

I was quite uncomfortable with our nuclear capability, and my instincts led me to act sooner, rather than later. One of the reasons I was uncomfortable with our nuclear arms capability was that I, as the leader of the National Party, was actively advocating a

[494] Sinclair, IM (Foreword by BA Wortley). 1973. *The Vienna Convention on the Law of Treaties (The Melland Schill Lectures)*. Manchester: Manchester University Press/Dobbs Ferry, NY: Oceana Publications, Inc. 39.

negotiated constitutional solution for South Africa, and here we had weapons of mass destruction that signified the diametrically opposite intent. Part of my political strategy that underwrote my advocacy of the pursuit of a negotiated constitutional solution was what I regarded as the imperative to credibly convince the international community that we were not playing games about our intention to negotiate a constitutional solution. I needed to act in a way that would build trust. I did not want to be seen by the international community as playing games and playing for time."[495]

Phenomenological Reduction

Mr de Klerk's focus on the imperative for being seen as 'not playing games ... by the international community' can be assessed in a variety of different ways. Dr Hans Blix refers on many occasions to how the Iraqis chose to play the game of what he termed 'cat and mouse', and effectively defied the United Nations Monitoring, Verification and Inspection Commission for Iraq (UNMOVIC). This defiance or flouting of an organisation entrusted with the remit from the United Nations Security Council, which is the highest voice of international law in the world, was most provocative. It meant firstly that the inspectors were not able to ascertain properly the substantive facts of Iraq's weapons of mass destruction. Secondly, playing games damaged trust and interpersonal relationships. Playing games was interpreted by members of the Security Council as non-co-operation by Iraq, under international law. This destruction of trust for the inspection regime had enormously negative human consequences for Iraq, as it was one of the factors that legitimated the subsequent invasion. Thirdly, it meant that the process of the relinquishment of the weapons of mass destruction in Iraq was inappropriate. It follows therefore that the failure in Iraq existed at the level of substance, relationship and process. De Klerk is asserting that all three of these dimensions were essential to the success of South Africa's relinquishment of its nuclear arsenal and accession to the NPT.

[495] Op cit De Klerk

"I wanted sanctions lifted. (Recognition I also deeply wanted, to ensure that a negotiated solution between South Africans would be negotiated free from international pressure.)[496] I perceived that this matter of the bomb was one of the areas that could assist in achieving a turnabout in international pressure, away from sanctions, if it was handled with delicacy and appropriately."[497]

Mr de Klerk asserted that the relinquishment of the nuclear arsenal would create an excellent intangible trade-off of 'goodwill' in the area of state recognition, and counteract South Africa's pariah recognition status. It was a qualitative trade-off and not a tangible, measurable and quantifiable trade-off. A qualitative trade-off is obviously different from a quantifiable trade-off. These different types of trade-offs have very different legal, logical and moral assumptions. They are predicated on different sets of values, and each requires a different negotiation strategy if benefit is to be derived. The achievement of a quantitative monetary reward for relinquishing nuclear weapons would have required engaging in distributive negotiations with the United States on the matter of nuclear relinquishment. The search for a qualitative trade-off (of positive recognition status being accorded to the new Constitution) required integrative negotiations. Dr Barnard advocated the goal of seeking a quantifiable and tangible quid pro quo in exchange for nuclear relinquishment and accession to the NPT. Negotiations around quantitative pay-backs in return for the relinquishment of the nuclear arsenal and accession to the NPT would have been value-claiming with competitive and conflictive underlying rules of engagement. However, the risk is that they could have invoked escalatory processes of tit-for-tat. Negotiations around qualitative pay-backs in return for the relinquishment of the nuclear arsenal and accession to the NPT would have been value-

[496] Neil Barnard, cited in Heald op cit, offers a comment that concurs with that of De Klerk: "I now want to discuss the matter of agreement that sovereign ownership of the negotiation solution would be South African. This is equally as important as the others that I have mentioned. From the very word go, I reached an agreement with Mandela, on my own instigation, that we will as South Africans do our own negotiations. We will not involve the Commonwealth, and the British, and the Americans, and the UN, and Africa, and the Eminent Persons Group ... or anyone else." Botha (2008) in his interview emphasised that the international pressure on South Africa to relinquish its nuclear weapons was sustained and relentless. The constitutional negotiations, although highly pressurised, were conducted, for the most part, without intrusive international pressure.

[497] Op cit De Klerk.

sharing, with co-operative and collaborative rules of engagement. They would not have been accompanied by as great a risk of inducing escalatory processes of tit-for-tat.

Mr de Klerk's viewpoint was ultimately quite pragmatic. The qualitative strategy would render a return of affording a positive recognition status on South Africa's new Constitution, while a search for a quantifiable and measurable trade-off for relinquishing the nuclear weapons was in actual fact much more risky and complex. The quest for material monetary and tangible rewards from the USA (for example) for relinquishing the nuclear arsenal and acceding to the NPT could easily have become a tortuous process, escalating international tension and exacerbating South Africa's (then) pariah recognition status.

The matter of treaty accession was used to signify South Africa's re-acceptance as a respected member of the international community after many years of pariah recognition status. This reacceptance would have been acknowledged through, inter alia, a Resolution from the United Nations General Assembly, acknowledging South Africa's accession to the NPT; endorsement by the Nuclear-Weapons-States (US, Russia, China, France and the UK) that the relinquishment of the nuclear weapons was conducted with integrity, to the satisfaction of all Safeguards criteria; and confirmation from the USA that the constitutional negotiations were sincere and irreversible, and therefore legitimate.

Mr de Klerk contended that the nuclear relinquishment process, accession to the NPT, and the constitutional transition in South Africa were deeply intertwined and interrelated. His essential argument was that it accorded South Africa's democratic Constitution a new and positive form of recognition.

Mr de Klerk specified that:

"My decision to relinquish the nuclear arsenal was essentially a pragmatic decision. I instructed that it should be done rapidly. My conviction was that if we addressed the matter gradually in South Africa, it would create enormous problems. I was acutely aware that South Africa needed to adopt an internationally credible process to do so. I have always felt that the world should take a step backwards from nuclear weapons."[498]

The spectre of South Africa's status deteriorating into that of a failed state was one that haunted the constitutional transition and represented a scenario that was totally unacceptable to Mr de Klerk and his team.

Mr de Klerk consciously set himself four key performance standards with respect to the principle of *diligentia quam in suis* that needed to be met with respect to the nuclear relinquishment and accession process. The *diligentia quam in suis* essentially related to maintaining juridical security with respect to the succession of the apartheid state into the New South Africa. The more speedily relinquishment and accession was achieved, the more it would compel the ANC to adhere to treaties that were in force at the time of accession. In short, they would be met with a *fait accompli*. If the accession to the NPT had not been in place at the time of the conclusion of the constitutional negotiations it could have made it much more tortuous for the ANC to reach a decision on how to address the matter, because it was so intensely intricate.

Mr de Klerk recollected that:

"My announcement that the South African nuclear capability was relinquished, when I made it, was important because it provided proof that the constitutional negotiations and what was happening in that regard were:

(a) Fundamental;
(b) Serious;
(c) That we were not playing games;
(d) That there were no hidden agendas.[499]

[498] Op cit De Klerk.
[499] The four points mentioned above represent Mr de Klerk's synopsis of the criteria that were essential for the creation of trust in the nuclear relinquishment process as a subsidiary factor and the Constitution itself as the dominant priority.

(In other words, the emerging South African constitutional framework should be recognised as having being negotiated in good faith, and with comity.)

The package which I announced on 2 February 1990 was an initiative in the true sense of the word. I was acting on my deepest inner convictions when we embraced a new vision for South Africa. What was being done constitutionally in South Africa was being done because it should be done. It needed to be done. Continuous modifications needed to be incorporated into the constitutional transition in an orderly and structured manner. The change had to be ongoing and never interrupted. Momentum could not be displaced."[500]

Mr de Klerk referred to both 'how' and 'why' questions pertaining to the relinquishment of the nuclear arsenal in the above citation. It has been submitted that the nuclear relinquishment process and accession to the NPT constituted an acid test for the credibility of the constitutional settlement. This acid test resides in Mr de Klerk's four self-imposed criteria of credibility:

- The nuclear relinquishment process, like the constitutional negotiations, was 'fundamental' in the sense that the weapons programme was disassembled and rolled back in its entirety under strict international oversight;
- The nuclear relinquishment process was 'serious'. It was almost perfectly and empirically verified;
- It was conducted with comity, in a respectful, co-operative and collaborative manner, and there was no 'playing games';
- There was complete and appropriate disclosure and discovery of nuclear information, and there was no residual retention of HEU and inappropriate alliances pertaining to the relinquishment and accession process. In other words, 'there were no hidden agendas'.

The above four criteria together encapsulated Mr de Klerk's intention to create trust and good faith.

[500] Op cit De Klerk.

5.3.2 The Imperative of Retaining a Framework of Constitutionality in Relinquishing the Nuclear Weapons and Acceding to the NPT

Mr de Klerk deemed it imperative that the Constitution should be written in a framework of constitutionality, and not in the vacuum of a Constitutional Assembly. The old Constitution (the interim Constitution) was the appropriate chrysalis for the creation of the new law. This analysis again falls logically into the framework offered by the Vienna Convention on Succession of States in Respect of Treaties 1978. It is inferred from Mr de Klerk's testimony that it was intended that the treaties that were in force and pertained to apartheid South Africa should prevail in the new South Africa as well. In other words, the new South Africa would remain party to the NPT at the time of succession and all multilateral agreements that existed in international law would be upheld without variation.

Mr de Klerk specifically wanted to ensure that the accession and relinquishment processes were completed prior to the ratification of the interim Constitution, because he deemed it preferable for the NPT to be concluded with the predecessor state. This was to ensure that parties that might have proliferation motives were confronted by a *fait accompli* in terms of international law.

It can be deduced that In a worst case scenario, had there been a delay in South Africa's relinquishment of its nuclear arsenal and accession to the NPT, the following principle that arises from Article 19(1) of the Vienna Convention on Succession of States in Respect of Treaties would have been held to apply:

"…if before the date of succession of States the predecessor State signed a multilateral treaty subject to ratification, acceptance or approval and by the signature intended that the treaty should extend to the territory to which the succession States relates, the newly independent State may ratify, accept or approve the treaty as if it had signed that treaty and may thereby become a party or a contracting State to it."[501]

[501] Op cit Vienna Convention Article 17(1).

According to Brownlie:

"For certain legal purposes it is convenient to assume continuity in a political entity and thus give effect, after statehood has been attained, to legal acts occurring before independence. Considerations relating to the principle of self-determination and the personality of non-self-governing peoples may of course reinforce the doctrine of continuity."[502]

Professor Brownlie in the paragraph cited above is simply offering a converging opinion to Article 17(1) mentioned above.

Mr de Klerk indicated that:

"At the starting point the ANC insisted that we should suspend the Constitution and insisted that we should simply negotiate the composition of an interim government. They sought to use this process to call a Constitutional Assembly, whose main task would be then to write a constitution.

We said 'no' to this, because you have to write a Constitution in a framework of constitutionality."[503]

Phenomenological Reduction

It is evident that the differences in opinion between the preceding and successor regime were in this instance technical and related specifically to the matter of state continuity. Mr de Klerk's basic intention was that there should be continuity in South Africa's legal personality and that its rights and duties in terms of international law would remain unaltered. Mr de Klerk is entirely lucid on this point and it does not require further qualification. Professor Brownlie in the paragraph cited below provides further legal context for the choices that were posed to Mr de Klerk.

According to Brownlie:

"In general, it is assumed that cases of state succession are likely to involve important changes in the legal status and rights of the entities concerned, whereas if there is

[502] Op cit Brownlie at 62.
[503] Op cit De Klerk

continuity the legal personality and the particular rights and duties remain unaltered. Unfortunately, the general categories of continuity and state succession and the assumption of a neat distinction between them, only makes a difficult subject more confused by masking the variations in circumstances and the complexities of the legal problems which arise in practice. 'Succession' and 'continuity' are levels of abstraction unfitted to dealing with specific issues."[504]

In the following citation, Hassen Ebrahim offered an ANC viewpoint on the matter. Their concern was that CODESA would prove to be an exercise in filibustering and they did not appear to regard the matter of South Africa's State continuity in terms of juridical continuity with the same sense of urgency. They questioned the integrity of the motives. Ebrahim expressed the dilemma of state continuity and succession thus:

"Mandela warned that progress in the talks depended on the decisions of CODESA having the force of law, since the ANC feared that without such a guarantee, the talks would be reduced to no more than a talk-shop. The government, however, was unwilling to compromise the sovereignty of Parliament. As an option, NP Secretary-General, Stoffel van der Merwe, argued that this would not be the case if the decisions of CODESA were also made with the express acquiescence of the NP. The ANC rejected this, as it would constitute a veto for the NP. The matter was finally resolved in a late-night bilateral meeting between the ANC and the NP on 18 December, where the government agreed that CODESA would draft the legislation needed to give effect to convention decisions. The government undertook to do everything in its power to have the decisions of CODESA implemented."[505]

Mr de Klerk continued with his line of reasoning:

"We were against creating a constitutional vacuum. The compromise that we reached was that we agreed to negotiate a transitional Constitution in terms of which there would be an election for Parliament. Parliament would then also act as the Constitution-making body to negotiate a final Constitution, which had to be in line with agreed-upon inviolate constitutional principles.

The Constitutional Court then needed to certify the 1996 Constitution which, as you know, it duly did. In this way we removed the biggest stumbling block to the negotiations and it gave us the moral high ground. We did this in an orderly and constitutional way.

[504] Op cit Brownlie at 80.
[505] Op cit Ebrahim at 100–101.

Again, if you compare South Africa to Israel, they (Israel) have invoked a step-by-step approach to their constitutional transition. My viewpoint is that it is not working for the reason that I have offered above. (Constitutional continuity is not being well secured in Israel.)

As a point of strategic principle, if I were to say to you, Geoff, at the outset that we needed to find a framework to reach ABC, then you need to give ABC a 'kick-start' that makes the achievement thereof a viable process.

The pursuit of achieving the goal of ABC should not be pursued through a tortuous route."[506] [The route which Israel and Palestine chose circa January 2009 was precisely that circuitous route.]

Phenomenological Reduction

This commentary illustrates unequivocally that for Mr de Klerk the biggest potential threat and stumbling block to the constitutional transition was the hazard of stepping into constitutional discontinuity. The emblematic theme of his discourse is the matter of juridical security of the South African State. Constitutional discontinuity could have most plausibly have arisen from the controversy associated with South Africa's relinquishment of its nuclear weapons and accession to the NPT.

Mr de Klerk's concern about state continuity and succession related to the need for a guarantee that the transition in government did not alter the legal personality of South Africa and its associated rights and obligations that would be inherited from its predecessor in the process of coming into existence. South Africa needed to be conducting its 'business as usual', so that diplomatic relations continued unaltered. That was why Mr de Klerk deemed it imperative that the change to a new government should be conducted constitutionally. Had the changes in South African been achieved unconstitutionally, problems would have arisen over the status of the territory, international obligations, and other matters. The nuclear relinquishment process and accession to the NPT is a good example of such a matter. It was conducted within the framework of South African municipal law and international law.

[506] Op cit De Klerk.

5.3.3 State Continuity – Prevention of Internal Social Fragmentation

Mr de Klerk was acutely aware of the need to manage carefully the ever-present risk of social fragmentation. These were very practical worries and risks that needed to be identified and mitigated. The risks of social fragmentation were as complex and intricate an exercise as the relinquishment and accession process itself. Mr de Klerk put it thus:

"You must remember that we needed to convince our electorate to support the constitutional negotiations. I believe the best way to bring about change is not by stealth. You need to deliberately and thoughtfully create a new positive vision. We sought to create a new and powerful all-embracing vision for South Africa."[507]

In these words we see that Mr de Klerk's diagnosis of the nuclear relinquishment process in South Africa coalesced into the prognosis for the successful conclusion of the constitutional transition. The constitutional transition was, of course, his primary concern, and the nuclear relinquishment was an important contiguous process that if conducted effectively and wisely would enable the achievement of a constitutional democracy.

The above citation provided an unequivocal testimony as to Mr de Klerk's understanding of the linkage between the nuclear relinquishment process and accession to the NPT, and the creation of a new and internationally credible Constitution for South Africa. The legitimacy of the new Constitution rested on the international credibility that would be attributed to it at the time of its birth. The retention of these nuclear weapons would have signified a lack of trust and an intention to re-invent the tensions of the Cold War.

[507] Loc cit.

5.4 The Reason the Decision was Reached to Relinquish the Nuclear Arsenal and to Accede to the NPT: Professor Wynand Mouton's Testimony and Animus

Professor Wynand Mouton contended simply that the nuclear arsenal was relinquished and South Africa acceded to the NPT because it was a useless weapon and served no purpose in either offence or defence. He raised the point of there being significant opposition to the relinquishment process from the right wing. This is congruent with Mr Pik Botha's reference to the elements within the South African Defence Force (SADF) and ARMSCOR who advocated conducting nuclear tests in the Kalahari Desert. There was influential opposition to the nuclear relinquishment process and accession to the NPT from certain elements of the SADF, from the armaments industry, and from elements within the ANC and the Organisation of African Unity (OAU) as well. Mouton's testimony is essentially that nothing could be done with nuclear weapons militarily, by means of deterrence or otherwise. His view was that they were useless as weapons. For Mouton, any conceivable use of a nuclear weapon would be a *delicta juris gentium* and a *mala in se*.

Mouton recalled that:

"I had always speculated that South Africa had nuclear weapons on the basis of the advanced development of nuclear physics in this country. But I did not know for certain whether we actually had them or not. I was not included in that circle of persons who were informed and who needed to know.

There was opposition to this relinquishment process from the right wing. My viewpoint is that these bombs were of no use.[508] They could not be dropped on Pretoria or Johannesburg. They could not be dropped on Soweto. We were fighting the wrong type of war to possess them. They would cause indiscriminate damage. The bomb was a deterrent and never intended for military usage.

[508] Babbage, Maria. 2004. 'White Elephants: Why South Africa Gave up the Bomb and the Implications for Nuclear Nonproliferation Policy'. Princeton University: *Journal of Public and International Affairs*, 15, Spring.

The central question to ask about the nuclear weapons is, 'What can you do with the things?' The answer, I think, is that you can do absolutely nothing with them militarily."[509]

The ICJ in its Advisory Opinion of 1996 could not clearly specify a single credible military case where a nuclear weapon could be lawfully deployed in war, even when the very existence of a state was at risk. Again we have confirmation that the bomb was never intended for usage but was intended as a deterrent. Any military usage of nuclear weapons would have been in violation of the United Nations Charter Article 2(4), which reads:

"All members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any manner inconsistent with the Charter of the United Nations."[510]

This is because of the nuclear fallout associated with these bombs.

5.5 The Reason the Decision was Reached to Relinquish the Nuclear Arsenal and to Accede to the NPT: Mr Pik Botha's Testimony and Animus

Mr Pik Botha reflected upon the reason that South Africa reached the decision to relinquish its nuclear arsenal. He introduced the interview by showing the researcher a newspaper photograph of himself shaking hands with Dr Hans Blix, the Director-General of the International Atomic Energy Agency, at a splendid formal ceremony held in Vienna, arranged in celebration of South Africa's relinquishment of its nuclear arsenal. The photograph depicted Mr Pik Botha handing over a small sculpture of a ploughshare to Dr Blix, while the President of Austria officiated. The ceremonial event celebrated South Africa's embrace of constitutionality and peace among nations, and respect for international law. This ceremony provided an indication of comity and consent to be bound by the NPT. Mr Botha informed the researcher that Dr Blix had presided over South Africa's relinquishment of its nuclear arsenal and accession to the

[509] Interview with Professor Wynand Mouton at his apartment at Gordon's Bay in the Strand in Western Cape on 30 October 2007.
[510] United Nations Charter Article 2(4).

NPT. Botha also mentioned that Dr Blix was highly respected in South Africa. Dr Blix later presided over the relinquishment of the weapons of mass destruction in Iraq.

Mr Botha explained that:

"The sculpture of the ploughshare was made out of some of the metal casings that were used in the construction of South Africa's nuclear bombs.[511] A Biblical verse is engraved on the plinth of the sculpture. The verse is from the prophet Isaiah, and the reference is Chapter 2 Verse 4 (King James Version). These are the words:

'And He shall judge among the nations and shall rebuke many people: and they shall beat their swords into ploughshares, and their spears into pruning hooks. Nation shall not lift up sword against nation, neither shall they learn war any more.' "[512]

Phenomenological Reduction

It is quite apparent from this reference to the Book of Isaiah and the event that it celebrated that Mr Botha paid tribute to the role of one of the ancient sources of international customary law, the Bible, in making this celebration of sanity coherent.

Mr Pik Botha commenced the interview by reflecting on the concluding phase of the nuclear relinquishment process in South Africa and its accession to the NPT. The 'end' is an appropriate place to start, because it is a new beginning. Mr Botha expounded on the post-accession phase of South Africa's nuclear experience, and reflected with some evident pride on the conclusion of the Treaty of Pelindaba, which declared Africa to be a nuclear-weapons-free continent. Botha articulated the recurrent theme that the Superpowers had placed extreme and sustained pressure on South Africa to relinquish its nuclear arsenal and to accede to the NPT, prior to the change of regime in this country. This pressure can be understood as the symptomatic manifestation of the international communities' pursuit for constitutional continuity and juridical security. Mr Botha mentioned that the

[511] Interview with Mr Pik Botha in Pretoria North on 18 February 2008.
[512] Holy Bible. King James Version., Isaiah Chapter 2, Verse 4.

Americans were of the view that constant pressure would positively affect the direction of change in South Africa and result in a credible and legitimate constitutional settlement. My personal viewpoint is that they were actually correct in this assessment, although they might just as easily have been wrong. Mr Botha asserted that the pressure on South Africa by the United States, the Department of Energy (DOE),[513] the IAEA and the Nuclear-Weapons-States to accede to the NPT had taken place relentlessly over many years of travail. He referred to South Africa's period of pariah recognition status, and the bitter years of ostracism in the political wilderness.

Mr Botha made the important point that the relinquishment process and accession to the NPT was not an idea that was 'immaculately conceived' in 1989. It was the product of years of fermentation, experience and thought, which had begun many years prior to this. Professor Waldo Stumpf concurred with Mr Pik Botha's longer view. The chronology of the nuclear relinquishment and accession process when triangulated with the primary testimony offered by the respondents substantiates Mr Botha's assertions in this regard.

It has already been argued by recourse to international customary law that the relinquishment and accession to the NPT actually began in 1977 when South Africa's nuclear weapons silos at *Vastrap* in the Kalahari Desert were discovered by the Soviet Union and exposed to the United States of America. Mr Botha presented the case that the United States were very concerned about the prospect for nuclear proliferation that might arise from regime change in South Africa, and to whom these weapons might be bequeathed. The testimony provided by the expert sample concurs with

[513] Department of Energy. See 'International Terrorism: A Compilation of Major Laws, Treaties, Agreements and Executive Documents'. 1987. Report Prepared for the Committee on Foreign Affairs, United States House of Representatives by the Congressional Research Service Library of Congress. Printed for the use of the Committee on Foreign Affairs. Washington DC: US Government Printing Office. August; Convention on the Physical Protection of Nuclear Material Implementation Act of 1982 (Public Law 97-351); Department of Energy. 1982. 'A Report in Consultation with the Department of Defence Concerning Export of Plutonium and Enriched Uranium'. [Pursuant to Public Law 99-399, sec 603 at 444.]

that assertion. It can be inferred from his testimony that the United States were also deeply concerned about the question of constitutional continuity and state succession in South Africa. They needed assurance that the new regime would abide by the legal, diplomatic and commercial obligations established by its predecessor. It is submitted as a general comment that this concern was well grounded, because liberation movements on the continent of Africa have a very poor track record of successfully metamorphosing themselves into responsible constitutional governments.

Mr Pik Botha unsuccessfully attempted to gain a quid pro quo from the Big Five for the relinquishment process and accession to the NPT. The quid pro quo that he sought included inter alia the cessation of sanctions. An unexpected benefit was received for the accession to the NPT, and this was the gaining of international trust in and recognition of the constitutional settlement. Mr de Klerk in his commentary envisioned this outcome quite clearly. The cessation of sanctions followed later as a logical corollary to South Africa's remarkable constitutional settlement and little-publicised nuclear relinquishment and accession to the NPT.

My view is that in retrospect, the energy that was devoted towards trying to achieve a tangible quid pro quo for relinquishment seems to have been misdirected and unnecessary. This is because the quid pro quo of tangible acknowledgment for the relinquishment of nuclear weapons would have arisen in any case because of the reciprocal obligation that such a commitment to international customary law presupposes.

Mr Botha reported that the Americans constantly contended that they could not offer such a quid pro quo deal because the matter of relinquishment and accession fell under the scope and remit of the International Atomic Energy Agency, which was mandated by the Security Council of the United Nations.

Mr Botha confirmed that:

"My role in contributing to the relinquishment of South Africa's nuclear arsenal was one of the last duties that I performed in my capacity as Minister of Foreign Affairs. The first democratic election in South Africa took place on 27 April 1994. I then assumed the portfolio of the Minister of Minerals and Energy.

Dr Hans Blix was much better known for his role in inspecting whether Iraq had weapons of mass destruction, prior to the Second Iraq War, while director of UNMOVIC, than for his involvement in South Africa's nuclear rollback as Director General of the International Atomic Energy Agency. It is a little-known fact that Dr Blix played a pivotal role in South Africa's relinquishment of its nuclear arsenal whilst he was director of the IAEA. He also therefore played a vitally important role in South Africa's accession to the NPT.[514]

The symbolic handing-over ceremony with Dr Blix in Vienna – when I presented him with the sculpture of the ploughshare – formally concluded South Africa's voluntary rollback of its fissile nuclear weapons. South Africa's relinquishment of its nuclear arsenal led to concluding the Pelindaba Treaty, which was formally ratified, and designated the entire African continent as a nuclear-weapons-free zone.

The Pelindaba Treaty was reached soon after the formal nuclear relinquishment process was completed in South Africa and was a logical corollary to South Africa's nuclear roll back. It extended the nuclear-weapons-free zone scope to the entire African continent.[515]

Again, I have no doubt that the intelligence agencies in both the USA and UK knew precisely what was going on within the South African Cabinet. They had to be aware of the squabbles and the deteriorating relationship between the newly appointed National Party leader Mr FW de Klerk and President PW Botha. This relationship was crumbling.

The internal jockeying created additional uncertainty, so much so that it ensured that the major powers felt an urgent necessity to increase the pressure on South Africa to relinquish the nuclear arsenal and accede to the NPT. They were of the view that this pressure would positively influence the direction of change towards a negotiated constitutional solution for the country."[516]

[514] Op cit Botha.
[515] Loc cit.
[516] Loc cit. The international pressure was aimed not only at edging South Africa towards a constitutional democracy, but also at reducing the risks of nuclear proliferation. Both were important.

Phenomenological Reduction

The central theme of Mr Botha's testimony is that the nuclear relinquishment and accession contributed towards ensuring juridical security and continuity in the context of the state transition towards a constitutional democracy. The reference to the role that Dr Blix played in South Africa and Iraq was intended to reveal that the process was of international importance. Dr Blix's reputation is used as a source of authority. The sword and ploughshare analogy can be interpreted as confirmation of South Africa's transition from a pariah state to its embrace of international customary law and its new and positive international recognition. It designates the ethics that accompany the commutation from war into peace. It acknowledges a prohibition of the use of threat and force in South Africa's affairs of state. In addition, it conjures respect for human rights and fundamental freedoms for all humankind. Mr Botha's testimony resonated with the ethos of a commentary contained in the Preamble to the Vienna Convention on Succession of States in Respect of Treaties, which reads thus:

"Emphasising that the consistent observance of general multilateral treaties which deal with the codification and progressive development of international law and those the object and purpose of which are of interest to the international community as a whole is of special importance for strengthening of peace and international co-operation."[517]

This is equated with a broader embrace of multilateralism in the form of South Africa's primary role in setting up the Pelindaba Treaty, which resulted in the entire continent of Africa becoming a nuclear-weapons-free zone. South Africa's role in establishing this Treaty can be regarded as an indication of its conversion from an agent of nuclear proliferation to an agent of peace.

Mr Botha continued:

"During the meetings in the late 1980s (and not only in the crucible year of 1989), I repeatedly experienced intense pressure that was directed by the United States of

[517] Op cit Vienna Convention.

America for South Africa to accede to the NPT. I likewise repeatedly tried to exact a quid pro quo if South Africa were to take the decision to adhere to the NPT.

The quid pro quo that we required for starters was a relaxation of economic sanctions and an end to the academic boycott in order to allow South African scholars to attend international conferences so that they might stay in the forefront of their particular fields.[518]

I made repeated attempts to exact a quid pro quo for accession to the NPT."[519]

The objective of the United States' legacy of pressure on South Africa was to change the mindset of the leaders of South Africa from being a threat to world peace to being agents for peace. It was intended to impel South Africa's leaders into ensuring juridical security in the conduct of its international affairs, by honouring the treaties and all obligations to which it was bound in terms of international law. The mandatory and comprehensive sanctions enacted against South Africa were instruments of international law and were used as sticks and carrots to induce this mindset of respect among the leaders for the principles of international law contained in the Charter of the United Nations. The mindset of respect was later codified into South Africa's Constitution and Bill of Rights.

The following citation from Mr Botha referred once again to his failed pursuit for a quid pro quo for relinquishing the nuclear weapons and acceding to the NPT. My simple deduction is that one of the contributory reasons that the nuclear arsenal was relinquished and accession took place was because the bargaining would not work. The ridiculousness of this pursuit is captured in the passage below.

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[518] *Phenomenological Reduction:* It would appear on first impression from this commentary that South Africa was not able to exact a quid pro quo for its nuclear relinquishment and that its deterrent attempts failed. This may not be the case. The argument against it would be that the relinquishment of the nuclear arsenal did in fact yield a considerable deterrent quid pro quo, which included international legitimacy, and the delayed withdrawal of economic sanctions. It is tendentious to equate the relinquishment of the nuclear arsenal to the withdrawal of economic sanctions and according of international legitimacy.

[519] Op cit Botha.

Mr Botha reflected that:

"My task was complicated by the fact that I had to exact a quid pro quo – without admitting in so many words that we had actually successfully produced six-and-a-half nuclear bombs.

In my many hours of meetings with our American colleagues, I had no doubt in my own mind that they clearly realised that we had had already produced this nuclear capability. I once felt compelled to speak to the Americans about our nuclear capability in a riddle. I said: 'Look, without admitting that the girl is pregnant ... let us assume that she is pregnant ... Let us use that as an analogy for you to roll back economic sanctions, and for South Africa to do the necessary and accede to the NPT.'

The Americans repeatedly claimed that they were powerless to do this. They mentioned that they had no rights in international law to give the IAEA any instructions whatsoever. This was because the IAEA's legal remit came from the Security Council of the United Nations. The Americans said that they could not, and would not intercede with the IAEA's insider staff, and they could not dictate to the IAEA staff how they should run this Security Council-sanctioned organisation."[520]

Mr Botha could not formally admit to the Americans that South Africa had a nuclear arsenal prior to its accession to the Treaty on the Non-Proliferation of Nuclear Weapons. At that time, the NPT was worded so as to prohibit a state that possessed nuclear weapons from legally acceding to the NPT, because the mere acknowledgement of this prior possession would automatically have placed the acceding state in a technical breach. This catch-22 situation resided in the manner and phraseology of how the NPT was then worded. The wording that pertained at that time has subsequently been amended to correct this contradiction. The United States were arguably correct to decline to agree to a quid pro quo for South Africa's accession to the NPT. It might have created a dangerous precedent by invoking a monetary auction relating to the relinquishment of nuclear weapons and accession to the NPT. Monetary quid pro quos were granted for nuclear rollback and accession in the cases of the Ukraine, Byelorussia and Kazakhstan. North Korea also received a material quid pro quo for toning down its nuclear weapons programme. The

[520] Loc cit.

respondents, however, subscribed to the individually-held moral view that the South African government had a responsibility *erga omnes* to accede to the NPT and relinquish these weapons.

The Americans contended that if apartheid were not abandoned, South Africa's isolation and recognition crisis would be deepened by inter alia the deployment of ever-constricting comprehensive and mandatory sanctions. There would be no concessions and relaxation of sanctions while apartheid was still on the Statute books. Mr Botha attempted to lobby for United States support to intercede with the IAEA's insider staff to use their offices with the United Nations to relax the pressure of sanctions. This was arguably illegal in terms of international law, and was to no avail. It recalls the *Uranium Red Book* incident, discussed in the previous chapter.

The DOE also declined to concede to a quid pro quo for South Africa's accession to the NPT. This was also a correct decision in terms of United States municipal law and international law. The United Nations Security Council provided the IAEA's remit. Had South Africa's request been entertained by the United States, it would have created a conflict between US municipal law and international law.

Mr Botha continued:

"It was absolutely clear that South Africa would receive international relations plaudits and acknowledgement from the US, the UK and other countries if it acceded to the NPT. [State recognition]

The point that I am making is that the nuclear rollback was not as a result of a single first effort. It came as a result of years of *ellende* [English translation: travail].

We had tried to manoeuvre around the diminishing and constricting political space created by apartheid for years.[521]

Then PW resigned and FW came in ...

[521] South Africa's re-acceptance into the international community was the greatest quid pro quo that it could ever receive. Once again, Mr Pik Botha made the point that the nuclear rollback occurred over many years. It was a case of trial and error, and manoeuvring in an increasingly intensified hostile political and military space.

During my first proper meeting with FW de Klerk I said: 'We need now to:

- Firstly, release Mandela and the political prisoners;
- Secondly, sign the NPT.'

Mr de Klerk said to me: 'You do not need to persuade me ... that is precisely what I am going to do.'"[522] [523]

Phenomenological Reduction

Mr Botha's first recommendation to Mr de Klerk consisted of a statement of the obligation *erga omnes* to accede to the NPT, and Mr de Klerk conceded to this obligation. The research concurs with his assertion that the nuclear rollback had its origin in gradually accumulating obligations arising from nuclear crises in terms of international customary law. Mr Botha's comment that "[t]he nuclear rollback was not a result of a single first effort. It came as a result of years of *ellende* (travail)" is congruent with Klug's notion of constituting democracy. Constitutionality develops unevenly, incrementally, often over many years, sometimes almost opaquely; and in the case of South Africa, it was intrinsically linked to the erratic development of constitutionality in the greater territory of Namibia, Angola, Zimbabwe, and the erstwhile Soviet Union itself. The theme of Botha's testimony was one of systemic constitutional interrelatedness between states – whether at war or in peace.

Mr Botha offered a case for positive state recognition in the paragraphs cited above. It can be deduced that the development of the nuclear arsenal created its own problems of momentum. Once the nuclear weapons programme was started, internal financial, economic, scientific, and political forces ensured its continuation.

A cadre of the country's best scientific, engineering and project-management brains were deployed together in what must have been to them an exciting and clandestine project. For those involved, it arguably

[522] Op cit Botha.
[523] Loc cit.

added the aesthetics of adventure to their lives. Once the nuclear weapons programme was started, it was very difficult to stop.

The comment 'we had tried to manoeuvre around the diminishing and constricting political space created by apartheid for years' is telling. It is submitted that the ever-constricted space was caused inter alia because of a vaguely-articulated clash of laws: the parochialism of South African municipal law, which was infused with apartheid legislation at the time, and the requirement for international standards of excellence in international law, which respected the United Nations Charter and the embodiment of universal human rights.

The clash between South African municipal law and the imperative for this country to become compliant with an emerging international human rights culture – *jus cogens* – associated with international law were forces behind South Africa's process of constituting democracy, nuclear relinquishment and accession to the NPT.

The commentary about the exit of Mr PW Botha from the office of Presidency and the entry of Mr de Klerk to this office resonates with an almost identical comment made by Dr Neil Barnard during the course of the researcher's doctoral studies. Dr Barnard commented:

"Then PW had a stroke. Enter De Klerk ... Exit PW, in with FW de Klerk ..."[524]

Similarly, Mr Botha's comments about Mr de Klerk's objective of releasing Mr Mandela and the political prisoners converge almost totally with Professor Stumpf's assessment of this matter.

Heald: "Did the relinquishment of South Africa's nuclear weapons programme have a beneficial impact on the creation of a new legal and constitutional framework for South Africa?"[525]

[524] Op cit Heald.
[525] Op cit Botha.

Botha: "Of course it did. It helped enormously. This has been the constant theme of what I have been saying to you. It created trust. It was a vital ingredient and it underpinned the monumental constitutional and transformational process that we negotiated in South Africa.

You will have noticed that South Africa's nuclear, constitutional, and political re-alignment began many years earlier than you might have ever expected. The international pressure for this change was sustained; it intensified, and never wavered.

I have sketched you the vitally important, complex and interacting context which led to South Africa's decision to relinquish its nuclear arsenal, and to offer you the reason for its accession to the NPT. My experience was that it was a long-term process that started in the 1970s and came to reality in 1994.

International research on South Africa's political transition is starting to gradually realise and acknowledge the central thrust of what I am saying to you ... that the changes in South Africa in 1989 were set decades before they manifested themselves in reality. Researchers in many countries around the world are starting to converge on the importance of these historically-interacting themes.

The importance of ending the war in Angola cannot be understated.[526] [527] It interacted [with] and paved the way for the political independence of Namibia which was granted at the end of 1988.[528]

On 22 December 1988 South Africa, Cuba and Angola signed agreements to withdraw all their troops from these areas and therefore to cease the intense military hostilities.[529] The next year, 1989, saw Namibia have its first free election.

We should see all these complex events in a dynamically interacting and intersecting context. They played out across the globe."[530]

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[526] Berridge, GR. 1989. 'Diplomacy and the Angolan Namibian Accords'. *Royal Institute of International Affairs*, 65(3), Summer.
[527] See International Edition of Granma (Havana) 1 January 1989 for full text of two final agreements. See also 'Principles for a Peaceful Settlement in Southwestern Africa'. Signed by Angola, Cuba and South Africa on 13 July 1988 and released on 20 July 1988. Reprinted in Southern Africa Record No 51 of 1988. Johannesburg: SA Institute of International Affairs. 2–4; 'The Protocol of Geneva'. Signed by Angola, Cuba and South Africa on 5 August 1989; 'Joint Statement on a Ceasefire Agreement for Angola and Namibia'. Issued simultaneously in Pretoria, Havana and Luanda. 1988 All references cited in this section derive from the research of GR Berridge.
[528] Dugard, John (ed.). 1973. *The South West Africa/Namibia Dispute Documents and Scholarly Writings on the Controversy between South Africa and the United Nations*. Berkeley: University of California Press.
[529] Op cit Dugard (1973), reference cited by Berridge.
[530] Op cit Botha.

This commentary is once again both congruent with, and illustrative of, Klug's notion of 'constituting democracy'.

South Africa's nuclear relinquishment process and accession to the Treaty on the Non-Proliferation of Nuclear Weapons was not an isolated exercise. It took place at a time when Argentina, Brazil, South Korea, Taiwan, Byelorussia, Ukraine, Kazakhstan and Libya were doing the same. It would be erroneous to posit a case of 'South African exceptionalism' with respect to nuclear relinquishment and accession to the Treaty on the Non-Proliferation of Nuclear Weapons. While what South Africa did was undoubtedly a precedent, and was predicated on its own unique set of underlying facts, unique complexities and specific political conditions, it was the first nuclear rollback which formed part of a growing international trend.

Mr Botha continued:

"The year 1989 was the turning point in the recent history of South Africa. Apartheid had made the whole world entirely suspicious of South Africa's trustworthiness. The ending of the war in Angola, and the withdrawal of Cuban and South African troops from that country, was accompanied by an immediate and dramatic reduction in the tensions and conflicts that had been suffered in Southern Africa for many decades.

The release of Mandela from prison, the release of the political prisoners, the freeing-up of all political activity, the negotiation of a new Constitution, can all be seen as the logical consequences of the steps that we had taken much earlier.

I was convinced that what was being done was intrinsically necessary. These events were *onafskeidbaar* (English translation: inseparably) part of our thinking and what we had done to prepare South Africa for a new chapter in its thinking. There was actually no way that we could release Mandela without taking the necessary steps to dismantle the nuclear weapons. Had we not done this, the nuclear weapons would have stood out like a sore thumb."

Phenomenological Reduction

Mr Pik Botha is making the point absolutely clear. There is no way that Mandela could have been released and a new democratic Constitution

could have been negotiated had the nuclear arsenal not been relinquished. In other words, the constitutional settlement was contingent upon the relinquishment of the nuclear arsenal and accession to the NPT.

Mandela's release from prison was inexorably linked to the nuclear relinquishment. Had De Klerk not decided to relinquish the nuclear weapons quietly and had he included the ANC in this relinquishment process, these hypothetical negotiations could have broken down, leaving the ANC with the nuclear arsenal and bequeathing them international fear, loathing and opprobrium.

"All the nuclear powers, including the USSR, welcomed our decision to relinquish the nuclear weapons inter alia out of a deep and abiding fear that this very advanced nuclear technology could land in the wrong and dangerous hands and threaten the world order.[531]

During the events and meetings of 1988 it was clear that the world was waiting for irreversible and irrevocable events signifying permanent change in South Africa.[532]

There were suspicions about our motives."[533]

Phenomenological Reduction

Mr Botha confirms that the year 1989 was a turning point for South Africa. It was also a turning point for the Soviet Union, Europe, the People's Republic of China, and the world. South Africa was a part of these world events. The political revolution in South Africa appears to have preceded a legal revolution by a narrow margin, and both appeared to play themselves out together. Mr Botha's private conviction that that which was being done was essential reflected a growing national consensus which was ultimately codified in the Constitution. 'The new way of thinking' that Mr Botha refers to could be characterised as an acceptance of the basic tenets of the United Nations Charter, and rejection of all arguments of

[531] The Nuclear-Weapons-States were all concerned about who might inherit the nuclear bombs. This was their abiding fear, and they were fearful of the integrity of the ANC. It was an unproved liberation movement that had yet to prove its credentials. It had recently been classified as a terrorist organisation by the USA.
[532] Op cit Botha. The signification of the first irrevocable event was South Africa's decision to relinquish its nuclear arsenal and to accede to the NPT.
[533] The theme of trust has again re-emerged as a perennial motif.

South African exceptionalism as justification for apartheid in legislation and practice which had brought the country to the edge of ruin.

Mr Botha provided a clear linkage between the pursuit of a negotiated constitutional settlement and the imperative to rid South Africa of the nuclear weapons. As was the case with Mr de Klerk, they were for him a contradiction in terms. All the respondents shared this view, although they expressed it in different terms.

Heinz Klug presented a conceptual analysis of the manner in which South Africa constituted democracy. This analysis resonates and provides an interesting counterpoint to the reality of Mr Botha's lived experience. It objectifies the subjectivity of the animus of Mr Botha's recollections. Klug asserted that South Africa underwent two revolutions which occurred simultaneously. One was a political revolution and the other a legal revolution. The political revolution was granted structure and form by an equally important legal revolution, which reached its apex in the conclusion of the democratic Constitution. The legal revolution involved an embrace of the globalisation of law and acceptance of international customary law by South African leaders. It also involved an exculpation of a worldview focused on a parochial apartheid-centric municipal law.[534] In Mr Botha's testimony, the legal revolution and the political revolution are seen to coalesce. Parliamentary sovereignty was replaced by the new and unfamiliar sovereignty of a supreme Constitution.[535] Klug provided a converging perspective on Mr Botha's utterances:

"South Africa's system of apartheid, or legally constituted racism, may have been unique in the last quarter of the twentieth century, the decision to embrace democratic constitutionalism as the basic legal element if the country's political reconstruction was much less unusual. Instead, South Africa's political reconstruction and its embrace of democratic constitutionalism were part of a massive international process of political reconstruction culminating in the collapse of state socialism in 1989."[536]

[534] Klug, Heinz. 2000. *Constituting Democracy, Law, Globalism and South Africa's Political Reconstruction*. Cambridge, UK: Cambridge University Press. 1.
[535] Op cit Klug at 1.
[536] Ibid.

It is reiterated that there is a powerful convergence between the reality of experience as articulated by Mr Botha and the broader international conceptual framework offered by Klug.

5.6 The Reason the Decision was Reached to Relinquish the Nuclear Arsenal and to Accede to the NPT: Professor Waldo Stumpf's Testimony and Animus

Professor Waldo Stumpf contended that during his entire involvement in relinquishing the nuclear weapons and acceding to the NPT, Mr de Klerk never once mentioned, or alluded to, any fear of passing on the nuclear weapons to the ANC as being a motive for relinquishing them. Stumpf did interrogate the matter quite extensively during the course of the interview. His viewpoint was that this was not a deciding influence in South Africa's relinquishment and accession process.

Stumpf indicated that:

"I was designated to become the new CEO of what was then called the AEC (Atomic Energy Corporation) in September 1989. I became the actual CEO only on 1 January 1990, but I was designated to take up this position in September '89. At the same time Mr de Klerk took over the Presidency from PW Botha. You know all about those politics.

Within two weeks of Mr de Klerk taking office I was summoned to attend a meeting at the Union Buildings in Pretoria. I did not know what it was about. I was very 'green' at that time.

I arrived at the Union Buildings and attended a smallish meeting. About four or five Cabinet Ministers were in attendance. Those present included Pik Botha, Dawie de Villiers, Barend du Plessis, and obviously General Magnus Malan ... In addition, Neil van Heerden was there. I think that Neil Barnard came in later. I did not know what this was all about. After we had settled down Mr de Klerk opened the meeting. His opening words were 'Gentlemen' (there were only gentlemen present). 'In my term of office I am going to take South Africa back into the international community as a respected member of the international community.

There are two things that must happen. Firstly, we are going to turn the political system completely around, to a full democracy.

Secondly, we are going to dismantle the nuclear weapons entirely and get them out of the way, because they are actually a liability at the moment.'

I realised then that this was why I had been invited to attend the meeting. This really drove home the seriousness of the whole project to me.

Many persons have posed the question to me: 'Was Mr de Klerk afraid of handing these things over to the ANC?' That was not an issue and was never even discussed. (You might want to ask him whether that concern was in the back of his mind.) A fear of handing over nuclear weapons to the ANC was never mentioned as a driving force ..."[537]

The opinions offered by Mr Pik Botha, Professor Wynand Mouton and Dr Neil Barnard converged on the explanation that one of the reasons the nuclear weapons were relinquished was because of the fear that the ANC might proliferate nuclear weapons to its former allies out of, inter alia, a sense of reciprocity for past assistance during the time of the struggle.

Mr de Klerk did not voice proliferation concerns about the ANC's nuclear inclinations. Suffice it to mention that he excluded the ANC in its entirety from this nuclear decision-making process.

Professor Stumpf claimed that the potential nuclear proliferation risks by the ANC were not raised by Mr de Klerk as a specific concern in his meetings with him. It is noted, though, that Professor Stumpf did explore the matter of nuclear proliferation fears associated with a national liberation movement. In this regard, Professor Stumpf's assessment was similar to that of Mr Pik Botha, inasmuch as:

- he acknowledged the OAU's desire to possess a nuclear capability;
- he acknowledged that there were elements within the leadership of the ANC who shared this view.

Professor Stumpf contended that the exclusion of the ANC from this relinquishment process should be understood as conduct offered in good

[537] Interview with Professor Waldo Stumpf at the University of Pretoria, Minerals Science Building, Pretoria on 18 October 2007.

faith, intended to induce constitutional continuity and a positive state success.

The researcher's view is that Mr de Klerk's silence was wise, because any utterances on the matter at the time of relinquishment and accession would have created a furious political controversy. The retention of the nuclear weapons would have complicated the matter of state succession and constitutional continuity. Mr de Klerk's silence about the potential for nuclear proliferation among the ANC is indicative of restraint on his part. It is inconceivable that he would not have devoted the utmost thought and reflection to this matter.

For Professor Stumpf, the relinquishment and accession was essentially a very practical matter that required a high level of care and discretion in order to ensure that the constitutional negotiations were not placed at risk by the controversy associated with nuclear weapons and accession. Stumpf contended in this fairly long but important citation that:

"Mr de Klerk realised (and there I must say I fully agreed with him) that to have kept these nuclear weapons operational throughout the very difficult negotiation of a political handover would have increased the complexity and the risk of the constitutional negotiations failing quite significantly.

It would have been a hot potato of:

- How do you hand them over? (constitutional succession and continuity)
- When should we hand the nuclear weapons over?
- Who would be issued with the authority to control the nuclear weapons during the handover?
- Who should not have control over the nuclear arsenal?

It is my view that Mr de Klerk realised that the political transition to democracy was going to be difficult enough as a project on its own. I think that his thinking followed these lines: 'Let us not make the constitutional negotiations even more difficult than they should be, by making this relinquishment of the nuclear weapons a compounding part of the political process.'

That for me is the fundamental reason underlying his decision to embark on this dismantling process unilaterally. I think that that he made a wise and considered choice. It was De Klerk's view that the nuclear arsenal itself had converted into a serious national liability.

Secondly, De Klerk realised that it would be far too risky for both sides, the blacks and the whites, to have these very sensitive constitutional negotiations imperilled by the nuclear weapon 'hot potato', which by its inherent nature is a matter fraught with mistrust.

Once again the indicators of mistrust would be reflected in questions like the preceding ones:

- Are the nuclear weapons going to be handed over? (*erga omnes*)
- When will they be handed over?
- What is going to happen to them once they have been handed over?

The constitutional negotiation agenda would have been one of escalating complexity and social fragmentation between black and white, had it been combined with the nuclear relinquishment project.

De Klerk fully appreciated that he needed to get these things quietly out of the way and not to allow them to contaminate the integrity and success of the constitutional negotiations, which was his prime goal. This argument suggests the fundamental reasons that that considered decision was taken. It was taken in such a way as to bring South Africa back into the international community, and away from its pariah-like isolation.

There were quite understandably many people in the new government who felt that they should have inherited these nuclear weapons. Their view was that they should have been accorded the task of dismantling the nuclear weapons. If this had happened, it would have certainly complicated the handover of political power. You can't simply put nuclear bombs behind a door and then lock them away (*diligentia quam in suis*). I can indeed understand why people expressed the sentiment that the ANC should have inherited the bombs and then dismantled them. It is my considered view that the political transition would not have gone as smoothly as it did, had this process of nuclear relinquishment been addressed as a discrete contiguous negotiation project.

Mr de Klerk appreciated that fully, and this appreciation was reflected in his words: 'Gentlemen, we will have to get these things out of the way before we proceed with a turnaround of the political system.' That is really the fundamental driving force that you will need to address in your study. If De Klerk had other motives underlying the dismantling process, he never voiced them. Then they would have been in his head. He never at one point (even in his body language) indicated that he was afraid that the ANC would inherit these.

There is a second point that needs to be reflected upon. If he had (hypothetically) kept the nuclear devices and had made these a part of the constitutional negotiations with the ANC, what would this share have done to the political stature of Mr Mandela? Would these leaders have been so ready to invite Mr Mandela onto all their platforms around the world, had they know that he was arriving on the world stage *with some nukes in his back pocket*?

These nuclear bombs would have been a poisoned chalice for Mr Mandela. Although Mr Mandela might have said immediately (to assure the world) that the ANC would dismantle these bombs, I do not think that this assurance would have been readily believed. Nuclear weapons by their very nature are fraught with mistrust.

In addition, the matter would have been complicated by dissenting voices from the political leadership of the African continent. They would not have easily accepted South Africa's relinquishment of its nuclear arsenal. The OAU would, I think, have applied intense pressure on Mr Mandela to hold onto the nuclear arsenal because of the political status that would derive from the possession of nuclear weapons.

One of the views that was strongly advocated was that Africa should have retained this nuclear capability, as it would place the continent in the company of the Superpowers.[538] I think that Mr Mandela's stature would have been diminished had he retained the nuclear arsenal. This would almost certainly have occurred at the beginning of his leadership, had the nuclear weapons been retained.

Just imagine Mr Mandela going to visit the USA with some nukes in his back pocket. The US is paranoid about nuclear weapons, and this would not have assisted political relationships at all.

My core argument is that the manner in which the nuclear weapons were rolled back in South Africa was probably the best way that the matter could have been undertaken, given the reality of the circumstances that existed at that time. I do not contend that it was the ideal way. I do contend that it probably was the best way.[539]

These are the fundamental reasons underlying the nuclear relinquishment in South Africa. You would have to verify my explanation with Mr de Klerk in order to ascertain whether he agrees with this reading. I was in extensive meetings where the rollback of the nuclear weapons was discussed with him. In all of those meetings, his driving force

[538] This was in fact confirmed by Mr Pik Botha during his interview.
[539] Op cit Stumpf.

seemed to be 'to get this nonsense out of the way, so that we can proceed with the political transition purposively'."[540]

Professor Waldo Stumpf concurred with Mr FW de Klerk's view that had these nuclear weapons been retained and had they remained operational throughout the very difficult negotiation of the new Constitution, they would have starkly increased the complexity of the constitutional negotiations and the risk of their failing.

Professor Stumpf submitted that the decision to relinquish the nuclear weapons and to accede to the NPT in such a way was intended as a tool for state re-recognition, to re-introduce South Africa as a respected member of the international community of nations. He asserted that Mr Mandela would have had a major international credibility problem had he entered the world stage with 'nukes in his back pocket'. His [Mr Mandela's] legitimacy would have been seriously compromised.

It is significant to note that Mr de Klerk and the nuclear relinquishment team showed a deep concern and also played an important contributory role in assuring Mr Mandela's credibility. They acted with comity and were concerned about ensuring that Mr Mandela had a positive *ratione personae*.

The credibility problem for Mr Mandela under an ANC nuclear-retention scenario would almost certainly have impacted on his international status and the legitimacy accorded to the new Constitution. The relinquishment of the nuclear arsenal and accession to the NPT was a delicate process requiring persons who possessed a deep knowledge of the physics of nuclear weapons, and long-standing relationships with the International Atomic Energy Agency.

It would have been a very risky burden for the ANC to assume the responsibility for the nuclear relinquishment and accession process at the

[540] Loc cit.

time that it was striving for international recognition, and to convert itself from a national liberation movement into a government of international standing. It is contended that the ANC simply did not have the technical expertise, the experience and the knowledge at its disposal to master this complexity effectively. This knowledge was acquired by their counterparts over a period of approximately thirty years of involvement in the development of this nuclear capability. International disquiet about South Africa's nuclear arsenal would have escalated had these weapons been naïvely bequeathed to an unproven national liberation movement.

It was decided that the relinquishment of the nuclear arsenal should be done in camera. By its very nature, knowledge of the possession of nuclear weapons could have created a wave of international panic. Professor Stumpf's and Mr de Klerk's reasoning therefore converged as to the reasons that the nuclear arsenal was relinquished. Their testimonies are entirely congruent and consistent with each other.

Professor Wynand Mouton did allude to an incident where he was approached by a senior ANC Minister who chastised him about South Africa relinquishing its nuclear arsenal and its accession to the NPT. Dr Neil Barnard referred to a similar incident, when he was confronted by the incoming Minister of Defence at that time, Mr Joe Modise, who bemoaned South Africa's relinquishment of its nuclear arsenal. He indicated that the weapons should have been retained by the ANC.

Mr Pik Botha also referred to two important instances where the putative matter of the nuclear weapons being proliferated by the incoming regime of the ANC was brought into stark relief. The first was when Mr Pik Botha had a joint-staff luncheon with the United States Assistant Secretary of State for Africa Affairs, Mr Hank Cohen, and the matter of the ANC potentially proliferating nuclear weapons was informally raised by one of Mr Cohen's staff members as a US concern.

The second occasion pertained to a meeting with Mr Julius Nyerere, who was President of Tanzania and an important indicative 'voice' of the Organisation of African Unity (OAU), who also chastised him for South Africa's relinquishment of its nuclear arsenal and accession to the NPT. Mr Botha was bemused by Mr Julius Nyerere's views on this matter.

The concerns that were expressed by Mr Pik Botha, Dr Neil Barnard and Professor Wynand Mouton about the possible proliferation inclinations of the regime-in-waiting were mirrored in informal discussions with the ambassadorial representative of the United States.

5.7 The Conundrum of the ANC's Hypothetical Proliferation Inclinations: *Rebus Sic Stantibus*

Mr Pik Botha reflected on the views expressed by Mr Herman (Hank) Cohen, the United States Assistant Secretary of State for African Affairs, about the risk of the ANC as a 'regime-in-waiting' acting as an agent of nuclear proliferation. His testimony reveals an insight into United States motives for pressurising South Africa to relinquish its nuclear arsenal and accede to the NPT. The fear expressed by the United States at the meeting was of the danger that an ANC regime might be tempted to proliferate nuclear weapons to countries that were hostile to US interests. The United States wished to ensure that the transition from the predecessor regime to successor regime in South Africa would be conducted in a manner that insured juridical security in international relations. The ANC's position on nuclear weapons was at that stage opaque and mistrusted because of the nature of their allies, who included Libya, Cuba, and North Korea, all of whom had chequered associations with nuclear weapons.

Mr Pik Botha informed that:

"Chester Crocker's successor was Mr Herman (Hank) Cohen, Assistant Secretary of State for African Affairs. He entered the arena after Chester Crocker retired.

Mr Cohen once told me confidentially at a lunch that we 'had better hurry up with our accession to the NPT', as South Africa was rapidly moving towards a new phase in its history. He said that the Americans were deeply concerned that the technology and the bomb could fall into the wrong hands. That would be a worst-case scenario for the USA. I am sure that Cohen would now deny what I am saying, but he actually did say it. At this same lunch one of his officials said to one of my officials that South Africa had better do it now (accede to the NPT) before there was a major change in the political leadership in the country (South Africa) that might be politically aligned to 'who knows who'." [541]

Phenomenological Reduction

One of the burning reasons for the pressure that the United States placed on South Africa to relinquish its nuclear weapons and accede to the NPT was that the US feared that they might have less control over the matter of nuclear proliferation with the successor regime than they had had with the predecessor regime. Washington was deeply concerned about ensuring state continuity and assuring juridical security, both during and after the constitutional transition. The successor regime's approach towards the treaties that were bequeathed to it by the predecessor regime was unknown. It was not then known whether the ANC wished to be bound by the Treaty on the Non-Proliferation of Nuclear Weapons or not. It was very important that the successor regime should be bound to the Treaty on the Non-Proliferation of Nuclear Weapons prior to its assumption of political power, and that the ANC were presented with a *fait accompli*, which would mitigate the risk of their proliferating these weapons, as they would be expected to be deeply involved with their incoming responsibilities.

The next citation also offered by Mr Pik Botha pertained to a conversation that he and Julius Nyerere, the President of Tanzania, had about the South African legacy.[542] It related to the regret that Mr Nyerere expressed that South Africa had not retained these weapons and bequeathed them to Africa. It will be recalled that Mr Nyerere enjoyed a high level of

[541] The assertion here is that the pressure from the US on South Africa to roll back the nuclear arsenal was predominantly inspired by the fear of its being inherited by a regime that was hostile to US and Western interests. The ANC were seen as being suspect in this regard, particularly because of their close relationships with Libya, Cuba and other anti-Western regimes.
[542] This concurs with a similar point made by Professor Stumpf.

continental prestige in the Organisation of African Unity (OAU) because of his role in the decolonisation struggle.

It is in this context that Mr Botha maintained:

"Julius Nyerere, the President of Tanzania, came to visit me personally in either late 1994 or 1995. He requested a friendly meeting with me and a discussion. In the first part of the meeting, Mr Nyerere provided an excellent overview of the seminal changes that had taken place in Southern Africa. He was highly influential in the Organisation of African Unity (OAU), which had been an important institution in Africa's decolonisation struggle in the Post-World War II period – from the 1950s up into most of the 1960s.

At one point Nyerere said to me, 'You have displayed great courage and wisdom in what you have done. You have assisted in setting South Africa on a democratic path and restoring human dignity. But I cannot understand why you decided to demolish South Africa's atom bomb.[543] The whole of Africa would have been so proud to own and display to the world that it had such power, mastery and high technology.'

I explained to Mr Nyerere that there was no way that we could have proceeded with the constitutional negotiations if we had retained the nuclear bomb. The nuclear bomb was anathema to the creation of trust that we were seeking from the constitutional negotiations. I said to Nyerere: 'The nuclear bomb is perceived and seen as the product of apartheid. It is the apartheid bomb. The perceptions are indissolubly linked.'

I found it interesting that Nyerere harboured these thoughts and deep-seated views. For me it was a *raaisel* (English translation: a riddle, a poser, an enigma) which could not stand up to logical scrutiny.

Nyerere never explained to me in what way Africa could have gained prestige from retaining our nuclear bombs. His logic also flew in the face of the emerging nuclear reality, which had as its central purpose the objective of getting Africa to be declared a nuclear free zone. Nyerere's deep-seated view seemed to be a negation of the massively positive steps of nuclear relinquishment, accession to the NPT, accession to the Pelindaba Treaty, and the abrogation of South Africa's apartheid Constitution with the negotiation of one of the most advanced constitutions in the world. Nyerere persisted with this bondage thought pattern."[544]

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[543] See Allison, Graham, Cote, Owen, Falkenrath, Richard & Miller, Steven. 1996. *Avoiding Nuclear Anarchy – Containing the Threat of Loose Russian Weapons and Fissile Material*. Cambridge, MA: The MIT Press.

[544] Op cit Botha. In these paragraphs Botha justifies Hank Cohen's fears. They were real, and the fact is that the successor regime might have been tempted to proliferate these nuclear weapons.

Nyerere's essential logic seems to have been that the nuclear bombs were a *res communis* and should have been rightfully bequeathed to Africa. His private utterances would appear to be in contravention of the African Convention on the Conservation of Nature and Natural Resources and the Bamako Convention. Tanzania was bound by both of these Conventions. Article 2 of the African Convention on the Conservation of Nature and Natural Resources articulates the principle of sustainable development and respect for the environment as the common heritage of humankind or public good. Subsequently, the Bamako Convention on the Ban on the Import into Africa and Control of Trans-boundary Movement and Management of Hazardous Waste within Africa has reaffirmed international environmental law principles; for example: state responsibility for trans-boundary pollution, the 'polluter pays' principle, and obligations relating to sustainable management and resource utilisation. The OAU also introduced the African Nuclear-Weapons-Free Zone Treaty (Treaty of Pelindaba).[545] Suffice it to say that Nyerere's private comments were at fundamental odds with the public principles espoused by this treaty.

Dr Neil Barnard confirmed that Mr Joe Modise, the ANC's Minister of Defence, expressed fury about South Africa relinquishing these weapons and acceding to the NPT and not bequeathing them to them. Dr Barnard recollected that:

"I was worried about these weapons ending up in the hands of the ANC, particularly as Mandela and Kaddafi were quite close at that time. I said: 'You will be in trouble if we have an ANC government with a nuclear weapons capability.'

I recall a significant occasion when Joe Modise, who was to become the ANC's Minister of Defence, came up to me and expressed fury that we had divested ourselves of this capability and acceded to the NPT.

545 du Plessis, Max. 2007. 'The African Union'. In John Dugard (ed). *International Law: A South African Perspective*. Third Edition. Lansdowne: Juta & Co Ltd. 547–548.
Subsequently, the Bamako Convention on the Ban on the Import into Africa and Control of Transboundary Movement and Management of Hazardous Waste within Africa reaffirmed international environmental law principles. The OAU also introduced the African Nuclear-Weapons-Free Zone Treaty (Treaty of Pelindaba).

If our nuclear weapons capacity had been handed over to the ANC, it would have had very serious and negative implications for South Africa's international relations, its constitutional status, and indeed its legitimacy as a state. This was an important reason for dismantling the nuclear arsenal. We started dismantling the nuclear capability after we returned from Vienna."[546]

The respondents were all in consensus that the relinquishment of the nuclear arsenal and accession to the NPT was a key pre-condition to achieving legitimacy as a successor state.

The testimony offered by Professor Mouton is in its essence a replication of that presented by Barnard. Professor Mouton recalled in his testimony, that he too, had been lobbied by a senior member of the ANC not to relinquish the nuclear bomb and accede to the NPT. It is the researcher's view that both President Nyerere and Mr Joe Modise revealed an inclination that might have led inexorably to *détournement de pouvoir*.

Professor Mouton recalled that:

"When I had completed my job of overseeing the relinquishment of the nuclear arsenal and this was publicly announced, a senior person from the ANC came to me. I can't remember his name. He was quite a figure, though.

He said: 'Why did you dismantle the nuclear bomb? … We wanted it …'

You will recall that at that time that Nelson Mandela and Muammar Kaddafi were great friends."[547]

It can be deduced from Professor Mouton's comments that one of the reasons the nuclear weapons were relinquished and South Africa acceded to the NPT was because of the danger of criminal nuclear proliferation.[548]

[546] Interview with Dr Neil Barnard at the Chameleon Restaurant in Plattekloof, Cape Town on 29 October 2007.
[547] Op cit Mouton.
[548] The death of Karen Silkwood is perhaps the most publicised case of criminal nuclear proliferation. See Rashke, Richard. 1981. *The Killing of Karen Silkwood*. Gray's Inn Road, London: Sphere Books Limited. 191– 381.

Mr Mike Louw also offered an insightful corroboratory opinion on the proliferation concerns associated with the friendship between Mandela and Kaddafi. He recollected that:

"Mandela impressed me from the beginning. He was straightforward. He did not mince his words. He did not seek favour. He was himself. He did not try to be anyone. There were no outward signs of bitterness, although I know that that was only my impression. He knew that what was done was done. He knew that he had broken the law willingly and knowingly. He was charismatic because he was non-charismatic.

I could not help but notice how out of touch he was. Although he had newspapers, what you read in them, and walking outside in the streets dealing with the reality of existence, are two very different things. We explored the theme of how divorced he was from reality and whether he could and would catch up ... the point of elasticity of his mindset ... his capacity to learn as an adult – and I came to the conclusion that he would catch up.

For example, he was to be awarded a *Mohamir Kaddafi Peace Prize*, and we told him that Kaddafi was now *persona non grata*. Mandela kept on harking back to a visit that he had made to North Africa decades before, and I was worried about an unnecessary bond with the obsolete. Some of his arguments were really out of touch. He was very up-beat about this accolade – the Kaddafi Peace Prize.

But what do you expect? I got a long lecture from him on reality. And a long speech about his experiences in North Africa ...

This was as a result of his being in gaol for so long. I chose never to argue with him, only to listen. It was in our view nothing to do with his ideological orientation. This would have changed our entire perspective. We factored in the matter of his own obsolescence into our discourse, in order to correct a major error of misperception.

Barnard gave the feedback on these meetings, firstly to PW Botha and then to FW de Klerk I found it important and interesting that Mandela kept his mind going by thinking very carefully about various issues. He worked out his point of view on violence and co-operation with the Soviet Union, on negotiation, etc. When he gave us his explanation, it was always well thought out.

Again our concern was whether he would vary his responses and show a lack of consistency. My realisation was that Mandela was absolutely consistent, to the extent that you might gain the impression that he was talking from a tape recorder and his viewpoint came through with word-for-word exactitude.

I also felt respect for him. He is very brave. He knew that the National Intelligence Service obviously had strong propagandistic capabilities and could have gone out and abused his trust and twisted his words. And we did not abuse this trust. He was very brave and he was doing what he was doing out of conviction. I respected this deeply. I never felt that he was insincere. You could trust him. If he said something, he would stick with it."[549]

Mike Louw presented the basic reasons that Mr Mandela was treated with respect and no games were played with him. The *ratione personae* is offered here. The spirit was one of good faith.

5.8 Conclusion

It has been shown that the reasons that the nuclear arsenal was relinquished and South Africa acceded to the Treaty on the Non-Proliferation of Nuclear Weapons were many, complex, and systemically interrelated. Although there was a general convergence on the reason for the accession, each respondent placed a slightly different emphasis on the reasoning. There are seven reasons that were proffered to justify this decision, and they are summarised below. But, before presenting those reasons, I wish to offer a brief synopsis of my interpretation of the relative emphasis placed by each respondent on the most important causal factors underlying the decision to relinquish the nuclear arsenal and accede to the NPT.

For Mr de Klerk, the most important issue was that this decision was a necessary condition for successfully concluding the constitutional negotiations and gaining international recognition for this settlement. He was also deeply concerned about ensuring juridical continuity in the context of the transition, and he was determined that the successor regime should be bound by the NPT prior to the conclusion of the constitution negotiations. His juridical concerns went further than the NPT and covered the entire ambit of South Africa's constitutional framework and international relations. Mr de Klerk indicated that the retention of the nuclear weapons while negotiating a democratic non-racial Constitution

[549] Interview with Mr Mike Louw at La Patt Café, Hatfield Plaza, Pretoria on 18 March 2005.

would have signified negotiations in bad faith, and for this reason they were relinquished. He did not wish to bequeath the successor regime a poisoned chalice, so he kept the negotiations in camera and out of Mr Mandela's knowledge in order to protect him from being stigmatised on account of being in possession of these weapons. The reason for Mr de Klerk's holding these sentiments was that he personally wanted the constitutional negotiations to be successful regardless of who ended up being the short-term political beneficiaries. Mr de Klerk did not refer to any concerns about the ANC's potential to proliferate nuclear weapons during the course of his animus, but it is suspected that these were legitimate but privately-harboured concerns.

Mr Pik Botha offered a similar explanation to Mr de Klerk as to the reasons for South Africa's accession to the NPT, but his testimony differed from Mr de Klerk's in certain important respects. Mr Botha emphasised the coercive pressure that the United States placed on South Africa to accede to the NPT as a precondition for international juridical recognition. This pressure was so incessant and intense that the researcher questioned whether South Africa had indeed voluntarily relinquished the nuclear arsenal and acceded to the NPT, or done so under duress. The conclusion that he reached was that it was a voluntary and independent decision although conducted under duress. One of the reasons that the United States placed such pressure on the predecessor regime to relinquish the nuclear arsenal was their fear that the ANC might have nuclear proliferation inclinations. It was discovered that there was indeed substance in this assertion. It was also found that there was an African continental view that these nuclear weapons should have been retained in order to place Africa in the prestigious nuclear club. The United States was therefore concerned about both South Africa's proliferation inclinations under an ANC regime and an African nuclear proliferation scenario as well.

Professor Stumpf's animus converged with that offered by Mr de Klerk. He too did not express a specific fear of the proliferation propensity of the

ANC or the OAU in an African continent-wide scenario. He did not identify a concern about juridical continuity, but he did strongly assert that the accession to the NPT was linked to the successful outcome of the constitutional negotiations and therefore, by implication, the successor regime's achieving positive international recognition status.

Professor Mouton's animus was simple and direct. For him the reason why the nuclear weapons were relinquished and South Africa acceded to the NPT is that the nuclear weapons were useless. He did share that he had personal experience of a senior ANC official's proliferation inclinations. Dr Barnard's view was that the decision to relinquish the nuclear arsenal was a furiously-contested internal decision, which hinged on different perspectives as to what could be achieved in terms of a deterrent quid pro quo. For him, the nuclear arsenal seemed to be a useful 'chess piece' that needed to be played for maximum political benefit for South Africa. His view was that it was not played to the greatest possible benefit.

Mr Mike Louw's perspective was unique, quite different from those expressed by all of the above respondents. He argued that the retention of nuclear weapons was contrary to *jus cogens* and that South Africa had an obligation *erga omnes* to rid itself of them. He stressed the pariah recognition status that these caused and regarded them as being symptomatic of a moral and legal degeneracy that could be changed only by making a totally fresh constitutional start. He therefore advocated the need for both a political and a legal revolution if South Africa were not to degenerate into a failed state.

The first reason proffered as to why South Africa relinquished the nuclear weapons and acceded to the NPT was that it was done to ensure that the new Constitution was written, negotiated and implemented without impediment.

Second, the weapons were relinquished and South Africa acceded to the Treaty on the Non-Proliferation of Nuclear Weapons because any practical military usage would have constituted a crime against humanity.

Third, after many failed attempts over a number of years, the deterrent usage of nuclear weapons had not achieved any tangible quid pro quo in the form of a reduction of sanctions. This point is arguable, though. The international goodwill accorded to the legitimacy of the constitutional transition could be contended to have been a major tangible and intangible quid pro quo. Indeed, the collapse of the Berlin Wall and the Soviet Union's withdrawal of support to the Cubans in the military battle fields in Angola made the South African presumptions regarding nuclear deterrence obsolete and irrelevant.

Fourth, the retention of the nuclear arsenal would have signified a mendacious intent by the predecessor regime towards the successor regime totally incompatible and contrary to the good faith commitment of negotiating a democratic and non-racial Constitution designed to dissolve the legacy of apartheid.

Fifth, the reason Mr Mandela was excluded from the relinquishment and accession processes was that his inclusion would have vastly complicated both the relinquishment and accession to the NPT and endangered the constitutional settlement. If Mr Mandela had inherited the nuclear arsenal, he would have been bequeathed a poisoned chalice. The retention of the nuclear arsenal would have compromised his international credibility, and would have been deemed a gesture in bad faith. The technical and legal challenge of relinquishing the nuclear arsenal and acceding to the NPT therefore needed to be handled meticulously and with great care. The ANC did not have the technical expertise to perform this task properly. The challenge of securing a new Constitution for South Africa rested on Mr de Klerk's ability to manage the constantly changing and fragmenting coalitions and groups which had vested interests in both the accession to the NPT and the constitutional settlement.

Sixth, Mr de Klerk was concerned about ensuring that the codification of rules relating to the succession of the state was managed in a way that ensured juridical security in the context of South Africa's international relations. He was therefore confronted by two intrinsically interrelated challenges that needed to be managed simultaneously. The first challenge that needed to be managed was the technical–legal one of relinquishing the nuclear weapons and acceding to the NPT. The second challenge was the danger of conflict arising from mistrust, and the different remits of the multiple stakeholders that might have been impacted by the nuclear relinquishment and accession to the NPT.

In retrospect, Andrew Feinstein's investigation into ANC corruption with respect to the multi-billion dollar arms deal justifies the perspicacity of the United States' concerns about criminal nuclear proliferation.[550] This arms corruption began in about 1998, four years after the ANC had assumed power.[551] The endemic corruption that has been evident in South Africa since the inception of democracy has been of such an intense and all-pervasive level that the researcher's personal view is that a criminal nuclear proliferation scenario would almost certainly have arisen had South Africa retained these weapons. The temptation to sell these nuclear weapons to the highest bidder, whomsoever it might have been, at the greatest profit would simply have been too great.

The researcher's viewpoint is that plausible South African nuclear proliferation scenarios under an ANC regime would have had:

- A political driving force pertaining to extensive reciprocity obligations to allies in the struggle – Libya, Cuba and Palestine would be obvious examples in point;
- A criminal driving force;

[550] Feinstein, Andrew; After the Party; Jonathan Ball Publishers Johannesburg, 2007.
[551] Op cit Feinstein at 155.

- A criminal driving force legitimised and camouflaged by ostensible political loyalties.

Extreme pressure was placed on South Africa by the Accessory Powers to roll back its nuclear weapons and accede to the NPT. This pressure raises the questions of whether South Africa's relinquishment of its nuclear arsenal and accession to the NPT was actually voluntary or not.

Given the presumption that South Africa's constitutional settlement was causally linked to the nuclear relinquishment, and accepting the fact that South Africa was also pressurised to relinquish these weapons and accede to the NPT, to what extent does it follow that South Africa's constitutional settlement was a sovereign act, and to what extent was its constitutional settlement an act of geo-legal imposition?

The researcher's view is that Mr de Klerk could have decided not to accede to the NPT. He would have gained support from elements within the SADF, ARMSCOR, the right wing, and more tacitly, from certain elements within the ANC and OAU as well. In gaining this support for non-accession, he would, however, have lost international support and credibility for the legitimacy of the constitutional transition. It would have been a parochial municipal gesture that would have been alienated by international law.

Mr de Klerk made a conscious decision not to follow the parochial path. This decision was, like many important decisions, made under great pressure. It was therefore a sovereign decision. The same logic applies to Mr de Klerk's decision to negotiate a new and democratic constitution. He could have elected to retain the status quo by increasing repression, but that would have been an unwise and destructive choice. The conclusion is therefore that the decision to relinquish the nuclear arsenal and negotiate a new constitution was a sovereign choice.

The expert sample were unanimous that there would probably not have been a successfully negotiated constitutional transition in South Africa had the nuclear weapons not been relinquished simultaneously with the constitutional negotiations. It was clear to Mr de Klerk and the other respondents that South Africa's constitutional transition would not have been granted international approval by the International Atomic Energy Agency, the Accessory Powers, the Nuclear-Weapons-States, the General Assembly of the United Nations, and the United Nations Security Council had it retained possession of these devices, and had it not acceded to the NPT.

While the constitutional negotiations were generally speaking, but not always, conducted as a relatively public matter, the nuclear negotiations were always, of necessity, conducted as a private and indeed secret matter. They were conducted in camera. The ANC played no decision-making or participating role whatsoever in the nuclear relinquishment process and South Africa's accession to the NPT. The reason proffered for this was that it was felt that the nuclear weapons issue would have complicated the constitutional negotiations, perhaps beyond redemption, and caused major rifts and unnecessary conflicts both within South Africa and internationally. The relinquishment of the nuclear arsenal was therefore an essential prelude to the new Constitution's being granted international legitimacy.

According to a research report presented to the Committee on Foreign Relations of the United States Senate:

"South Africa relinquished its nuclear weapons only after the coincidence of four developments, each of which appears to be critical to the South African decision.

These include:

1. *Reassessment of Threat* – The end of the Cold War reduced feelings of insecurity as 50 000 Cubans withdrew from the region.
2. *Desire for International Standing* – After the end of apartheid, the South African regime sought to normalise relations with the rest of the world in order to achieve

the political and economic assistance that would accompany such a move. The normalisation of relations required South Africa to relinquish its nuclear weapons.

3. *Personal Leadership* – President FW de Klerk's personal leadership represented a critical factor in the South African decision.
4. *Regime Change* – As the National Party prepared to relinquish power to the African National Congress, the National Party feared the ANC might share nuclear weapons or technologies with its allies in Libya, Cuba, the PLO or Iran.

A single reason cannot explain a country's decision to roll forward or roll back its nuclear weapons programme. Second, a state's decision regarding the development of nuclear weapons should not be viewed as a single distinct (and) irreversible decision. On the contrary, history consistently demonstrates that the proliferation decision making process of states can be better understood as a series of decision points in which states 'dial up' or 'dial down' their programmes in an effort to keep their options open. Decisions relating to proliferation evolve slowly and incrementally."[552]

The researcher's view is that the value of the four factors mentioned in the Report to the Committee of Foreign Relations cited above resides in their dynamic and systemic interrelatedness. They were all relevant to the decision to relinquish the nuclear arsenal, and to accede to the NPT, but the nuances of understanding and emphasis that underpinned the decision were obviously variable and subtle.

The reassessment of the military threat was unquestionably an important justificatory factor that provided a rationale for the relinquishment and accession decision. But this cannot be understood as a comprehensive rationale. South Africa could have retained those weapons had it wished to. Military threats wax and wane. The respondents understood that any usage of these weapons would have constituted a crime against humanity. Nuclear weapons could not have been used legally in the type of military conflict that manifested in Angola, because their effect is indiscriminate and disproportionate. The variability and subtlety of the matter is illustrated by the fact that the ANC Minister of Defence, Mr Joe Modise, bewailed the relinquishment decision, and wished for the retention of the nuclear

[552] Report to the Committee of Foreign Relations, United States Senate. 2008. 'Chain Reaction: Avoiding a Nuclear Arms Race in the Middle East'. One Hundred and Tenth Congress, Second Session, Washington DC. 21 –22. February.

weapons. The military threat was not the issue for him. His concern was the national prestige that would arise from their retention. Mr Julius Nyerere, the President of Tanzania, held a similar but Africa-wide view, which he communicated to Mr Pik Botha, and which is annotated in this chapter.

The search for international standing and positive as opposed to pariah state recognition was a complicated pursuit. It required changing the perceptions of South Africa as a pariah state to its being a respected member of international bodies. It also demanded, inter alia, that South Africa should not be tarred perceptually with the same brush as in the case of Iraq. It required the creation of juridical security in its international relations by demonstrating inter alia that the succession of state would leave Pretoria bound to its preceding treaties and agreements. This was a subtle project. The need for internal stability and standing within South Africa itself was an equally important component of the decision to relinquish the nuclear weapons and accede to the NPT.

‘The personal leadership of Mr FW de Klerk was fundamental to the rollback and accession decision and its interrelationship with the constitutional transition. It is very difficult to envision this process as having happened efficiently and painlessly without his leadership.

Chapter Six

How the Nuclear Arsenal was Relinquished and Accession to the Treaty on the Non-Proliferation of Nuclear Weapons and Compliance with International Law was Achieved

6.1 Introduction

In this chapter, the question of how South Africa's nuclear arsenal was relinquished will be interrogated, together with an analysis of how it acceded to the Treaty on the Non-Proliferation of Nuclear Weapons, in compliance with international law. This 'how' question is relevant to the research as it will assist in understanding the practical question of how South Africa fulfilled the terms and conditions of acceding to the Treaty on the Non-Proliferation of Nuclear Weapons. This clarification of the 'how' question is intended to serve a broader purpose, as it may be of assistance to other states who may have developed a nuclear weapons capability and have also decided to relinquish these weapons of mass destruction. This chapter is structured to introduce the reader to both the general themes and specific questions which are of basic importance as to how this matter would be pursued in the context of international law. The reader will firstly be introduced through the 'eyes' of Mr de Klerk and his co-respondents to the general themes that are relevant to understanding the 'how' question. It begins with a composite analysis of Mr de Klerk's contribution towards addressing the 'how' question in the context of the transitional negotiations leading to a non-racial and democratic Constitution. Mr de Klerk's role was crucial to this process. His colleagues (and the respondents) enacted the principles of his decisions and made them work in reality. The nuclear relinquishment and accession process was portrayed in the interviews as a focused conversation. The primary data that was shared by Mr de Klerk during his interview is cross-referenced with that of the other respondents. Some of the citations are fairly lengthy. Their value resides in the important primary data and factual information that they contain and their historically significant contribution in

clarifying an important and little-appreciated aspect of this country's nuclear status in conjunction with the constitutional transition. The information arising from the interviews is triangulated with relevant literature and then subjected to phenomenological reduction when and where appropriate. The phenomenological reductions assist in refining, contextualising and qualifying the insight arising from the data contained in the interviews.

Mr de Klerk's reflections on this matter are presented according to different themes relevant to how the weapons were relinquished and accession to the NPT was achieved. One of his important instructions was that an Announcement Plan should be put in place. The Announcement Plan is instructive because it provides a clear basis for understanding how he envisioned the implementation of the entire process of relinquishment and accession. His legal–strategic approach was multifaceted and designed to solve complex interrelated political and social problems. The first section of this chapter is therefore devoted to understanding Mr de Klerk's role in how relinquishment and accession were pursued. After this, the question of how these matters were synchronised will be revealed by means of a reflection on the Announcement Plan. Mr de Klerk instructed that an Announcement Plan should be established and a discussion of this plan, although it was continually adapted, is intended to provide the reader with a useful holistic view of the overall reasons guiding how it was envisioned that the nuclear arsenal would be relinquished, and how accession to the NPT would be achieved.

The nuclear relinquishment and accession process, although underpinned by complex reasoning, was a practical event that required effective project management skills. It is for this reason that Mr de Klerk placed considerable emphasis on selecting the right, high-quality people to perform this task. His decision to appoint Professor Wynand Mouton as the Oversight Auditor is therefore explored. This discussion about appointments has been included to reveal the role of human judgement and discretion in reaching high-quality decisions about who should be

entrusted with the responsibility of representing South Africa before the IAEA on the matter of Safeguards.

Mr de Klerk was compelled to apply a similar considered judgment at an institutional level when he decided that the Atomic Energy Corporation (AEC) would be the designated state authority to determine how South Africa would relinquish its nuclear arsenal and accede to the NPT. He did this knowing that there were other state agencies and corporations, for example, ARMSCOR and the South African Defence Force (SADF), which might have performed this role. He perceived 'institutional neutrality' in the Atomic Energy Corporation that commended it, rather than ARMSCOR, to be mandated with the authority to relinquish the nuclear arsenal and accede to the NPT. ARMSCOR or the SADF would almost inevitably have included persons who were strongly opposed to the decision to relinquish the nuclear arsenal and accede to the NPT and would therefore probably have attempted to subvert the process. This was perhaps because Mr de Klerk anticipated that other potential agencies and state corporations might have been tempted to filibuster because they perceived that they might lose power and influence because of the decision to relinquish the nuclear arsenal and accede to the NPT.

Mr de Klerk needed to ensure that the relinquishment process was conducted in an orderly and structured manner and for this reason he established internal nuclear regulatory protocols that afforded credence to the nuclear relinquishment and accession to the NPT. He granted the IAEA inspectors unfettered access to investigate any suspected military sites in South Africa. The matter of access to military sites and the question of state sovereignty proved to be an important question of general international applicability and relevance in relation to which Mr de Klerk needed to reach a decision. This temporary waiver of sovereign territorial rights was condoned by Mr de Klerk because it was anticipated that this gesture of granting unconditional access to the nuclear inspectors would create comity and trust and open the way for the constitutional negotiations to proceed smoothly. In addition, it contributed to South

Africa's gaining a new and positive recognition status. Indeed, this openness was commended by Dr Hans Blix to the United Nations Security Council, where open access was deemed to be an exemplary principle that should guide international practice with respect to how nuclear inspections are conducted in terms of the NPT. Because the nuclear relinquishment and accession process needed to be conducted in a structured fashion, the matter of internal regulatory controls was given careful attention. These controls afforded credence to the accession. It will be shown later that authorising documents were provided to those individuals charged with implementing the 'how' decision to ensure that no official countermanded Mr de Klerk's decisions.

Having presented the general framework of how South Africa set about relinquishing its nuclear arsenal and acceding to the NPT, the research will focus on specific aspects of the 'how' question which are guided mostly by the Statute of the IAEA and the NPT in the context of international law. These specific matters include inter alia:

- The form of accession is not prescribed under international law;
- The credibility of the Initial Report;
- Safeguards and Comprehensive Safeguards; and
- Acceptance by the General Conference of the International Atomic Energy Agency.

More specifically, the first matter that is presented is an interrogation about the flexibility on the 'form' of accession to the NPT. The 'form' of accession was not prescribed. The architecture of the form of accession was designated by the intention and consent of Pretoria to be bound by the NPT. The 'form' of accession therefore arose from the unique set of interrelated circumstances that gave rise to South Africa's decision to relinquish its nuclear arsenal and accede to the NPT. South Africa developed its own indigenous nuclear relinquishment and accession process that had a 'form' that solved its specific requirements on how to relinquish and accede to the NPT. It is contended that each country that

wishes to relinquish nuclear weapons and accede to the NPT will need to develop its own indigenous form of treaty accession suitable to its reality and specific factual circumstance. This is because each state will have its own country-specific case that will need to be addressed on its own merits.

The discussion on the 'form' of accession is also a logical and necessary prelude to an assessment of the matter of the Initial Report and the authority of the Safeguards Audit Agreement. The documentation that contained the vital nuclear evidence that was reported to the IAEA and formed the database on which Safeguards was based was called the 'Initial Report' by the IAEA. The Initial Report and Safeguards need to be discussed in sequence, starting with the Initial Report and followed by the questions that revolved around Safeguards. In South Africa the Initial Report was termed the 'Opening Inventory', and they are therefore one and the same. The discussion about the Initial Report is a necessary precondition for understanding how Safeguards are implemented. The accession process was predicated on a carefully compiled factual, and empirically verifiable, body of scientific information – evidence – that validated South Africa's entire nuclear programme. It needed to be verifiable, according to the laws of nuclear physics, which were regulated by the NPT and the IAEA's Safeguards protocols.[553] A precise and credible Initial Report/Opening Inventory was compiled by the South African Safeguards Manager, Dr Nick van Wiellig, in record time for presentation for review by the IAEA's inspectorate. This Initial Report provided crucial, empirically validated information that reconciled the nuclear inspections in preparation for accession to the Treaty on the Non-Proliferation of Nuclear Weapons.

The onus was on South Africa to present a substantively impeccable Initial Report to the International Atomic Energy Agency, in pursuit of compliance with Safeguards. Any noteworthy variances could have meant that South

[553] Cochran, Thomas. 1994. 'Highly Enriched Uranium Production for South Africa's Nuclear Weapons'. *Science and Global Security*, 4(6):166–176.

Africa's highly enriched uranium and nuclear weapons would not be properly accounted for on relinquishment, and that the Safeguards would therefore not have been met. Had this occurred, the Initial Report would not have been endorsed by the International Atomic Energy Agency. Safeguards would not have been approved for ratification by the United Nations General Assembly, and the country's credibility and sovereign risk profile would probably have been severely shaken. Needless to say, its pariah recognition status would have been perpetuated under these compromising circumstances and state continuity jeopardised. The constitutional transition would perhaps have been thwarted and international juridical insecurity enhanced.

The Safeguards constituted the audit standards of the relinquishment and accession exercise, as determined by the International Atomic Energy Agency and its multinational inspectorate of nuclear experts. South Africa was subjected to two phases of Safeguard Audit.

The first process of verification was the IAEA's Safeguards, which related to peaceful nuclear usage for domestic energy creation. The remit of the first Safeguards pertained to the present only and did not audit South Africa's previous military nuclear weapons programme at all. The second Safeguards Audit investigated the previous programme. Two different types of nuclear expertise were therefore required for the different audits. The first type of expertise required was civilian nuclear expertise, and the second was military nuclear expertise. The second phase of verification, which included the military nuclear weapons audit, was conducted by an enlarged team of nuclear weapons experts who operated under the aegis of the IAEA and were referred to as the 'Extra Team'. These two audits impacted on the form of accession. Furthermore, the United States played a dominant role in the activities of the Extra Team. In the phase of the second Safeguards Audit by the Extra Team, it was particularly important to build trust with the Americans. They were mistrustful about South Africa's intentions with respect to the nuclear arsenal. This was borne out by their historical experience. For this reason, the question of how trust

was developed is explored, as it lies at the heart of settling a transaction in good faith. It was recognised that this mistrust, if not counteracted, could perpetuate South Africa's pariah recognition status. Trust was gradually developed through the South Africans and Americans planning interactively together, sharing information and solving problems jointly. In this way, positive and respectful relationships were cultivated. The matter of trust is equated with the measure of good faith relating to the accession. It is anticipated that this will be a matter of specific concern in all processes of accession to the NPT.

The penultimate matter addressed in this chapter is an investigation as to how South Africa's Comprehensive Safeguards credentials were accepted at the General Conference of the International Atomic Energy Agency in September 1991. This acceptance of the Comprehensive Safeguards once again circles back to the substantive integrity of the Initial Report that was discussed earlier in the chapter, and which constituted a vital building block justifying the IAEA's recommendation, flowing from the Safeguards, that South Africa's accession to the NPT should be supported. South Africa had proved beyond reasonable doubt and to the satisfaction of the highest scientific standards possible that it had indeed relinquished its nuclear arsenal in every conceivable manner. Furthermore, it could not and would not proliferate nuclear weapons in the future. South Africa's achievement of compliance with the Comprehensive Safeguards Agreement was a vitally important step in its accession to the NPT. The IAEA's endorsement of South Africa's compliance with the terms and conditions of that Agreement was also an important ceremonial process, underpinned by comity, where South Africa's 'good faith' in acceding to the NPT was ratified before a world audience. It was therefore important to re-establish good international relations. It is significant that the timing was carefully synchronised with South Africa's constitutional transition.

Article V of the Statute of the IAEA is devoted to matters pertaining to the General Conference of the IAEA. It provides the authority to, inter alia:

"E. 3. Suspend a member from the privileges and rights of membership in accordance with Article XIX ...

6. Approve reports to be submitted to the United Nations …

7. Approve any agreements or agreements between the Agency and the United Nations."[554]

On 16 September 1991, South Africa signed a Safeguards Agreement with the IAEA. Its expulsion from the General Conference of the IAEA was revoked, and the country regained its seat.[555] This reinstatement came about because South Africa's Initial Report was ratified and deemed compliant with the Comprehensive Safeguards Agreement. The relinquishment and accession to the NPT was conducted as a legal-strategic project that was articulated and stringently controlled by Mr FW de Klerk, and executed by a trusted relinquishment and accession team. Mr de Klerk instructed the team to comply to the letter with South African municipal law and international law as it pertained to accession to the Treaty on the Non-Proliferation of Nuclear Weapons.

Stumpf recalled that:

"Our brief and instructions from Mr de Klerk were 'absolutely not to put a foot wrong, and to follow the letter of the NPT and the Comprehensive Safeguards Agreement'. I had to dot all the i's and cross all the t's. That is why he gave me the instructions to comply with the IAEA."[556]

All the terms and conditions of the NPT needed to be perfectly complied with before the weapons could be 'deemed to be relinquished', and accession to the NPT could be ratified.

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[554] Statute of the International Atomic Energy Agency (IAEA) at 3–4.

[555] *Nuclear News*, October 1991 at 26.

[556] Interview with Professor Waldo Stumpf at the University of Pretoria, Minerals Science Building, Pretoria on 18 October 2007. The inference that Mr de Klerk placed great importance on reconciling between a conflict of laws resides in inter alia the fact that he gave Professor Waldo Stumpf and other key persons written instructions to relinquish the weapons in order to ensure execution, and his appointment of the Oversight Auditor and instruction that he should adhere to all terms and conditions of the NPT. He was also deeply concerned about ensuring constitutional continuity and juridical security

6.2 Mr de Klerk's Role in How the Nuclear Arsenal was Relinquished and How South Africa Acceded to the NPT

Mr de Klerk's testimony makes it evident that he took the matter of the relinquishment of the nuclear arsenal and accession to the NPT personally and devoted constant and dedicated thought and energy to managing the matter. It is fair to infer that that he regarded it as a high priority, and it is probably because he took it so seriously that the process was conducted successfully. The leader in charge of the nuclear relinquishment and accession processes maintained stringent control procedures in order to ensure that there were no variances and breakdowns. His technical team consented to the intention to accede to the NPT, and as a team they were able to maintain their consensus on consent and intention throughout the entire process.

Mr de Klerk explained:

"I appointed a technical team to advise me on the way forward in a process of decommissioning the nuclear arms which had been assembled. When I took the decision to relinquish our nuclear arms, all the key players in my Cabinet who were involved in the nuclear oversight accepted this decision.

This included Magnus Malan who might not have been that enthusiastic, but who was part of that decision. Of course some individuals and scientists who were involved in the nuclear programme were upset. However, I gave the political decision-makers the fullest opportunity to influence this decision to relinquish our nuclear arsenal. It was not an imposed decision."[557]

Phenomenological Reduction

Mr de Klerk is pointing out that he went to great pains to ensure that the internal process of reaching a decision on the relinquishment of nuclear weapons was agreed upon by the key decision-makers. This would appear to be in contrast to the decision-making process in Iraq, where there was little or no internal agreement and consensus on their

[557] Interview with FW de Klerk at the Offices of the FW de Klerk Foundation in Plattekloof, Cape Town on 4 October 2007.

relinquishment process. The researcher's view is that the absence of an internal Iraqi consensus was one of the causal factors that contributed to the subsequent war. Conversely, the presence of an internal consensus in South Africa had a direct and positive bearing on the outcome.

"I was acutely aware that South Africa needed to adopt an internationally-credible process to do so. I appointed Professor Wynand Mouton, former rector of the University of the Free State, to preside over this decommissioning process. He was a brilliant academic and had formerly been head of the SABC. Mouton was an international scientist of repute. He led the entire nuclear decommissioning process. Mouton conducted careful inspections and created a credible process of verifying the decommissioning.

When this process was completed in South Africa, it needed to be signed off with the International Atomic Energy Agency, and they needed to check all our facilities. We invited them to check all the former nuclear facilities and materials and accounted for everything.

Had the decision to relinquish our nuclear arsenal not been taken early on, the constitutional transition would have been a much more dangerous and prolonged process than it was. It would have been more analogous to the changes that are presently taking place in Israel, where they are negotiating on an excruciatingly painful tit-for-tat-basis to (for example) release so many Hamas guerillas, for some or other concession. That type of process is inefficient, time-consuming and painful.

The decision to un-ban the ANC and release all political prisoners was unilateral, but my political constituency needed to be brought along with this decision.

There are some that have said that we should have gained more leverage out of our atomic capability. I personally do not think that South Africa could have (gained more leverage), and that had we attempted to do this, it would have created intense mistrust, muddied the waters and confused the constitutional transition.

Indeed, if we had chosen the Israeli negotiation process, every move that we made towards relinquishment of the nuclear arsenal or any other initiative would have been seen as a concession."[558]

Heald: "Was the ANC in the know about the nuclear relinquishment?"[559]

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[558] Op cit De Klerk. This comment by De Klerk again resonates and is perfectly congruent with the considered viewpoint offered by Barnard mentioned above.
[559] Loc cit.

De Klerk: "I think that as a matter of courtesy, Mandela would have been advised, probably via a letter. I cannot at this stage recall exactly how he was advised but I am sure that he was. You might need to ask Dave Steward about this fact. Dave Steward has the most astonishingly excellent memory."[560]

Mr de Klerk's first priority was that the relinquishment and accession should be conducted as an internationally credible process. An internationally credible process would be logically congruent with South Africa's achieving positive international recognition for its new non-racial democratic Constitution. A process that lacked international credibility would lead to the opposite outcome. An important feature of the credibility of the process was that it needed to be expertly project managed by a person of repute. This was why Mr de Klerk took the decision to appoint Professor Mouton. Mr de Klerk briefly alluded to his offer of access to the IAEA's inspectors, but at this stage in his interview did not spell out the magnitude of that offer and its ramifications. (That is addressed later in the chapter.) The commentary about the importance of taking this decision to relinquish the arsenal and accede to the NPT early on in the constitutional negotiations was signified as an important cornerstone of its success. It reveals that the nuclear accession and constitutional negotiations needed to be carefully synchronised. They could in fact have become interlinked in a very negative fashion, had the nuclear programme been placed in the public domain. They were simultaneous processes, and, to the best of my knowledge, this is the first time that this assertion has been made in the literature. It was for this reason that the relinquishment and accession were set about confidentially and conducted unilaterally. Confidentiality was a contributing factor to the success of the intervention. Mr de Klerk's allusion to Hamas and the Israeli negotiations is noteworthy, because they represent a case study in fragmenting groups and an example of poor comity.

[560] Loc cit. It has been ascertained from the interview with Stumpf that Mr Mandela was informed about South Africa's decision to relinquish its nuclear arsenal only the day before this announcement was made to the world.

Mr de Klerk had a choice. He could either conduct the process incrementally, as was done in the case of the Israeli-Palestinian scenario, or conduct it unilaterally it by adopting a 'big bang' approach. He chose the latter path, and he has proved to be correct in his judgement. He decided to exclude the ANC entirely from this process, and again this was wise from a practical perspective, as it prevented the process from breaking down around the inability to maintain sufficient consensus and obviate the ever-present risk of fragmentation. My final comment is that I am certain that Mr de Klerk was being tactful in his response to my question about whether the ANC were informed about the nuclear relinquishment or not. The answer to this question is that they were certainly excluded from the process entirely.

6.2.1 The Announcement Plan and Question of Timing

This analysis of the Announcement Plan is intended to assist the reader in gaining a clearer understanding of the entire process of nuclear relinquishment and accession from a holistic perspective. Professor Stumpf's testimony is particularly important in offering clarity on this matter. He, of course, was one of the persons tasked with designing the Announcement Plan. The announcement of South Africa's relinquishment of its nuclear arsenal and accession to the NPT was delayed on a number of occasions because of very important additional reasons.

Mr de Klerk delayed the announcement because he felt that South Africa would be unfairly (and illegally) tarred with the same brush as Iraq. At that time, the Gulf War was raging. Iraq had indeed proliferated nuclear weapons and other weapons of mass destruction. It had acted in breach of the NPT. South Africa had never breached the NPT, but because of its international pariah status, Mr de Klerk felt that it would have been perceived as a threat to world peace. This might have occurred had South Africa's possession of a nuclear arsenal been prematurely disclosed to the international media. It would most certainly have tarnished its aspirations for a positive international recognition status being accorded to the new

Constitution. Had the security situation in Angola, instead of stabilising, radically degenerated, there might have been a call by the military leadership to hold onto these weapons as deterrent bargaining tools. A scenario of Pretoria retaining its nuclear arsenal and then reversing an undertaking to accede to the NPT after international disclosure of its nuclear weapons status could have led to a greatly-enhanced perception of pariah recognition status, sovereign risk and juridical insecurity. Constitutional continuity would have been precarious at best. It would have been difficult to negotiate an internationally-recognised constitutional settlement successfully under this type of situation. Mr de Klerk received an overwhelming vote of confidence from the electorate in the last white referendum, which sought electoral endorsement for the constitutional changes, to proceed with the constitutional negotiations. Mr de Klerk interpreted this electoral endorsement as constituting a mandate from his constituency to relinquish the nuclear weapons, and he set about planning to accede to the NPT.[561]

The relinquishment of the nuclear arsenal and the constitutional settlement were shown in the previous discussion to be intrinsically interlinked.[562] The timing of the nuclear relinquishment, accession and constitutional negotiations had to be carefully synchronised, because the concept of the nuclear relinquishment process was so huge that it could easily have eclipsed the perceived import of the constitutional negotiations in the eyes of the world. Mr de Klerk therefore delayed the timing of the announcement until he was confident that there would be no negative reactions to the decision that might impel a reversal of the constitutional settlement.[563] The manner in which the announcement was made was also important to the success of the accession process. Mr de Klerk applied the 'doctrine of no surprise' to the key stakeholders. He ensured that no one was 'wrong footed' or compromised by the timing of the announcement. He did not want anyone to be embarrassed by the

[561] Loc cit.
[562] Op cit Stumpf.
[563] Loc cit.

decision to relinquish the nuclear weapons and accede to the NPT. He placed a priority on the preservation of excellent relationships. He therefore took particular care to ensure that the IAEA inspectors, and specifically Dr Hans Blix, were in the country at the time of announcement.[564]

Dr Blix was informed of the decision on 22 March 1993, the day before the formal announcement was made. Mr Mandela was informed about the decision to relinquish the nuclear arsenal and accede to the Treaty on the Non-Proliferation of Nuclear Weapons the next day, on the morning of 23 March 1993. The confirmation of the sequence of the announcement and accession to the NPT proves that the process was conducted unilaterally.[565]

Professor Stumpf explained the reasoning that underpinned the Announcement Plan:

"People have often asked me whether we could have acceded earlier. The answer to the question is simple ... No, we could not have acceded earlier. The question is, however, a valid one. Should we not have announced the relinquishment of the nuclear weapons programme at the point of accession? That was on 10 July 1991.

Should Mr de Klerk have stated to the world: 'We acceded to the NPT today. We had this nuclear weapons programme, and it is now dismantled, and the IAEA will now be invited to South Africa to verify that the nuclear weapons have been dismantled.'?[566] That would perhaps have been the correct way to have done it, from a purely logical perspective.[567]

[564] Ibid.
[565] Ibid.
[566] The following assessment explores how the accession to the NPT was synchronised with the constitutional negotiations. The announcement of South Africa's accession to the NPT and relinquishment of its nuclear arsenal had to be withheld until such time as both processes were aligned. If the announcement had been made prematurely, it would have opened up a Pandora's Box for the constitutional negotiations.
[567] The correct way from a logical perspective does not mean the correct way from a political perspective.

I know that there was one meeting at the Union Buildings where this matter was in fact discussed extensively.[568] Mr de Klerk was very hesitant about following that course. We said to Mr de Klerk: 'This really is the correct way to do it.' But he said no.

There were two reasons for Mr de Klerk's hesitancy. Firstly, it was in the middle of the First Iraq War (the Gulf War). I explained to you in my notes on your research proposal that you should keep in mind that Iraq was a signatory to the NPT, and that Iraq had really broken the NPT. South Africa was in an entirely different situation. South Africa had never signed the NPT."[569]

Phenomenological Reduction

Professor Stumpf reveals in this transcript that the question of choosing the appropriate timing was central to understanding how the nuclear accession was conducted. The reality is that the negative perceptions and mistrust that arose from the Gulf War could have been imputed to South Africa, regardless of the fact that the point of accession was on 10 July 1991, and regardless of the substantive merits of the South African case. Mr de Klerk judged that the world was not yet ready to hear another instance of nuclear proliferation, albeit one with a happy ending of accession to the NPT. The substantive case of South Africa's nuclear relinquishment and accession was not ready for presentation, regardless of its technical merits. Mistrust about South Africa's hitherto pariah international recognition status still needed to be permitted time to dissipate. It did not matter that Iraq had acted unlawfully and breached the NPT and that South Africa had never breached the NPT. Both countries were regarded with great suspicion, and South Africa's bona fides still had to be put to the test.

"People don't understand how the IAEA operates. The news media and the general public often don't understand their *modus operandi*. They think that the IAEA comes here as a swarm of people and that they look behind every little cupboard. It does not work like that. It is highly scientific. In our case, they went to the Y plant and they got hold of all the production records that we had kept over all the ten years of production. Then they

[568] Op cit Stumpf. Discussions at the Union Buildings had the purpose of seeking *ground rules* of appropriate nuclear conduct.
[569] Op cit Stumpf. Legal status of South Africa *vis-à-vis* the NPT. Mr de Klerk understood that the world would not have understood this vitally important but subtle legal difference.

analysed those records meticulously, and predicted how much material the plant should have used and could have produced, and compared that with the material that we had declared. On this basis they were able to calculate exactly what we had done within a minuscule margin of error, which was not relevant. This was a lengthy exercise. This is what nuclear verification is all about.

At that point in time, the purpose was to verify that South Africa had declared all the material and it was under Safeguards. In other words, it was intended that the nuclear material should be used for peaceful purposes, and this was subject to verification from the IAEA's Comprehensive Safeguards Agreement. The Americans wanted to get in on the act because they still thought that we would hide some HEU and so on."[570]

Phenomenological Reduction

Professor Stumpf discussed in the passages above the substantive integrity of the Safeguarding process. It was obviously a process of scientific robustness and substantial integrity, but this rigorousness was understood only by very few people: the IAEA inspectors and their nuclear expert counterparts. It was felt that their message of the integrity of the process would not impress the world media, and a much more carefully conceived public relations programme would need to be implemented. This public relations programme can be understood as Mr de Klerk's Announcement Plan.

"It was not simply a matter of Mr de Klerk standing up in Parliament and announcing that there had been a very extensive nuclear weapons programme that had just been dismantled. The Announcement Plan involved informing various parties beforehand. Mr de Klerk also realised that he did not want the fact that:

(a) we had such a programme, and
(b) we had dismantled it;
(c) to take key decision-makers off-guard.

He did not want key decision-makers to read about the nuclear relinquishment in the headlines of the newspapers or hear it over the news. We had to draw up an extensive Announcement Plan in which crucial people were informed of this programme before it was to be announced in Parliament. The day before the announcement was made was 22 March 1993. It was then that the Director General of the IAEA, Dr Hans Blix, was

[570] Loc cit.

informed. He was the last guy that Mr de Klerk would have wanted to have suddenly surprised. The international newspapers would have been onto him. There was another technical requirement that needed to be considered. We had to delay the announcement until there were IAEA inspectors on site here in South Africa.

I have mentioned to you before that at that point we had signed a Safeguards Agreement. The IAEA inspectors were here in South Africa quite frequently, and they were also here for the Prior Safeguards Agreement. We knew that if there were no inspectors on site, this announcement would be embarrassing to the IAEA, and we did not want to inflict embarrassment on them. We did not want them to have to scramble to get here. The world would expect it of them to be in South Africa immediately. We thus were compelled to wait until March, when they were in the country and at hand. Right, so we had two senior inspectors here on site doing their normal inspection. On the morning of 23 March, Mr Mandela was informed before the announcement was made in Parliament. So, too, was Mr PW Botha. I know that my former head, Wynand de Villiers, had to travel down to Wilderness and inform him. I am not sure who else was informed. There were one or two others that were informed.

At two o'clock in the afternoon of 23 March there was a big meeting in Cape Town of all the diplomats. They were called together. The Director General of the Department of Foreign Affairs and I had to announce that the programme had been set in motion and that it was now dismantled. The diplomats were told that it was to be publicly announced later on in the afternoon so that nobody would get caught off-guard. They wanted to ensure that no one would possibly be compromised by the information. At 5 o'clock that afternoon, Mr FW de Klerk then announced it in Parliament.

That is the reason there was quite a long time between the time that we acceded to the NPT and were compliant with the NPT. This was actually because of the interim political situation. It is clear that those persons who were responsible for South Africa's nuclear relinquishment process did not want there to be any confusion about the matter. They did not play games, as was the case in Iraq. The rules underpinning the nuclear relinquishment process were co-operation and collaboration, not competition and conflict. This is because the creation of an international attitude of trust in South Africa was essential to its constitutional success."[571]

[571] Loc cit. The 'doctrine of no-surprise' was contained in the Strategic Arms Limitation Treaty (SALT) and called for the US and the USSR to inform one another about their own nuclear weaponisation developments, so that in the event of a new weapons technology being created, it would not spur an arms race and create escalatory panic. The care with which Mr de Klerk approached this matter is remarkable. The Iraqi weapons inspections were conducted in a manner that was oblivious to the centrality of process.

Phenomenological Reduction

Mr de Klerk used the Announcement Plan as a framework for ensuring that harmonious relationships were maintained during the relinquishment and accession process with all the key decision makers. He also placed considerable emphasis on ensuring that high levels of comity were always observed. Careful thought was devoted to ensuring that ceremonial process and protocol were always of the highest order so that no individual or state would be offended and thereby place this fragile process at risk.

The Announcement Plan was designed to ensure that the message that South Africa had developed and possessed a nuclear arsenal, then relinquished it and acceded to the NPT, was received in an appreciative and credible manner, both within South Africa itself and internationally. Mr de Klerk understood that South Africa and the world were not ready to accept the fact that South Africa's point of accession to the NPT was actually 10 July 1991. It is contended that the United States and the United Kingdom were politically reluctant to accept the truth that Iraq had actually already relinquished its nuclear arsenal and was completed depleted at the conclusion of the Gulf War. They had committed much political capital to demonising Iraq on its questionable credentials relating to its alleged possession of nuclear weapons. It might have been very embarrassing for them to admit that they had been wrong in their speculation and accusations about Iraq. Mr de Klerk understood fully that there would have been serious credibility problems associated with an announcement that South Africa had relinquished its nuclear weapons in 1991. South Africa's positive recognition approach had to be carefully managed and timed. The correct timing of this announcement would help to make acceptance of the legitimacy of the constitutional agreement an international formality, ensuring constitutional continuity and maintaining international juridical security. It was imperative that none of the stakeholders should be permitted to be embarrassed by the process, as that embarrassment could have led to the subversion of accession to the

NPT, and therefore to the foundering of the constitutional settlement. The synchronisation of the process of which timing was an inherent component therefore required particular care.

In this way, Mr de Klerk was able to dissolve one of the most serious threats to the constitutional transition. A high quality of foresight and wisdom characterised the design of the Announcement Plan.

Ian Brownlie confirmed that:

"International comity, *comitas gentium*, is a species of accommodation not unrelated to morality but to be distinguished from it nevertheless. Neighbourliness, mutual respect, and the friendly waiver of technicalities are involved, and the practice is exemplified by the practice of exemption of diplomatic envoys from customs duties. Oppenheim writes of the rules of politeness, convenience and goodwill observed by states in their mutual intercourse without being legally bound by them."[572]

The interaction between the South Africans, who were vested with the responsibility of relinquishing the nuclear arsenal, the IAEA inspectorate, and the US inspectorate had to be very carefully addressed. Von Baeckmann et al clarified that the IAEA and the South African nuclear relinquishment and accession team needed to develop joint seminars, and were obliged by the nature of the project to work co-operatively and collaboratively together.

The relevant Article in the IAEA's Statute is:

"*Article VIII Exchange of Information*

A. Each member shall make available to the Agency all scientific information developed as a result of assistance extended by the Agency."[573]

The project was intensely intricate and complicated, and the full extent of the programme could be completely understood only by sharing a deep

[572] Brownlie, Ian. 2003. *Principles of International Law*. Sixth Edition. Oxford: Oxford University Press. 28.
[573] Statute of the IAEA at 7.

scientific discourse. This understanding was the first step that needed to be taken on which a foundation of trust could be built. Trust had to be cultivated between the South African nuclear relinquishment and accession team and the IAEA. The trust arose from sharing data and information, in pursuit of compliance with the Comprehensive Safeguards Agreement. An informal moral code of conduct and a covenant of trust gradually developed, on which the legal accession to the NPT in all its complexity could be predicated. The preservation of respectful, trusting relationships – comity – was a central feature of South Africa's nuclear relinquishment process and accession to the NPT. Professor Stumpf offered an example of the great pains to which the South Africans went in order not to embarrass Dr Hans Blix in any way. He confirmed:

"The day before the international announcement was made on 23 March 1993, the Director General of the IAEA, Dr Hans Blix, was informed. He was the last guy that Mr de Klerk would have wished to have suddenly surprised. We knew that if there were no inspectors on sit, this announcement would be embarrassing to the IAEA, and we did not want to inflict embarrassment on them."[574]

It is clear that those persons who were responsible for South Africa's nuclear relinquishment process did not want there to be any confusion about the matter. They did not play games, because they valued comity. Professor Stumpf contended that a failure to have informed the IAEA about the then pending announcement that South Africa had relinquished its nuclear weapons and then acceded to the NPT would have been construed as a gross breach of trust and of good faith. It would have undermined comity.

The final section of this analysis will be devoted to exploring how the actual timing of the relinquishment and accession process was synchronised with the Announcement Plan. 10 July 1991 was the seminal date – 'the point of accession' – when South Africa acceded to the NPT. Mr de Klerk then delayed the announcement of South Africa's accession

[574] Op cit Stumpf. This citation provides an indication of the importance of the relationship aspect in South Africa's relinquishment and accession process.

to the NPT, its development, and subsequent relinquishment of its nuclear weapons capability until 23 March 1993. It was a full eight months later, in November 1993, that the General Assembly of the United Nations accepted that South Africa was compliant with the NPT, and Pretoria's accession was ratified. This purposeful delay of the announcement of South Africa's relinquishment of its nuclear arsenal and accession to the NPT therefore covered a 20-month period.

It has been argued that the constitutional settlement would almost certainly have been placed at deep risk had the announcement of the accession to the NPT been made on 10 July 1991. The country and the world were simply not ready for the announcement. The constitutional transition towards a non-racial democracy was not yet assured. The political climate in South Africa at that time was volatile, and there were waves of violence around the country. The acts of violence were particularly outrageous in KwaZulu Natal, and might have degenerated into civil war if unchecked. An announcement at that time would have been incendiary. Mr de Klerk would have risked being attacked from all sides of the political spectrum had he not carefully planned the timing of the announcement.

Professor Stumpf offered his assessment of the sequence of accession in his following submission:

"Now I also noticed that in some areas you were a bit uncertain about the dates of the nuclear rollback. They need to be corrected. I want now to discuss the dates. The first meeting about dismantling the nuclear arsenal was in September 1989. I do not have the exact day, though. It was approximately two weeks after de Klerk took over from PW Botha. That was the first meeting, where the fundamental relinquishment decision was taken. It was not a discussion. It was a decision. FW de Klerk made the decision. FW de Klerk told me that we should go away, and draw up a Rollback Plan for the entire matter. He requested a broad plan (the nuclear relinquishment) and instructed me to come back to him with this Rollback Plan as soon as possible. It was in November 1989 that we took the first Rollback Plan for the nuclear relinquishment process to Mr de Klerk. We

estimated that: 'it would take so long, and this is when it would start,' and so forth.[575] So it was in November, when we took the plan to him.[576] I don't know the exact day now, but we took the plan to him.

We explained to FW de Klerk that it would take about six months to set up all the documentation and procedures for this to be enacted. It would then take an estimated twelve months to dismantle the six devices. So in November 1989 FW de Klerk got our plan and he approved it. We realised that we needed a signature from Mr de Klerk to authorise the nuclear dismantlement. It was not good enough for us to say that we were at a meeting where this matter was decided. We needed a formal document authorising this decision in order to enact it. Early in January 1990, we requested Mr de Klerk to authorise the relinquishment formally with an Authorising Document and his personal signature. We requested a written instruction from Mr de Klerk. Mr de Klerk said fine. Yes – he would give it to us, and he issued two written instructions, which we got in February 1990. Official authorisation was granted in February 1990, but the decision to relinquish the nuclear arsenal had been taken some months prior to that. The written instruction said that 'FW de Klerk hereby gives instructions to us to dismantle this nuclear weapons programme in a safe and secure manner ... to remove the HEU from the devices, to re-melt them into unrecognisable ingots (because they have a special shape), into little ingots, transport the material to the AEC, who were really the owners of the material at that stage ... and then finally to advise government on accession to the NPT as a non-nuclear-weapons-state'.

Mr de Klerk in fact issued us with two authorising letters, because the first one went to General Magnus Malan, who then took it to both ARMSCOR and the South African Defence Force. The other letter went to Minister Dawie de Villiers, who was then my Minister (Minerals and Energy). I received that letter (the Authorising Document).That was the essential chronological sequence of the decisions that were taken. The actual decision was already taken in September '89. Beyond that it was just planning."[577]

Mr de Klerk's commitment to an Authorising Document is again indicative of internal regulatory and legal integrity under South African municipal law.

[575] Op cit Stumpf. For Stumpf, the starting point of the decision to relinquish the nuclear weapons programme and accede to the NPT was his instruction from De Klerk to draw up a rollback plan. The 'how' question required the development of a comprehensive internal relinquishment programme. This was complementary to the IAEA's regimen under the Treaty on the Non-Proliferation of Nuclear Weapons.

[576] It was also in November 1989 that the meeting took place in Vienna with the IAEA, where Mr de Klerk realised that South Africa would not be able to achieve a quid pro quo for its accession to the NPT.

[577] Op cit Stumpf.

6.2.2 Mr de Klerk's Appointment of Professor Wynand Mouton as Head of Oversight of the Nuclear Relinquishment Process and Accession to the NPT

Professor Wynand Mouton was required to conform to a strict and regular reporting obligation to Mr de Klerk on all matters related to the relinquishment of the nuclear arsenal and accession to the NPT. Mr de Klerk required full and exact information of the status of the process at all times. Professor Mouton was deployed in the role of Oversight Auditor of the entire process. His instructions were that he should abide by the NPT correctly and to the letter. This also meant that he needed to comply with the Statute of the IAEA as well. Professor Mouton acted as an Inter-Ministerial Chairman on the nuclear rollback and accession process. This meant that he had to chair meetings between various organisations, ministries, companies and departments, some of whom might have opposed the accession decision, and indeed actively tried to sabotage the process.

As Oversight Auditor, Professor Mouton was required to understand fully the entirety of the complex nuclear physics that underpinned the creation of the bomb, and all other technical matters relevant thereto, and to convey this knowledge to the inspectorate of the IAEA and the Extra Team in a coherent and logical manner that proved to the various inspectorates the integrity of both relinquishment and accession. Professor Mouton's remit required mastery of stringent control and safety procedures to manage the HEU in a safe and orderly fashion, in terms of both the Statute of the IAEA and the Treaty on the Non-Proliferation of Nuclear Weapons. Professor Mouton was tasked to face tough processes of interrogation from the IAEA inspectors, including Dr Hans Blix. He also authorised the physical destruction of all documents related to the nuclear weapons programme in synchronisation with the accession to the NPT. Finally, he was a physical witness to the dismantlement process and the de-enrichment and transfer of the HEU.

The duty of the IAEA was to interrogate every aspect and detail of South Africa's nuclear programme, in order to determine compliance with Safeguards. This interrogation was so detailed, exacting and scientifically precise that it required world-class expert knowledge, not only of nuclear physics, but also of nuclear weapons as such. The requirement for the task of 'Head of Oversight' was ideally a brilliant and internationally respected nuclear physicist who had the authority to chair politically-charged and difficult meetings effectively. His credibility needed to be dual – both internal and international. Accession to the NPT is a task that can hardly be undertaken without the participation of internationally credible scientists. It would be preferable if these scientists were indigenous, because the development of nuclear weapons is frequently linked with international insecurity about constitutional sovereignty, which is complicated by association with matters of national prestige and pride. Professor Mouton possessed the ability and knowledge to lead the oversight process with credibility at both a local and an international level. He alluded in his response to the crucial importance of appointing people who could be trusted, and reflected upon the moral covenant of trust. It has been noted that Mr de Klerk appointed Professor Mouton on the basis of trust in his technical competence and credibility. Professor Mouton also appointed his own staff according to the same criteria. He emphasised the imperative of building trust between the inspectorate and the South African relinquishment team as being fundamental to the success of the task of accession to the NPT.

"In 1989, Mr de Klerk approached me and asked me whether I would be prepared to act as his auditor on the relinquishment of the nuclear arsenal in South Africa. He asked me whether I would be prepared to oversee the dismantling of the nuclear weapons programme, and he said that this would require that I had to report to him, on a strict and regular basis, that all the requirements of the NPT were fulfilled to the letter.

He instructed that everything had to be done correctly, and every term and condition that was required for South Africa's accession to the NPT had to be perfectly fulfilled. I was requested to audit the entire nuclear arsenal as it pertained to the rollback process. This meant that I had to work with other people representing the various organisations and departments that were party to the process. These organisations and departments

included ARMSCOR, the SADF, the AEC, the Ministry of Minerals and Energy, the Ministry of Foreign Affairs and the Ministry of Finance. These people were all engaged in this process.

De Klerk asked me to be his 'Oversight Auditor' in rolling back the nuclear arsenal. The reason for my appointment, I think, was that I had a doctorate in nuclear physics which I had gained from Utrecht University in Holland."[578]

Phenomenological Reduction

Mouton's immediate interpretation of international law as it pertained to this research was focused on accession to the NPT. The NPT requires that inspectors conduct regular, extremely rigorous and intensive inspections of a country's nuclear regimen. Mouton's duty was to be the official auditing counterpart to the International Atomic Energy Agency's nuclear inspection regimen. This required an extensive knowledge of nuclear physics, and the ability to communicate with scientific exactitude. Mouton also had to have access to all the facts, and be in possession of a comprehensive knowledge of the entire nuclear programme. Apart from the imperative for having expert technical knowledge and ability in nuclear matters, Mouton also had to be able to interact harmoniously and effectively at an inter-ministerial and departmental level. This was because multiple departments were involved and impacted by the nuclear rollback.

Mouton revealed that his background experience and knowledge of nuclear physics, together with his resumé, which included academic and government leadership positions, were the factors that inclined Mr de Klerk to appoint him for this role. It was a carefully-considered appointment. It would appear that Professor Mouton was honoured by the approach that was made to him by Mr de Klerk, because of the importance and worthwhile nature of the assignment. Mr de Klerk's quiet appointment of the Oversight Auditor was a crucial implicit aspect that contributed to the success of the relinquishment and accession process.

[578] Interview with Professor Wynand Mouton at his apartment at Gordon's Bay in the Strand in Western Cape on 30 October 2007.

Professor Mouton continued:

"I had also held various leadership positions, including that of Vice Chancellor of the University of the Orange Free State and Chairman of the Board of the South African Broadcasting Service (SABC). Uranium is a difficult 'chap' to handle. It is highly toxic and radioactive. You can't put it in a safe and lock it away. There are some nice things going on inside of it. (Laughs) It took about three years to dismantle the bombs. Each bomb was designed to exist in two complementary halves. The two halves were never put together, as this would have formed a composite nuclear bomb. There were two pieces of uranium. The one piece was uranium 235 and the other was uranium 238. The two uranium types have mass differences. The one piece of uranium had a hole in the middle of it. The bomb works on the device by smashing these two uranium types of different mass together. When that is done, the mass becomes critical and you have an atomic explosion.

Hans Blix of the International Atomic Energy Agency came to visit us in South Africa and to interrogate the credentials of our nuclear programme. He played an extremely important role in South Africa's nuclear relinquishment process and accession to the NPT. He and the inspectors came to look at what we were doing in terms of accession to the NPT. They questioned us for many hours. Hans Blix can ask probing questions! The questions were of the type: 'How can I be assured that there are only six bombs? Have you got HEU to make another bomb?' My response was: 'I have looked in meticulous detail at every piece of information that is available. I have investigated the facilities and questioned all the people and studied all the data.' I said: 'I stand here before you to tell the truth.' FW de Klerk looked for and appointed people that he knew that he could trust. Because you are dependent on people, it is essential that you should be able to trust their integrity and ability. Others need to trust them as well."[579]

It is recalled that Mr de Klerk in his interview also offered extensive introspection on the crucial matter of trust. The nuclear relinquishment process had to be trustworthy at the personal relationship level between the inspector and the inspected. It is important to note the respect and high esteem in which Dr Hans Blix was held by Professor Mouton. When there is respect of this nature, mutual trust is the natural corollary. Professor Mouton also offered an insight into the comity and 'process aspects' of how he communicated with the International Atomic Energy Agency, which was the legitimating authority for accession to the NPT. He

[579] Op cit Mouton.

submitted that he offered his assessment and Oversight Auditor review to the IAEA on South Africa's nuclear status under oath. The point is that the accession to the NPT is, in the final analysis, a solemn ceremony underpinned by integrity.

Professor Mouton recalled that:

"I also made sure that the people that were handling this process were people that I could trust and that I was fully confident in them. Trust is extraordinarily important. Enriched uranium develops a nickel 'skin' covering and this had to be taken off. This reduces the mass of the HEU and we had to reconcile this reduction in the mass of HEU to fractions of grams to the IAEA."[580]

The physics and chemistry of highly enriched uranium is in a constant phase of flux. That is the nature of the element. This change in physics had to be conveyed in a credible way to the inspectorate, as it manifested differently depending upon time. Any incorrect calculation of the nuclear physics and chemistry of the relinquishment process would have damaged trust.

Professor Mouton maintained that:

"It was in the interest of everyone that these bombs were relinquished. There were about 12 000 documents that were destroyed. All the documentation relating to the nuclear weapons was brought to a central point and we made one hell of a fire with a blow-pipe to destroy them. It took two days to burn all the documents. We burnt the whole blooming lot. There were about 1 000 people working on the project. The remarkable thing is that no one said anything about the nuclear weapons programme. There was never a leak. Those years were intensely interesting years ...You will have noticed from my response that my task was to audit that the nuclear weapons were destroyed in an absolutely meticulous way. There was a senior journalist from the *Washington Post* who came to interview me on this dismantlement and accession process. He stayed over a weekend to conduct interviews and understand what we had done. He said that it was a very important assignment that was conducted here in South Africa, from an international perspective."[581]

[580] Loc cit. The nuclear verification and inspection process under the IAEA is a precise science of applied physics and exact measurement.
[581] Loc cit.

The commentary offered by Professor Mouton is important because it provides unequivocal testimony that all South Africa's nuclear weapons, facilities for nuclear weapons, HEU, plus associated research, drawings, diagrams, designs, plans and documentation were destroyed in their entirety. The potential for further nuclear proliferation had been nullified.

6.2.3 The Appointment of the Atomic Energy Corporation (AEC) as the Designated State Authority

One of the aspects that Mr de Klerk needed to manage carefully was those South African persons and agencies with 'nuclear proliferation inclinations' who might have attempted to use their institutional power to subvert the relinquishment process and accession to the NPT, and thereby have quashed the putative constitutional settlement. Obviously, there were mixed views on the matter of the nuclear relinquishment and accession to the NPT among persons from within ARMSCOR and the SADF. Some persons supported the decision, while some opposed it. Those who opposed the nuclear relinquishment and accession to the NPT did so because of the painful knowledge that there would be a loss of funding, professional prestige, influence, knowledge resources, and career opportunities that would inevitably accompany this decision. Professor Stumpf indicated that one way in which Mr de Klerk solved the dilemma of defusing this opposition was by entrusting the institutional authority of the relinquishment and accession process to the Atomic Energy Corporation. Mr de Klerk perceived the AEC as being relatively neutral and as having 'non-proliferation inclinations'. For Mr de Klerk, the challenge was not so much in discovering a legal–technical solution to the problem of rolling back the nuclear arsenal and acceding to the NPT. The greater challenge was to master the social and political problem of managing the different interest groups and stakeholders, who could fragment, and might then undermine, the constitutional settlement and state continuity.

Professor Stumpf confirmed that Mr de Klerk faced the daunting task of uncovering ways of keeping all the divergent stakeholders with their

different, and often conflicting, interests aligned to a common vision on the nuclear relinquishment and accession to the NPT. He interrogated the practical question of managing a relinquishment process in a low trust situation:

"Now, let's come back to the question that you asked me earlier on: 'Why did De Klerk trust me?' I had a feeling (I must be very careful about what I say. I do not want you to misquote me here) ... I don't want to use the word *mistrust*. But I do think that De Klerk was uncertain about ARMSCOR and the security forces being involved in the dismantlement programme. The AEC at that point was a more neutral research and development organisation. I think that it was because of this that FW was more comfortable in asking me to head this dismantlement programme, although I worked very closely with the head of ARMSCOR and the Chief of the South African Defence Force. That is all I can say about the question that you asked about him trusting me with this matter. FW de Klerk realised at that point that the six devices had been completed. They were a *fait accompli*."[582]

The divergent and conflicting interests arose from powerful persons and institutions. Mr de Klerk's decision to entrust the nuclear relinquishment and accession to the AEC was wise. His task was complicated by the fact that the situation could be designated as one of very low trust within South Africa as well. Stumpf also discussed the matters of perceived conflict of jurisdiction and the territoriality of the accession process that existed between the International Atomic Energy Agency and the United States inspectorate. This tension can be understood as having its source in the conflict of laws between international law and United States municipal law. It therefore fell within the ambit of international private law.

6.2.4 The Matter of Access to Military Sites and the Question of Sovereignty

Mr de Klerk granted a temporary waiver on sovereign rights of access and egress to military facilities to allow the inspectors to inspect all suspected nuclear sites in order to ensure that there were no residual doubts about

[582] Op cit Stumpf. These exact words were used by FW de Klerk himself … they pertain to Moxley's "so what?" question. These weapons had been built and the design process could not be un-created.

nuclear material having been retained after the relinquishment and accession to the NPT had been completed. Mr de Klerk's decision to grant unfettered access to military sites was brave. One can understand how, in a situation which is characterised by low trust, the granting of such a waiver on this sovereign right, although legally appropriate in terms of obligations that exist *erga omnes* and *jus cogens*, might be politically unfeasible. The offer of unlimited access to the inspectorate might have been misconceived by adversaries as a sign of political weakness. It was therefore a morally brave decision on Mr de Klerk's part.

"…I still remember that at one meeting with Mr de Klerk I said, 'Mr de Klerk, I think that it is correct to invite such a team, but we would then have to give them free access to wherever they want to go.' He agreed, and asked: 'What should we do?' I said: 'Give them an invitation that they can go anywhere they want and visit anywhere anytime; obviously within reason ...' And he gave them that invitation."[583]

"... We said to this Extra Team (it was an ad hoc team under the IAEA leadership): 'Mr de Klerk has given you the authority to visit anywhere, anytime, and you can talk to anybody, obviously within reason ... you cannot go and visit someone at twelve o'clock at night, because he may complain.' They made use of that offer."[584]

In this regard Ian Brownlie asserted:

"While the concept of territorial sovereignty normally applies in relation to states, there is the likelihood that international life will comprehend situations in which international organizations not only assume legal responsibility for territory in respect of which no state has territorial sovereignty. Such a situation arose in 1966 when the General Assembly terminated the Mandate on South West Africa. The nature of the legal relations of an organisation to the territory would be cause for difficulties of substance."[585]

Mr de Klerk voluntarily authorised that Pretoria's territorial sovereignty should accommodate inspections by this Extra Team, which was comprised of agents of the nuclear-weapons-states. He reached this decision as it was wise to do so, and would create trust. Any reluctance or hesitation by South Africa to permit the IAEA's inspectors or the Extra

[583] Loc cit.
[584] Ibid. From a process perspective, this was in total contrast to how it was done in Iraq. Access to inspecting facilities was often contested.
[585] Op cit Brownlie at 107–108.

Team access to conduct nuclear inspections would have been viewed with suspicion. Mr de Klerk's granting of access therefore resonates with the circumstance that led to the termination of South West Africa's mandate in 1966, referred to by Brownlie above.

For Dr Hans Blix, South Africa's decision to grant the inspectors unrestricted access to all questionable facilities was an exemplar that he contended should be emulated by the world at large. He also reflected upon the difficult duties that the inspectors had to perform and how they require collaboration and active co-operation from the state that is being inspected if they are to perform their duties properly and ensure that nuclear weapons are not used in armed conflict.

"Inspectors cannot shoot their way into locations and installations they are entitled to visit and inspect. As we saw in Iraq, they can be shut out or shut in. The inspected State must know that the Security Council will intervene and enforce the right of inspectors as it did in Iraq."[586]

Dr Hans Blix offered four key reasons that explained why South Africa's relinquishment of its nuclear weapons and accession to the NPT was successful:

- "First, transparency regarding all nuclear related activities is important to build confidence in the completeness and correctness of a State's declaration of nuclear material and installations. (Substance)
- Second, a voluntary offer to go beyond standard obligations and accept Agency inspection anywhere, any time on a case by case basis, helps to inspire confidence. (Comity) It goes without saying that in taking up such offers the Agency, while sometimes asking to see sites that may be military, is ready to make arrangements to protect legitimate military secrets from being revealed during inspection. (Relationship)
- Third, it is important to have inspectors who have some knowledge and understanding of nuclear weapons design and production. (Substance)
- Fourth, even in the case where the agency has been shown the most extensive co-operation and openness and has conducted the most extensive inspections, it is not in a position to affirm that a declaration is correct and complete. (Comity) It

[586] Blix, Hans. 1991. 'Inspections in Iraq'. Statement to the US Senate Foreign Relations Committee, Washington DC. 23 October.

can only report after a very thorough verification that nothing is found suggesting the opposite."[587]

Mr de Klerk displayed comity in his relationship with the inspectorate and eschewed a parochial South African municipal law application of territorial sovereignty in order to allow the International Atomic Energy Agency unfettered access to inspect South African military facilities for nuclear weapons, because of its responsibilities under international law.

Professor Stumpf's suggestion and Mr de Klerk's granting of the right to the inspectors to visit any place, any time, anywhere had a sequel. Dr Hans Blix, in an update to the Security Council asserted that:

"The Agency must have the right of free access to locations pinpointed by the intelligence reports. Although the Agency is given the right to perform special inspections in Safeguards Agreements, it has never been used for the purpose of inspecting undeclared locations. This is primarily because up until recent events in Iraq, there was never any information indicating a need for such inspections. Such inspections would obviously have to be conducted very carefully and be subject to control from the Board of Governors. Other improvements to the right of access should be made by extending the right of unannounced inspections and providing the right of entry for inspectors without visa requirements".[588]

In this paragraph we see that Mr de Klerk's decision to grant unlimited access and egress to potential nuclear weapons sites was commended to the United States Security Council to be codified into international law. It is submitted that the IAEA's imperative for open access arose from the realisation of the credibility value of Mr de Klerk's open invitation to the IAEA (at the suggestion of Stumpf), that they were free to visit any place at any time to conduct nuclear inspections. This was an important invitation as it created trust and respect.

[587] Blix, Hans. 1995b. 'Statement by Dr Hans Blix to the Review and Extension Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons'. New York. 17 April. 4–5.
[588] Op cit Blix (1991).

6.2.5 Internal Nuclear Regulatory Protocols that Afforded Credence to the Nuclear Relinquishment and Accession to the NPT

South Africans devised their own internal procedures and methodologies for dismantling the nuclear weapons and for acceding to the NPT. These procedures and methodologies were comprehensive and were helpful to the IAEA inspectors, as they provided proof of systematic diligence in managing the programme. The internal contractual arrangements between the ministries, the SADF, ARMSCOR and the AEC regarding nuclear matters within the State's own appurtenances needed to be based on probity and integrity. The probity and integrity of these arrangements needed to be comprehensively recorded and audited and kept in a meticulously accurate condition. These records had to be compliant with internationally expected standards of integrity. Any omissions of factual material, technical mistakes, or incorrect stockholding could potentially have serious international law, political and humanitarian ramifications for any state that possesses a nuclear weapons capability, and is placed under inspection. Professor Waldo Stumpf referred to the fact that South Africa, as a threshold nuclear-weapons-state, ensured that it had a reliable internal administrative structure, legal regimen, and regulatory structure within ARMSCOR, the SADF and the AEC. These served as policy and procedural guidelines for its nuclear weapons programme. This is what Professor Stumpf referred to as a comprehensive nuclear 'paperwork system'.

There was therefore only one standard of auditing excellence that was acceptable to the nuclear inspectorate and that was perfect record-keeping, and a perfectly-reconciled nuclear audit in compliance with the IAEA's statute. South Africa needed to justify every milligram of HEU usage. There were no significant irreconcilable gaps in the facts that were presented to the inspectorate. This meant that ARMSCOR, the SADF, and the AEC had to dispense with any 'turf-related rivalries' that might have existed between them, and work co-operatively with each other, in order to

present proof of their regulatory integrity to the IAEA. No inter- or intra-departmental, ministerial and organisational territorial turf battles could be countenanced that might have compromised the integrity of the data on the country's nuclear status.

Stumpf mentioned the internal regulatory arrangements:

"They (the nuclear bombs) were handed over technically to the South African Defence Force. ARMSCOR and the South African Defence Force had developed a weapons handover arrangement between them. It was a paperwork system ...

The devices were technically in the 'physical possession' of ARMSCOR, but they were really the legal property of the South African Defence Force. This explains why the South African Defence Force had to be part of this dismantling programme. It could not be otherwise. ARMSCOR was obviously central to the relinquishment process because the nuclear bombs were still in their possession."[589]

Professor Stumpf confirmed that extensive control systems were enacted. There were clear inter- and intra-organisational duties, rights and obligations created under South African municipal law. He also indicated that there were indeed plans to conduct an underground nuclear test at some point in time. It was important for the International Atomic Energy Agency to be aware of all the control systems as they afforded the system technical and regulatory credibility.

Professor Stumpf offered an assessment of the integrity of the control systems:

"One needs to understand the extensive control systems that existed in those days. There were plans that were to be enacted if these devices were to be tested underground. (There were plans to do that at some point in time.)

These control systems required four *pass signatures* to the system that had to be obtained, before enactment. There was not simply just one *pass signature*.

1. The Head of the AEC had the *pass signature* code to one half of the device.

2. The Head of ARMSCOR had the *pass signature* code for the other half.

[589] Op cit Stumpf.

3. Then the Chief of the Defence force had the *pass signature* code to put them together.

4. Finally, the Head of State (Mr de Klerk at that point) had the *pass signature* code to activate it.

So it was never intended to be a one-man decision.[590] These four people had to act in concert:

- The Head of State;
- The Head of AEC;
- The Chief of the South African Defence Force; and
- The Head of ARMSCOR.

All of them had secret *pass signature* codes to these devices and each was useless on its own.[591] FW de Klerk obviously brought me in to ensure that the nuclear material was relinquished. It was part of the control system. That is the background of how it worked."[592]

It was important to prove to the IAEA and the Extra Team that a decision to push a nuclear button in South Africa could not be arbitrarily decided upon the whims of a dictator, as was the case in Iraq. There were responsible municipal law-based control systems in place in the case of South Africa.[593]

6.3 Flexibility on the Form of Accession to the NPT

Ian Brownlie contended that treaties are brought into force on the basis of the two pivotal questions of intention and the consent to be bound. He observed that there are considerable variations as to the form in which a treaty is presented, because intention and consent are multifaceted. It will be shown that in South Africa, 'form' was characterised by two Safeguarding processes that underpinned South Africa's nuclear relinquishment process and its accession to the NPT. The first nuclear

[590] Pelindaba was the subject of an armed robbery in 2007.
[591] These control procedures might not be effective in a criminally-corrupt regime.
[592] Op cit Stumpf.
[593] The stringent integrity of the control systems was confirmed in Steyn, Hannes, van der Walt, Richardt & van Loggerenberg. 2003. *Armament and Disarmament: South Africa's Nuclear Weapons Experience*. Pretoria: Network Publishers.

audit consisted of the IAEA's safeguarding the civilian nuclear programme. This exercise was an obligatory precondition for accession to the NPT in terms of international law. The second audit involved a double-checking and voluntary additional commitment to a secondary Safeguarding process that was conducted by the Extra Team on every aspect of South Africa's nuclear weapon status. The Extra Team consisted of nuclear weapons experts from the United States and other nuclear-weapons-states. This secondary audit was conducted by consent with the specific intention of acceding to the NPT. The first IAEA Safeguarding process was deemed to be an insufficiently stringent audit from the nuclear-weapons-states' perspective. A second audit that double-checked and extended the terms of reference was regarded as being essential for clarifying the precise status of South Africa's nuclear weapons programme. The form of South Africa's accession to the NPT was founded on the reconciliation of these two powerful audits. The Extra Team's Safeguarding was thus a voluntary additional 'double-audit' designed to put to rest any residual fears that might have existed in the international community that South Africa had retained its nuclear weapons capability. The audit that was conducted by the Extra Team was not authorised in the NPT. It was a voluntary additional multilateral agreement conducted with the consent of Pretoria and the nuclear-weapons-states with the specific intent of acceding to the NPT. This multi-lateral agreement was therefore congruent with the intention of the NPT.

The form of the consent to be bound by the NPT was determined by the unique circumstances relating to South Africa's accession. Safeguards can therefore be divided into two distinct integrated phases. The first phase involved the obligatory process, where the IAEA took the determinate role under the authority of its Statute and the NPT. During the first phase of accession, South Africa had not yet conceded that it had developed a nuclear arsenal. John Dugard concurred with Brownlie's view on the flexibility as to the form of accession to treaties, and makes a similar point that there are no prescriptions in international law that specify how states are to conclude treaties. Multilateral treaties usually require

both signature and subsequent ratification in order to provide the state with a final opportunity to re-appraise the wisdom of its intentions and to review its consent before being bound. Dugard informed that a state is obliged not to subvert a treaty after ratification, until such time as it has specifically confirmed that it no longer intends to be party to the treaty.[594]

There are two further procedural processes that need to be noted and which guide the accession to the NPT. Ian Brownlie clarifies further:

"Accession, adherence or adhesion occurs when a state which did not sign a treaty already signed by other states, formally accepts its provisions. Accession may occur before or after a treaty has entered into force. The conditions under which accession may occur and the procedure involved depend on the provisions of the treaty. Recent practice has introduced the terms acceptance and approval to describe the substance of accession."[595]

I interpret Brownlie's assertion as implying that there was almost certainly adhesion on Pretoria's part to the NPT, and perhaps adherence as well, at the time when South Africa entered (through the agency of the AEC) into the bilateral agreement with the United States of America to abide by the 'spirit and the letter of the NPT' on 31 January 1987.[596] Adhesion arose from the fact that South Africa formally accepted the provisions of the NPT. Accession therefore came after adhesion, because South Africa's accession to the NPT followed an indigenous developed form. Once again, this is congruent with the principle espoused by both Brownlie and Dugard that there are few specific prescriptions on form as far as accession to treaties is concerned. The intention and the consent of the parties are the paramount concerns in the matter of accession to treaties. This does not mean that the matter of form was treated nonchalantly. Great care was taken to ensure that the form of accession to the NPT met four standards of excellence. These standards related to achieving:

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[594] Dugard, John. 2007. *International Law: A South African Perspective* (with contributions by Bethlehem, Daniel, du Plessis, Max & Katz, Anton). Third Edition. Lansdowne: Juta & Co Ltd. 404.
[595] Op cit Brownlie at 583.
[596] Masiza, Zondi. 1993. 'A Chronology of South Africa's Nuclear Program'. *The Nonproliferation Review*, 35–55, Fall. 43.

substantive compliance with Safeguards and the relevant international law; harmonious and respectful relationships (both personal and in the realms of international relations) with the inspectorate and other relevant persons, congruent comity (together with appropriate and necessary ceremony), and finally, carefully considered timing and synchronisation. Substance, relationship, comity and time were therefore the basic elements that together played crucial and integrated roles in designating the form of how South Africa acceded to the NPT.

In addition, national and international political considerations played an important part in shaping how the form of relinquishment and accession to the NPT would develop. South Africa's accession to the NPT was guided by its own municipal law, which is closely aligned with legal practice in Great Britain.[597] In the citation below, Professor Stumpf confirmed that treaty accession does not prescribe rigid criteria on form, and that Brownlie's and Dugard's insight holds true. Stumpf corroborated that the IAEA did not specify a methodology on the form of accession to the NPT

Heald: "Did the IAEA specify a methodology for accession to the NPT?"[598]

Stumpf: "Not really, because keep in mind, at that point South Africa was still maintaining this policy of uncertainty like the Israelis are doing at the moment. 'Do you have nuclear weapons?' It was almost an open secret that we had nuclear weapons. It had never been acknowledged that we had them, though. Pik did not have the authority at that point to say, 'Yes, we do have a nuclear weapons programme.' All that he could say was: 'We have a Y Plant that makes highly enriched uranium.' So he could not really talk to them (the IAEA) and say: 'How should we get into the NPT?' For the same reason, he could not really talk to them and say: 'How should we get rid of it?' It was sort of skirted around and not properly acknowledged at that point. It was not formally acknowledged that we had such a programme and had such devices.[599] At one point a senior inspector of the IAEA came to see me in my office privately. He said to me: 'Look, I know that we cannot talk about the past, but we are picking up a lot of evidence that you were involved in a nuclear weapons programme. We are happy with what you have declared. We have no suspicions, but at some point you will have to make a declaration.' I said to him: 'Look, I hear what you are saying. That is in the hands of Mr de Klerk. I cannot say more at this

[597] Op cit Dugard (2007) at 404.
[598] Op cit Stumpf.
[599] Loc cit.

point.' He did not push me and did not ask me outright whether there had been a nuclear weapons programme. De Klerk made the announcement at the appropriate time. What happened then was unique."[600]

Heald: "It was a legal difference, but De Klerk understood that perception could be seen as truth."[601]

Stumpf: "Absolutely, the world would have said that 'South Africa is another Iraq', in the first instance. Secondly, the internal political situation in South Africa at that time was very uncertain ... It was uncertain whether De Klerk would receive the necessary mandate from his own constituency to turn the country's constitutional situation around. (This was at the time just before he had called that last whites-only referendum.) He was concerned that the news that we were dismantling the nuclear weapons would have been seen as a sign of weakness and would not have been palatable to the white electorate at that time. The realistic fear was that the white electorate might latch onto the nuclear relinquishment process to derail the political transformation, which was his key goal. So De Klerk said: 'No, gentlemen, the time is not right for this announcement. We will maintain complete secrecy around it, until the time is ripe.' We went back to Mr de Klerk after the political situation seemed settled and we said to him: 'Mr de Klerk, we have to consider announcing this programme. 'We could not keep it quiet forever. There was too much evidence lying around, so that a nuclear weapons expert would have immediately known that there was such a programme. Mr de Klerk kept on saying that the time was not right, until late in 1992. After he got a vote of overwhelming positive acceptance from the white electorate in the last white referendum, Mr de Klerk said: 'Fine'. (You will have to verify the date, but I think that it was late into 1992.) 'I am now convinced that the country can absorb this information and you must draw up an Announcement Plan.' This Announcement Plan had ramifications that needed to be carefully managed."[602]

Phenomenological Reduction

Professor Stumpf's discussion about the 'open secret' that South Africa possessed nuclear weapons at that stage was particularly relevant to the decision to conduct a second Safeguards audit by the Extra Team. His commentary reveals how the *real politik* at that time appeared to require some equivocation about the reality of Pretoria's possession of this nuclear arsenal. This international collusion in support of the 'open secret' that South Africa had a nuclear arsenal reveals the tortuous risks posed by

[600] Ibid.
[601] Ibid.
[602] Op cit Stumpf.

the way in which the NPT is drafted, interpreted and executed. Acquiescence and complicity by the IAEA in this collusion to turn a blind eye to South Africa's possession of a nuclear arsenal was conceivably rationalised by the quality of Mr de Klerk's leadership and belief in his good faith, as well as his intent and consent to accede to the NPT. With the knowledge of hindsight, this decision was correct.

There could be other conceivable scenarios where such trust might be misplaced. A state might not negotiate in good faith. It might possess a nuclear arsenal that it has signalled that it intends relinquishing. A supervening event (perhaps a leadership struggle) occurs, and the outcome is that an extremist clique takes political power. The commitment of the prior leadership to relinquishing nuclear weapons and acceding to the NPT is then quickly forgotten, and the possession and proliferation of nuclear weapons gathers new momentum. In such a scenario, collusion by the IAEA could quite feasibly degenerate into a threat to world peace and indeed perhaps tacitly lead to condoning circumstances that could even lead to an act of aggression, which is in breach of the United Charter and also contrary to international law.

6.4 The First Process of Verification – the Initial Report (Opening Inventory)

The Initial Report can be understood as analogous to a company's annual report and books of account. In the case of a company, it is important for the annual report to be signed off and approved by the auditors. If the audit is qualified and the auditors refuse to sign off the books of account, then it can be deduced that the books of account are deceptive in one form or another and do not represent a true and fair reflection of the health and activity of the business under review. In the nuclear sphere, an Initial Report has a similar function to a company's books of account, except that the Initial Report contains all the relevant scientific data that is required for conducting a nuclear audit. South Africa's goal was therefore to present an Initial Report consisting of all the relevant facts, information, data, proof,

and scientific evidence to standards of such impeccable integrity that it would be approved with the authority and credibility of the scientific rigour contained within the competence of the inspectorate of the IAEA.

Nuclear physicists and other experts in the IAEA peer reviewed the scientific integrity of Initial Report. Their approval provided an important although not infallible indication that a state was not proliferating nuclear material. The scientific proof was sufficiently robust to be equated with the legal principle of 'beyond reasonable doubt.' The man charged with this responsibility for writing up the Initial Report was Dr Nick van Wiellig, who was Professor Waldo Stumpf's Safeguards Manager. He was tasked with presenting the Initial Report which was termed the 'Opening Inventory' in South Africa.

Professor Stumpf explained the process thus:

"We signed the NPT on 10 July 1991. We were then formally a non-nuclear-weapons-state. The NPT afforded you a period of up to 18 months to put together your Opening Inventory. You put forward your statement of the Opening Inventory of your Declarable Material. The NPT looks only at materials, and does not look at other things. Today it has gone a bit further, but at that time their concern was about enriched uranium and plutonium. We did not have any plutonium. In the first instance, the IAEA gave us a period of 18 months to comply. Politically, it was moving so fast that I said to Nick van Wiellig, my Safeguards Manager: 'I am sorry, Nick, but this statement of Opening Inventory must be completed and finished in four weeks.' He said to me: 'Waldo, that is impossible. I simply won't be able to do it.' You have a document this thick [gestures with hand], and you have to specify:

- Where everything is located;
- How it is located; and
- All the 'whys and the wherefores'.

I said to him: 'I am sorry, Nick, you have got no choice. You are going to have to finish this in four weeks' time.'

He said: 'It can't be done.' I said: 'Go away and do it.' Then he went out, and I must say, in six weeks he produced the Opening Inventory. In the annals of the International Atomic Energy Agency, it probably still stands today as one of the best Opening Inventories that

there ever was. Keep in mind it was not just the HEU – these little soap bars that we had re-melted. There was lots of other uranium in the enrichment plant. It was a major exercise to draw up this Opening Inventory. Nevertheless, we did that. We realised that we needed to beat the looming deadlines."[603]

It is evident from Professor Stumpf's testimony that he took professional pride in the quality of the submission made by Dr van Wiellig under intense pressure. The nuclear relinquishment and accession to the NPT was a deadline-driven process. The time dimension was absolutely critical. Failure to meet these deadlines could have brought chaos.

Von Baeckmann et al used the 'Initial Report' which was duly authorised by the Safeguards Agreement to judge whether South Africa's accession to the NPT should be supported by the IAEA, and whether the IAEA should make such a recommendation of authorisation and justification to the General Assembly of the United Nations. They submitted:

"As required under the Comprehensive Safeguards Agreement, South Africa submitted to the IAEA an 'Initial Report' of its nuclear programme.[604]

The 'Initial Report' is a comprehensive document and includes quantitative data on all types of nuclear material, on a facility-by-facility basis. It is expanded by its attachments, which provide detail on the location and the number of items of nuclear material contained in each respective facility."[605]

The confirmation by Von Baeckmann et al of South Africa's submission of its Initial Report (Opening Inventory) converges elegantly with Professor Stumpf's testimony. The functional interrelationship between the Initial Report and the Comprehensive Safeguards Agreement is neatly clarified.

6.5 The Matter of the Authority of the First Safeguards Audit

The first phase of the IAEA's remit with respect to Safeguards was to audit the declared inventory, to be satisfied that the material that they contained

[603] Loc cit.
[604] See Duffy, Gloria. 1988. 'Compliance and the Future of Arms Control'. Report of Project Sponsored by the Center for International Security and Arms Control, Stanford University.
[605] von Baeckmann, Adolph, Dillon, Garry & Perricos, Demetrius. 1995. 'Nuclear Verification in South Africa'. *IAEA Bulletin*, 1. 42.

was correctly accounted for. In practice, the objective was to audit the 'present' nuclear status. It was not to audit the past nuclear material that would have included the nuclear arsenal. (That task fell under the second phase of the Safeguards, which was conducted by the Extra Team.) These two phases of Safeguarding required different technical areas of nuclear knowledge to be conducted effectively. The first phase required knowledge of civilian nuclear matters that included nuclear power stations and nuclear medicine, for example. The second phase required knowledge of nuclear bombs and all matters relating to nuclear weapons.

The first Safeguard Audit was authorised by the IAEA's Statute and by the NPT. It was an audit of civilian energy facilities, and the inspection team did not include nuclear weapons experts. The civilian nuclear facilities were inspected by the IAEA in accordance with the Safeguard criteria with the objective of preventing nuclear proliferation. Accession to the NPT is achieved by concluding a Safeguards Agreement between the non-nuclear-weapon state and the International Atomic Energy Agency. Article III of the Treaty for the Non-Proliferation of Nuclear Weapons states:

"1. Each non-nuclear-weapon State Party to the Treaty undertakes to accept Safeguards as set forth in an agreement to be negotiated and concluded with the International Atomic Energy Agency in accordance with the Statute of the International Atomic Energy Agency and the Agency's safeguards system, for the exclusive purpose of the verification of the fulfilment of its obligations assumed under this Treaty with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other explosive devices. Procedures for the safeguards required by this article shall be followed with respect to source or special fissionable material whether it is being produced, processed or used in any principal nuclear facility or is outside any such facility. The safeguards required by this article shall be applied to all source or special fissionable material in all peaceful nuclear activities with the territory of such State, under its jurisdiction, or carried out under its control elsewhere."[606]

It was precisely in the area of diversion from civilian usage to military proliferation anticipated in Article III(1) of the NPT that South Africa set

[606] Treaty on the Non-Proliferation of Nuclear Weapons (NPT).

about establishing its nuclear arsenal. Nuclear materials and research were diverted from their ostensible peaceful civilian intentions into the military nuclear weapons programme. The civilian nuclear energy programme was used as a ploy and a deceit to conceal the military intent.

The authority for the Initial Report arises from Article XII on Agency Safeguards. Relevant clauses include:

"1. To examine the design of specialized equipment and facilities, including nuclear reactors, and to approve it only from the viewpoint of assuring that it will not further military purposes, that it complies with the applicable health and safety standards, and that it will permit effective application of the safeguards provided for in this article ...

3. To require the maintenance and production of operating records to assist in ensuring accountability for source and special fissionable materials used to produce in the project or arrangement.

4. To call for and receive progress reports:

(Compliance with the 'Initial Report' would be enforced through inspections and inspectors.)

5. To send into the territory of the recipient State or States inspectors, designated by the Agency after consultation with the State or States concerned, who shall have access at all times to all places and data and to any persons who by reasons of occupation deal with materials, equipment or facilities which are required by this Statute to be safeguarded, as necessary to account for source and special fissionable material supplies and fissionable products and to determine whether there is compliance with the undertaking against use in furtherance of any military purposes."[607]

The IAEA's inspectors picked up clear signs that South Africa was proliferating nuclear weapons during the first civilian phase of the Safeguards process. It has been noted that the inspectors who conducted the first phase of the inspection were experts in the civilian usage of nuclear energy. They were not expert in matters pertaining to nuclear weapons, which is a specific area of specialisation. For this reason, the

[607] Op cit NPT at 10.

first phase of Safeguards could not go beyond the civilian nuclear inspections. A second Safeguarding process was required to audit the nuclear weapons programme. That process required experts in inspecting nuclear weapons facilities.

6.6 The Matter of the Authority of the Second Safeguards Audit: The Extra Team's Nuclear Weapons Audit

Unlike the first phase of Safeguards, which explored only the 'present' status of South Africa's civilian nuclear programme, the second phase safeguarded the past nuclear weapons programme in its entirety. This required that they needed to establish the exact nature of every minute detail of the past programme with scientific exactitude and safeguard it. The first and second phases of the auditing process were therefore complementary.

In the testimony that follows, Professor Stumpf explains how the Extra Team conducted the second verification of South Africa's nuclear weapons status under the aegis of the IAEA. The first Safeguard audit was prescribed by the IAEA's Statute and authorised by the NPT. The second Safeguard audit was (in a very narrow sense) voluntary, inasmuch as it was arranged by means of a multilateral agreement with the consent of Pretoria and the nuclear-weapons-states, of which the United States was the most vocal advocate. This was pursued in order finally to put to rest any residual fears that South Africa still retained nuclear weapons. It was a characteristic of the form of accession which was suitable to the circumstances that prevailed at the time. Stumpf informed that:

"After the announcement had been made on 23 March 1993, they came back for a second verification.[608] The difference was that they were now verifying the past. That was not in the terms and conditions of the NPT. There was an open invitation from Mr de Klerk saying: 'We invite you to come back and verify the past, although it is not a part of the NPT.' This is an open invitation."[609]

[608] "They" were the Extra Team, consisting of nuclear weapons experts from the United States and also from other nuclear-weapons-states as well, who had the most conspicuous role.
[609] Op cit Stumpf.

Heald: "Very clever. Trust was built up by openness."[610]

Stumpf: "Oh, we had nothing to hide at that point.

Keep in mind that the IAEA does not have nuclear weapons experts, because they are not supposed to supervise countries with nuclear weapons. At that point the IAEA said: 'We have a few guys who know something, but they are not nuclear weapons experts.' The IAEA asked whether we would be comfortable if they put together an Extra Team of nuclear weapons experts.

We said: 'Fine; we really have no problem with that,' and then they put together a team, an ad hoc team, that had quite a few Americans on it, some guys from the UK, some from Russia, and some from France. There was no one from China on that team. These were now real nuclear weapons experts. They knew about nuclear weapon designs.

Heald: "Did you have any advisors in terms of compliance with the NPT?"[611]

Stumpf: "Now that is a good question. Right in the early stages, at the very first meeting in September this matter was discussed. How would this work?

At that point South Africa was not an NPT signatory. Although we had a Safeguards Agreement with the International Atomic Energy Agency, we did not have a Comprehensive Safeguards Agreement. The Safari Reactor, for example, fell under the scope of a Safeguards Agreement."[612]

Professor Stumpf did not really answer the question about whether or not they had advisors.[613] Those persons who assumed responsibility for this project understood all the ramifications of accession to the NPT, and were experts in the field constituted the Advisory Team. They were effectively the highest authorities in the land. It would appear that world-class expert advisors might be wisely included in this process at as early stage as is possible.

Stumpf continued with his explanation:

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[610] Loc cit.
[611] Ibid.
[612] Ibid. South Africa's legal status *vis-à-vis* the NPT in 1989 was that it had a Safeguards Agreement but had not acceded to the NPT. (This was not yet the Comprehensive Safeguards Agreement.).
[613] To this day I do not know whether they had advisors or not.

"The IAEA was not a strange animal to us. We knew how it worked.[614] We knew what the NPT said. The question was raised at the September meeting: 'When do we accede to the NPT?

I said to Mr de Klerk and the Ministers: 'There is no way that we can accede to the NPT before we have dismantled these devices. The NPT does not allow nuclear weapons to be possessed by a party unless you are one of the 'Big Five'. They were the only ones that were allowed to have them. You can't go and say 'Mr NPT, I have some nuclear weapons, but I want to become a signatory. You have to get rid of them first.' This is a quandary, because the NPT was not designed for nuclear relinquishment. The IAEA should really have made it easier for a country to accede to the NPT. The moment that you acceded to the NPT, you would actually be breaking the NPT, if you had not dismantled the devices, and re-melted the HEU, and so forth. We could accede to the NPT only at the point when we had dismantled the devices and re-melted the HEU. Anything less would have been in breach of the NPT at the point of accession. It was thus only at that point of full relinquishment that we could accede to the NPT.

Mr de Klerk said to us: 'This is fine.' That is why he specified later in his Authorising Document that we were to advise government on its accession to the NPT. The NPT actually was a strange document at that time. It only looked forward from the point of accession. From a logical point of view, what you had done in constructing nuclear weapons prior to the choice of acceding to the NPT was 'nobody's business'.[615] Today the procedure is a bit different. The NPT have what they call an Additional Protocol to the NPT (which South Africa has also signed) and where they look into your past history. But at the time of our nuclear relinquishment the position was that once you had acceded to the NPT, the NPT looked at you from that point onwards and forwards. They were not allowed really to look backwards. I will talk a bit later about the implications that this had on the Comprehensive Safeguard Agreement that had been signed. That was the situation with the NPT."[616]

The researcher's deduction is therefore that from a perspective of positive law, South Africa might have claimed that it had the right to possess nuclear weapons for a limited deterrent purpose, partially because it was not a signatory to the NPT at the time when these were developed. Had it been a signatory to the Treaty on the Non-Proliferation of Nuclear

[614] They understood the IAEA's legal remit. It was part of their day-to-day work and the ultimate guiding authority.
[615] Op cit Stumpf. Stumpf is referring to the legal quandary that the NPT presented at the time of the relinquishment of the nuclear arsenal. It was a catch-22 situation. A country could accede to the NPT only if it had no nuclear weapons. It had to get rid of them first, before acceding to the NPT; otherwise it would be breaking the NPT at the point of accession.
[616] Loc cit.

Weapons at the time of development, it would obviously have been in breach of this treaty.

Similarly, South Africa could not have legally acknowledged this possession and capability at the time of accession, because that would have placed the country in breach of the NPT. The researcher's deduction is that the NPT (at that time), by virtue of this default, might have encouraged a clandestine approach to the proliferation of nuclear weapons by threshold states. Any acknowledgement of possession would have rendered a country in breach of the NPT at the point of accession. This discouraged the volunteering of nuclear weapons status.

In the next instance, a fairly extensive citation of the research of Von Baeckmann et al will be depicted. The reason for its inclusion is that it provides the reader with confirmation of the extent and detail of the relinquishment and accession process. It also counters casual conversation that might be inclined to foster proliferation-centred rumours and fears that have no basis in reality. Most importantly, it offers a general corroboration of Professor Stumpf's testimony.

Von Baeckmann et al asserted that:

"By the time of the IAEA team's visit in April 1993, the dismantling and destruction of weapons components and the destruction of the technical documentation had been nearly completed. Dismantling records concerning the HEU components were available. They provided sufficient detail to enable ARMSCOR data to be correlated with the corresponding data in the nuclear material accountancy records maintained by the AEC.

The dismantling of the non-nuclear components of the weapons had been carried out in accordance with procedures approved by the South African authorities. A number of destroyed or partially destroyed components had been retained and were shown to some members of the team in April 1993. Remaining records, in the form of 'build history' logbooks for the completed weapons and the experimental devices, were examined and compared with the dismantling listings. Identification numbers of remaining components were compared and found to be consistent with those shown on the records. The team carried out an audit of the records of the transfer of enriched uranium between the AEC and ARMSCOR/Circle.

As a result of this audit, the team (the Extra Team) concluded that the enriched uranium originally supplied to ARMSCOR/Circle had been returned to the AEC and was subject to IAEA safeguards at the time that the Safeguards Agreement entered into force. The team visited all facilities identified as having connections with the former nuclear weapons programme. It is appropriate to record the active co-operation of the South African Authorities in arranging for access to all facilities that the team requested to visit, both those facilities which had been provisionally listed by the South African authorities as having direct connection with the former nuclear weapons programme, or with peripheral activities, and additional facilities identified by the team. The IAEA is not in possession of any information suggesting the existence of any undeclared facilities connected with the programme."[617]

Von Baeckmann et al again refer to the fact that the relinquishment process and accession to the NPT were conducted with the IAEA in a spirit of active co-operation. Stumpf indicated that South Africa had no obligation under the Treaty on the Non-Proliferation of Nuclear Weapons to declare what had been the past purpose of its nuclear material. Von Baeckmann et al therefore concurred that Stumpf's assertion was the correct understanding of the law as it applied to the Treaty on the Non-Proliferation of Nuclear Weapons at that time. Equally, the primary task of the IAEA was to ascertain that all material had been declared and placed under Safeguards. Priority was afforded to this task during 1992.

Stumpf explained:

"The IAEA also resisted any interference in the process. We obviously also resisted interference in the process ... We said: 'Look, we will give the IAEA everything we have. But we are not obliged to tell the Americans or anybody anything else at that point.' Yes, you are quite right. There was pressure from outside on us. The pressure arose not so much from the sides of the UK and the Russians, but it came from the US. They pushed very hard. They wanted to get in on the act, by any means. This was resisted."[618]

The US had legitimate proliferation fears about South Africa. The IAEA did not get its remit from the US. It gained it from its Statute, the NPT, and

[617] Op cit Von Baeckmann et al.
[618] Op cit Stumpf.

resolutions of the General Assembly and Security Council of the United Nations.

Heald: "Was it effectively resisted?"[619]

Stumpf: "Yes. This is because the IAEA said: 'We want to do this according to our remit. The Americans have nothing to do with this. We are the UN-appointed body to handle this matter we are tasked to do this and we will verify this.' I must say that the IAEA has got some very professional people. I have always worked well with them, I really have. They arrived on the site in November 1991 after we had signed the NPT. The NPT says to the IAEA: 'We now have to look forward from this point onwards.' The IAEA was not allowed to ask us questions about the past. I had anticipated this. I said to Mr de Kler:k 'What must I do if they ask me outright, did you have some nuclear weapons?' He said to me: 'Then you say to them, yes.' He said, 'Don't lie to them. But keep it confidential, for internal political reasons, until such time as it is safe to announce it.' Fortunately they never asked me. (But it was an open secret.) Later on we (the IAEA and I) laughed about it. I said, 'Maybe you should have asked me.' They were afraid that I would rebuff them and say: 'This is no business of yours.' That is the factual situation. The IAEA were legally correct not to ask us about the past nuclear programme. But they started to pick up a lot of indirect evidence that there must have been a programme of nuclear weapons. They were quite happy that we had kept all the material evidence. The IAEA also had something to prove to the Americans. They wanted to show that they had slipped up in Iraq but that they had corrected that in the case of South Africa."[620]

Von Baeckmann et al therefore concurred that Stumpf's understanding of the law as it applied to the Treaty on the Non-Proliferation of Nuclear Weapons at that time was correct. Equally, the primary task of the IAEA was to ascertain that all nuclear material had been declared and placed under Safeguards. Priority was given to this task during 1992.

It is for this reason that Von Baeckmann et al maintained that:

"The task was further complicated when, on 23 March 1993, State President de Klerk announced that South Africa had developed and subsequently dismantled *a limited deterrent capability involving the design and manufacture of seven gun-assembled*

[619] Loc cit.
[620] Loc cit.

devices. The news prompted the IAEA to augment its Safeguards Team in South Africa with, among other specialists, nuclear weapons experts."[621]

The augmented IAEA Safeguards team can be understood as the Extra Team.

Von Baeckmann et al furthermore reported that:

"Over the following five-month period, the IAEA was augmented by nuclear weapons experts who carried out inspections at a number of facilities and locations that had been declared to have been involved in the former nuclear weapons programme".[622]

The objectives of these inspections were to:

- "Gain assurance that all nuclear material used in the nuclear weapons programme had been returned to peaceful usage and had been placed under IAEA Safeguards";[623] (Confirmed by Professors Stumpf and Mouton.)
- "Assess that all non-nuclear weapons-specific components of the devices had been destroyed and that all the laboratory and engineering facilities involved in the programme had been fully decommissioned, and abandoned or converted into commercial non-nuclear usage or peaceful nuclear usage; that all weapons-specific equipment had been destroyed; and that all other equipment had been converted to commercial non-nuclear usage or peaceful nuclear usage";[624] (Confirmed by Professors Stumpf and Mouton.)
- "Obtain information regarding the dismantling programme, the destruction of design and manufacturing information, including drawings, and the philosophy followed in the destruction of the nuclear weapons";[625] (Confirmed by Professors Stumpf and Mouton.)

[621] Op cit Von Baeckmann et al at 42.
[622] Loc cit.
[623] Op cit Von Baeckmann et al at 46.
[624] Loc cit.
[625] Ibid.

- "Assess the completeness and correctness of the information provided by South Africa with respect to the timing and scope of the nuclear weapons programme, and the development, manufacture, and subsequent dismantling of the nuclear weapons";[626] (Confirmed by Professors Stumpf and Mouton.)
- "Consult on the arrangements for, and ultimately witness, actions at the Kalahari test shafts to render them useless";[627] (Confirmed by Mr Pik Botha, and Professors Stumpf and Mouton.)
- "Visit facilities previously involved in or associated with the nuclear weapons programme and to confirm that they were no longer used for such purposes";[628] (Confirmed by Mr de Klerk, Mr Pik Botha, and Professors Stumpf and Mouton.)
- "Consult on future strategies for maintaining assurance that the nuclear weapons capability would not be regenerated".[629] (Confirmed by Mr de Klerk, Mr Pik Botha, and Professors Stumpf and Mouton.)

These objectives were conducted according to stringent schedules which were set out across the entire time-line of the relinquishment and accession process. Von Baeckmann et al contended:

"These objectives were based on the IAEA's rights and obligations under the Safeguards Agreement and on the stated policy of the South African Government for full transparency with respect to the country's former nuclear weapons programme".[630]

The IAEA therefore relied on two sets of rights in order to perform its obligations under the Safeguards Agreement. The first right emerged under the Safeguards Agreement, and the second right emerged from the principle of comity that ensured that Pretoria was transparent and co-operative in its dealings with the IAEA.

[626] Ibid.
[627] Ibid.
[628] Ibid.
[629] Ibid.
[630] Op cit Von Baeckmann et al at 47.

In the following citation offered by Professor Stumpf, we are shown the extent of the coverage of the second Safeguarding process. Professor Stumpf informed:

"They (the Extra Team) visited companies that had nothing to do with this programme – they went all over. They explored military contracts that might be related to the nuclear weapons programme. They went all over the country, visiting quite a few armaments factories, even those that were involved with conventional armaments and were not involved in the nuclear weapons project. They spoke to many people who had left ARMSCOR, and who had left the AEC at that point. They spoke to all the experts who had designed these devices. They spoke to lots of people in the Defence Force who had been involved with the nuclear project. Slowly they started putting the whole picture together of what the past picture looked like. It tallied with what we had informed them. What they saw on the ground gave us some credibility."[631]

6.7 Building Trust with the Americans and the IAEA – Maintaining Sound Interpersonal Relationships

Professor Stumpf reflected upon the fragile relationships that initially existed between the South Africans and the Americans at the beginning of the relinquishment and accession process, and how this relationship of mistrust was gradually improved upon, by developing of mutual understanding that arose from joint problem-solving over time. This mistrust came to the fore during the inspections conducted by the Extra Team and was certainly a legacy of the mistrustful relationships that existed between South Africa and the United States about the nuclear weapons programme, and which had extended over at least two decades.

Professor Stumpf recalled:

"The Americans questioned the IAEA's competence then. The relationships between the IAEA and the South Africans were professional and good. The Americans were initially extremely distrustful of the South Africans. They interrogated whether the South Africans were relinquishing the nuclear weapons and acceding to the NPT in a spirit of good faith. Trust between the South Africans and Americans was slowly nurtured over a period of

[631] Op cit Stumpf.

time when they were able to work and plan together in a co-operative and collaborative manner. Trust needed to be earned."[632]

Professor Stumpf's starting point is to acknowledge the low levels of trust that originally existed between the South Africans and the Americans at the time of inspection. Mr Pik Botha provides testimony which explains the origin of this mistrust. It will be recalled that he had a continuous involvement in the political aspect of the nuclear relinquishment process, over many years. Mr Botha described how the State Department in the United States set up a special section called the Department of Energy (DOE) to deal with all matters relating to nuclear weapons. The DOE performed a similar role to the IAEA, but its remit related to the United States' national interest. (The DOE can be understood as being a United States municipal law equivalent to the IAEA, which falls under international law.) South Africa was engaged in meetings with the DOE on its nuclear status for a period of years. The DOE placed South Africa under pressure to dismantle its nuclear programme.

The interaction between the South Africans and the Americans at the DOE constituted a 'shadowing' of the inspectorate of the Extra Team after the IAEA had completed its remit. The DOE had a relationship with the IAEA, and this symbiosis served the useful purpose of creating for the IAEA a 'double' international oversight arrangement on nuclear weapons and their possible proliferation. The Extra Team investigated South Africa's past nuclear weapons programme after the IAEA had performed its task. The membership of the Extra Team included American, British, Russian and French inspectors. The American inspectors were the most prominent in their critique of South Africa's nuclear relinquishment and accession to the treaty on the Non-Proliferation of Nuclear Weapons. Mr Pik Botha's citation is included to afford an insight into the *modus operandi* of the Americans as far as South Africa's nuclear programme was concerned. At that particular stage, the relationships were strongly conflictive, competitive and coercive.

[632] Loc cit.

Mr Pik Botha explained that:

"A special section, or division, was created in the State Department at the USA. This section was called the Department of Energy (DOE). It dealt with all matters relating to nuclear weapons and worked quite closely with the IAEA. Its function was to assess nuclear matters locally and globally. The DOE functioned as a component of the US State Department and they called for meetings with South Africa regularly. These meetings took place over the years. There was a guy called Kennedy who was in charge of the DOE at that time. He was not related to *the* Kennedys. Pressure to dismantle the nuclear programme was directed from the USA, Britain, the Soviet Union and the State Department which created the DOE. The DOE worked closely with the International Atomic Energy Agency. It therefore had direct access to the United Nations Security Council. This access could be used to pressurise South Africa to put a halt to its ambitions relating to nuclear weapons.

In 1978 President Jimmy Carter passed the Nuclear Non-Proliferation Act through Congress. This Act prohibited the transfer of any nuclear technology to any non-NPT countries. At the time of the promulgation of this Act, South Africa had delivered a consignment of low grade uranium to the DOE. It was intended that this uranium would be enriched for peaceful power generation to be used at Koeberg nuclear power station. The DOE declined to hand over the upgraded uranium to Eskom, who were the principals for Koeberg. They were thus in breach of contract with Eskom. The DOE demanded payment for the enrichment which it refused to deliver."[633]

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[633] The US created legislation to prohibit nuclear proliferation in, inter alia, South Africa by promulgating the Nuclear Non-Proliferation Act 1978, 92 Stat. 120. Approved 10 March 1978. *Statement of Policy:* Sec 2 'The Congress finds and declares that the proliferation of nuclear explosive devices or of the direct capability to manufacture or otherwise acquire such devices poses a grave threat to the security interests of the United States and to continued international progress toward world peace and development. Recent events emphasize the urgency of this threat and the imperative need to increase the effectiveness of international safeguards and controls of peaceful nuclear activities to prevent proliferation. Accordingly, it is the policy of the United States to–

(a) actively pursue through international initiatives mechanisms for fuel supply assurances and the establishment of more effective international controls and over the transfer and use of nuclear materials and equipment and nuclear technology for peaceful purposes in order to prevent proliferation, including the establishment of common international sanctions;
(b) take such actions as are required to confirm the reliability of the United States in meeting its commitments to supply nuclear reactors and fuel to nations which adhere to effective non-proliferation policies by establishing procedures to facility timely processing of requests for subsequent arrangement and export licenses;
(c) strongly encourage nations which have not ratified the Treaty on Non-Proliferation of Nuclear Weapons to do so at the earliest possible date;".

The US also used economic and financial pressure to disrupt South Africa's nuclear weapons programme. South Africa's civil nuclear energy requirements were regarded by the USA as subordinate to the overarching requirement that its nuclear weapons programme should be

The United States was in breach of contract on the Koeberg uranium contract. This breach of contract arose from their legitimate fear that South Africa was enriching this uranium with nuclear proliferation objectives in mind. This incident caused mistrust between the United States and South Africa. South Africa, like Iraq, used the legitimate matter of the generation of electricity by nuclear power as a camouflage to conceal its military nuclear intentions. This ploy is clearly anticipated in both the Treaty on the Non-Proliferation of Nuclear Weapons and in the Statute of the International Atomic Energy Agency. The transfer of this enriched uranium would have been in contravention of Articles I and II of the Treaty on the Non-Proliferation of Nuclear Weapons inasmuch as the transfer or receipt of HEU that might be used for military purposes is prohibited. The transfer would have been in breach of Article III B2 of the Statute of the IAEA, which requires the IAEA to 'establish control over the use of special fissionable materials ...'.

The discovery of the nuclear test site at Vastrap and the confirmation that South Africa had built the Y Plant to make HEU required a high level of caution about the transference of all fissionable material, because it could be subverted to military usage. Mr Botha acknowledged that the concerns of the Americans about South Africa's good faith in acceding to the NPT were valid and needed to be respected. He conceded that the Americans were quite correct to interrogate to their satisfaction whether or not South Africa was playing games, and respecting the principle of comity. This was an entirely legitimate line of interrogation.[634]

Professor Stumpf in the following citation found that certain displays of rudeness and presumptive arrogance by a particular member of the United States inspectorate was unacceptable. It undermined comity and was destructive to relationships. These displays of disrespect could have

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discontinued. The US in this gesture of a breach of contract to deliver upgraded uranium to Eskom sent out a clear message that the nuclear weapons programme should be discontinued.

[634] See Clausen, Peter. 1993. *Nonproliferation and the National Interest – America's Response to Nuclear Weapons*. New York: Harper Collins College Publishers.

damaged the relationship aspect of the relinquishment and accession process and indeed placed it at risk. The conduct that he alluded to included the casting of destructive aspersions, negative parochial framing, and sowing of suspicion at a personal level about the nuclear matters which were in fact being addressed with sincerity and executed according to the highest Safeguards standards pecified by the IAEA and the NPT.

It can be expected, as a general principle, that all state representatives will abhor undignified treatment and would often be inclined to refuse to co-operate if treated in a disrespectful manner. Rudeness could place an entire nuclear relinquishment and accession process at risk.

Professor Stumpf illustrates this point thus:

"The first inspectors arrived in November, and that particular American started applying a lot of pressure onto the system because they still did not trust us. They still thought that we were playing games. They thought that we would be hiding things and so forth. That is why I made a bit of a negative comment about 'Mr X'. 'Mr X.' played a lot of games at that stage. I experienced him as somehow sowing suspicion in the hope that South Africa would never declare all of its materials. 'How can we trust that you will play open cards with us?' and so on. So I had many run-ins with 'Mr X.

But let's put that aside.[635] We resisted the attempt by the Americans to become involved, and so too did the IAEA. The Americans wanted to become involved. They did not trust the IAEA and the reason for that is the following: it was post-1991 and the Iraq situation was dominating their attention. The Americans said to the IAEA: 'You failed in Iraq; you did not pick up its nuclear weapons programme. You are not good enough ... you can't do it.' So the Americans did not trust the IAEA at that point and even today they don't always trust them. There were very good reasons for the Americans' distrust."[636]

Heald: "You were trusted by the Americans eventually ... Mr de Klerk made the point that he had the meeting with George W Bush Senior in the Rose Garden at the White House, and that it was there that the President of the USA made the announcement that the change process in South Africa is irreversible. This whole thing is about trust."[637]

[635] The accession to the NPT could have been endangered by other persons, who were part of the inspection regime, 'playing games'.
[636] Op cit Stumpf.
[637] Loc cit.

Stumpf: "It is. Keep in mind that the Americans did not trust us, or the IAEA, because they were not part of the verification process until after March 1993. Then they became part of the verification process of the past. You must always see this in two phases. After we had signed the Safeguards Agreement, the IAEA just looked at the inventory with all the HEU that was there and they were satisfied that all had been declared and that nothing remained. The IAEA did not look back. They just looked at the material. The second process began after March 1993. The Americans were involved and were really trying to understand the extent of the past programme. What had been done? What were the driving forces behind the programme? After that they also had some trust in it because they had been part of the process ... but not before that. They were very distrustful before that. Maybe this was because Saddam Hussein had shown the world that he could play games with them. It was only after the Americans became actively involved in the relinquishment and accession process that they started to trust the South African bona fides. This involvement resulted in a commitment to the integrity of the accession process."[638]

Heald: "I would guess that our sales of G5 and G6 artillery to Iraq could not have helped trust much?"[639]

[If South Africa could transact with Iraq on G5 and G6 artillery, then why should they not proliferate nuclear weapons to Libya, Iran, Pakistan, Israel, Iraq and North Korea?]

Stumpf: "Absolutely."[640]

It was through interactive planning between the South Africans and the Americans that trust in the true status of the South African nuclear weapons programme was gradually nurtured. Professor Stumpf offered a detailed and practically-reasoned submission on how South Africa relinquished its nuclear weapons and acceded to the NPT. He alluded to the careful nurturing of trust with the IAEA. This gradual building of trust was an important moral theme that underpinned South Africa's accession to the NPT. Trust needed to be created and spread more widely on an ever-increasing canvas. Firstly it needed to be developed individually among the members of the relinquishment team; simultaneously it needed to be developed with the IAEA; thereafter it needed to be nurtured with the Extra Team, and particularly with the American members of that team

[638] Ibid.
[639] Ibid.
[640] Ibid.

because of their suspicions about the effectiveness of the IAEA and South Africa's integrity.

South Africa's relinquishment of its nuclear arsenal and accession to the NPT was not only a matter of harmonising municipal law with international law. It also required the harmonising of the conflict of laws with an intensely and indeed dangerously fragile set of constitutional negotiations that would change the very face of South Africa's legal system. The underlying political turmoil escalated this complexity and intensified the need to manage it wisely.

Von Baeckmann, Dillon and Perricos[641] corroborated Professor Stumpf's commentary on the establishment of the Extra Team thus:

"The (inspection) team's assignment was extended to include assessing the status of the former nuclear weapons programme and ascertaining that all nuclear material involved in the programme had been removed and placed under Safeguards."[642]

There were clearly differences in opinion between the IAEA and the American members of the Extra Team as to the perception of mendaciousness relating to South Africa's nuclear weapons programme. The relationship with the IAEA had been built up over many years of involvement in Safeguards, and was conducted specifically in terms of its Statute and the NPT. Good all-around interpersonal relationships were built up between the IAEA and Pretoria during the first phase of the accession process, which was concerned with South Africa's civilian nuclear programme. The United States entered the inspectorate of the Extra Team during the second and much more controversial phase of inspection, which was focused on Safeguarding the nuclear weapons programme. A second round of trust and relationship building had to be nurtured. Any interference with the IAEA's inspection regime, by the United States or any other State, would have constituted a breach of the

[641] Perricos was a member of the IAEA's South African inspection team who was tasked with this remit. He can therefore be regarded as an expert on the matter of South Africa's nuclear relinquishment process and accession to the NPT, from the perspective of the IAEA's inspectorate.
[642] Op cit Von Baeckmann et al at 42–43.

Statute of the IAEA and of the Treaty on the Non-Proliferation of Nuclear Weapons. The Americans therefore did not possess legal authority to intrude upon the IAEA's inspection remit in South Africa, as this could result in the abrogation of the United Nation's Authority.

By the same token, South Africa's request for a material (sanctions-reducing) quid pro quo for relinquishing its nuclear weapons created a conflict of laws between United States municipal law and international law. The Americans therefore had a clear authority to decline to support South Africa's request for a sanctions-reducing quid pro quo. The authority for this decision lay within the Charter of the United Nations. The legal authority for their stance resided in the Statute of the International Atomic Energy Agency, which is vested by the United Nations with the duty to conduct inspections and set safeguards on nuclear energy matters. (See Article IIIA, 5, 6, B, 1, 2 of the IAEA Statute.)

6.8 Approval of South Africa's Comprehensive Safeguards at the General Conference of the International Atomic Energy Agency in September 1991

South Africa remained a member of the IAEA after its suspension from participation in the General Conference, but obviously could not attend the General Conference meetings. This sanction remained in place for a while after the Safeguards Agreement was reached. South Africa could resume participation at the General Conference of the IAEA only once the procedures relating to the implementation of these sanctions were formally withdrawn by virtue of a recommendation to this effect by the IAEA to the General Assembly of the United Nations.

Professor Stumpf recalled:

"The Extra Team finished their work in about July of 1993. About then, the Extra Team wrote a report to the IAEA. They said that they had investigated the past programme, and they recommended that the General Conference of the IAEA accept that South Africa had achieved full compliance with all the requirements of the NPT. South Africa had declared

everything of its past programme, which has been demolished. There was no information left any more of the design of these weapons that could proliferate. What sort of information was destroyed? It was only technical information that was destroyed, that could be seen as 'proliferation-centred'. The IAEA actually complimented us and informed us that we were absolutely right to have destroyed those drawings before they arrived at the scene. If they had arrived and seen those drawings, they would have had to say: 'You are technically in violation of the agreement.'

In September 1993 the General Conference of the IAEA accepted that South Africa was fully compliant with the NPT. The General Conference of the IAEA sent a recommendation to the General Assembly of the UN that South Africa was compliant with the NPT. In November 1993, the General Assembly of the UN accepted that South Africa was fully compliant with the NPT. That was really the end of the verification process. The IAEA comes here and visits South Africa every so often. They still have their open invitation, and they still have the right to come anywhere, any time, if they so require. But they are not making use of this invitation now. After November 1993, they still asked from time to time to visit and inspect some places. We never refused them. Why not? The whole reason for this, Geoffry, is that we all realised that it was in our interest for South Africa to have a credible clean slate record. If we had tried to play 'footsy-footsy' with the IAEA, we would have damaged ourselves. The decision had been taken for South Africa to embark on a new political process. We decided: 'Let's clean this thing out; let's draw the bottom line and say that it is part of our history, but it is not part of the political process of the future.' That in broad terms is my response to the points that you raised."[643]

Von Baeckmann et al corroborated Professor Stumpf's recollection when they recalled:

"Over the months that followed, the team thoroughly examined detailed records and verified the inventories of nuclear materials in South Africa. As a result, the IAEA was able to conclude that there were no indications suggesting that the Initial Inventory was incomplete or that the South Africa nuclear weapons programme had not been completely dismantled."[644]

Professor Stumpf explained:

"That is why the Comprehensive Safeguards Agreement was pushed so hard. The Agreement really specifies how the IAEA will verify the nuclear status of a country."[645]

[643] Op cit Stumpf.
[644] Loc cit.
[645] Loc cit.

Von Baeckmann et al agreed with Stumpf's rationale for the Comprehensive Safeguards Agreement being pushed so hard, and mentioned:

"For the IAEA, it was therefore possible – on the basis of the data contained in the Initial Report and subsequent inventory changes – to establish an itemised list of each facility's nuclear material inventory. Verification of such itemized lists was carried out during the first few months of the implementation of the Comprehensive Safeguards Agreement. This was done in accordance with the requirements for Physical Inventory Verification (PIV) specified in the IAEA 1991-1995 Safeguards Criteria, using established accountancy verification measures. Unlike other States that had entered into Comprehensive Safeguards Agreements, South Africa had been operating a number of nuclear facilities, of unique indigenous origin, that previously had not been the subject of Safeguards. Details of their design and operation were thus relatively unknown to the IAEA at the time the Comprehensive Safeguards Agreement was concluded."[646]

Heald asked:

"When you were project-managing the process of relinquishment, were you having constant conversations with the Americans, the Russians, the French and the British about what you were doing?"[647]

Stumpf responded:

"Let me go back one step in history. In 1974 South Africa was barred from participating in the IAEA General Conference. At that point the General Conference was set to be held in India. It is actually a bit funny that 1974 was the same year that India exploded its first nuclear test device outside of the NPT. They were not chastised for this. But anyway, that is politics. So we were barred here.[648] Although we remained a member of the IAEA, we could not attend the General Conference at that time. Now moving forward to 1991, the General Conference of the IAEA was set to be held in September 1991. FW de Klerk wanted us to become a full member of the IAEA again for its political leverage. It was important for South Africa to participate in the General Conference.[649] We realised that if we had not signed the Comprehensive Safeguards Agreement at that point, we would never get full acceptance at the IAEA. People would have said: 'Look, those guys have

[646] Op cit Von Baeckmann et al.
[647] Op cit Stumpf.
[648] South Africa was suspended from membership privileges in terms of Article V E.3 of the General Conference of the IAEA.
[649] Its exclusion from the General Conference was a mark of its pariah nuclear and political status.

signed the NPT. It is a 'foefie' (English translation: a deceptive and frivolous ploy). They are never going to sign the Comprehensive Safeguards Agreement.' North Korea took six years to sign a Safeguards Agreement, which is obviously a lot longer than 18 months.

Nevertheless, at the General Conference (I was there, and there were quite a number of other people there, also Neil van Heerden and those people were there), the Comprehensive Safeguards Agreement was signed. I know that it was on the opening morning of the conference (that Sunday we had lots of faxes and telefaxes coming in from Pretoria ...). Then on that Monday morning at 08h30, the Comprehensive Safeguards Agreement was signed.

Hans Blix was then the Director General of the IAEA. At 09h00 Hans Blix got up and opened the General Conference of the IAEA and his opening words were: 'South Africa has signed the Comprehensive Safeguards Agreement.' It was quite a momentous occasion, because nobody expected us to do it. They still suspected that South Africa was playing games with the world.[650] The perception was that we were not serious about the NPT and nuclear relinquishment."[651]

Prior to its accession to the NPT, South Africa had retained its membership of the IAEA but was prohibited from participating in its General Conference. This sanction prevented it from contributing to the creation of international law on matters pertaining to nuclear weapons, because it could not participate in law-making conferences.

Von Baeckmann et al corroborated Professor Stumpf's assessment that the accession to the NPT:

"... was promptly followed by the signing of the Comprehensive Safeguards Agreement with the IAEA on 16 September 1991".[652] "Four days later, the IAEA General Conference adopted a resolution aimed at ensuring early implementation of the Safeguard's Agreement and verification of the completeness of the inventory of South Africa's nuclear installation and material.

In November 1991, a senior team of IAEA safeguards officials specially appointed by the Agency's Director General carried out the first inspections under the Comprehensive Safeguards Agreement. The activities to verify the correctness of South Africa's *Declared Inventory* of nuclear material extended over several months and involved long-

[650] The suspicion of South Africa's playing games with the world was a serious manifestation of mistrust. This playing of games was also a perception that applied in the case of Iraq.
[651] Op cit Stumpf.
[652] Op cit Von Baeckmann et al at 42.

established measures. These included the examination of contemporary operating and accounting records, and analysis of the nature and quantity of nuclear material."[653]

The signing of the Safeguards Agreement led directly to the withdrawal of this sanction, and its resumption of participation at the General Conference. The signing of the Comprehensive Safeguards Agreement was an important event in itself. It signified that the threat of South Africa's engaging in nuclear proliferation was being substantively and procedurally eliminated. As a corollary to this, it heralded the gradual return to credibility and respectability of South Africa as a state. It signified an inversion of its recognition as a pariah state into being perceived as a respected member of the international community of states, in pursuit of juridical security.

6.9 Conclusion

The purpose of this analysis has been to search for answers to the question of how the nuclear arsenal was relinquished and how South Africa acceded to the Treaty on the Non-Proliferation of Nuclear Weapons in compliance with international law. Rich findings have emerged from this research.

It was discovered at an overall conceptual level that the relinquishment and accession to the NPT took place at four levels simultaneously: substance; process; relationship and time. These will be qualified below.

Firstly, the exercise took place at a substantive level of international law – *ratione materiae* – where the data contained in the Initial Report had to be submitted according to exceptionally high levels of scientific exactitude. The IAEA's inspectorate effectively acted as an international nuclear physics 'peer review committee' that functioned at the highest levels of expertise available in the world. There needed to be precise adherence to the Prior Safeguards Agreement, the Safeguards Agreements, and the Comprehensive Safeguards Agreement to the satisfaction of the

[653] Loc cit.

International Atomic Energy Association, and also (almost as a second nuclear audit) to the satisfaction of the Extra Team.

Secondly, it took place according to stringent deadlines. Indeed, it was a deadline-driven process – *ratione temporis*. An excellent example of how Mr de Klerk addressed the notion of *ratione temporis* lay in his instructions that a very carefully-considered Announcement Plan should be developed over time.

Thirdly, the relinquishment and accession of nuclear weapons was conducted in a positive spirit of legal process and procedure, which can be interpreted as a spirit of comity. The legal process and procedural issues included the formally-ratified re-admission to and participation in the General Conference of the International Atomic Energy Agency, and later on, before the General Assembly of the United Nations.

Fourthly, trusting relationships with the persons who had been appointed were an imperative. Mr de Klerk wanted those involved in the relinquishment and accession to be sincere and not to play any games, as subsequently happened in the case of Iraq. The matter of upholding excellent personal relationships was alluded to by all the respondents – this is designated as *ratione personae*.

All four of these dimensions were carefully and appropriately harmonised. Mr de Klerk was careful to ensure that meticulous performance standards were upheld as far as South Africa's relinquishment of its nuclear weapons and accession to the NPT were concerned.

The first step that Mr de Klerk took in setting about the nuclear relinquishment and accession strategy was to communicate his intentions to a select group of trusted and highly-competent colleagues who had the ability to enact his intentions to the letter of the law.

Second, he needed to establish internal consensus even among those who opposed the choice. This internal consensus was required in order to gain support for the wisdom of the decision, so as to prevent filibustering from those who perceived that they might have stood to lose as a result of the decision to relinquish the nuclear weapons and accede to the NPT.

Third, Mr de Klerk appointed an internationally credible domestic relinquishment and accession team in whom he had confidence to enact the process of nuclear relinquishment and accession to the NPT. This team needed to be credible in the eyes of the IAEA as well as those of a group of nuclear weapons experts referred to as the Extra Team. Professor Mouton was appointed as the Oversight Manager in charge of the project.

Fourth, Mr de Klerk ensured that the timing of the decision to relinquish the nuclear weapons and accede to the NPT was appropriate. His viewpoint was that it needed to be done as swiftly as possible, because any delay in the relinquishment and accession might have placed the credibility of the constitutional settlement under profound national and international jeopardy. It would have sown global juridical insecurity about South Africa. In this regard, he also instructed that an Announcement Plan should be developed, against which accession to the NPT would be synchronised and calibrated.

Fifth, Mr de Klerk instructed that an appropriate project-management methodology should be applied to conduct this undertaking successfully. He decided not to use a tortuous approach such as that which has been unsuccessfully applied in the negotiations between Israel and Hamas. He rejected an ‘incremental’ approach and elected for a ‘big bang’ approach. He purposefully sought to pursue an efficient, quick and painless relinquishment and accession process.

Sixth, Mr de Klerk decided to conduct the relinquishment and accession process unilaterally, without the involvement of the ANC. The rationale for

this was that he needed to devise an approach that would not alienate his electorate and the international community of states, who might have perceived the process as a threat to world peace. He was acutely aware that this relinquishment process, while necessary for world peace, might have been perceived by elements of his constituency as being unnecessarily concessionary, because of the nature of parochialism. Equally, the international community might have reacted with panic to a formal but untimely confirmation that South Africa indeed possessed an arsenal of weapons of mass destruction.

Mr de Klerk decided that the electorate would be included only at the last moment, at the time of the announcement of the accession ... when it was already a *fait accompli*. In other words, his unilateral decision also excluded the ANC, his own constituency, the far right, and all other political parties, from the accession decision. The support of these stakeholders could not have been assured. He recognised that if the matter was not handled appropriately, he might be attacked by:

1. The ANC on the left;
2. Disaffected members of his own constituency; (and)
3. The right wing, which inter alia had a very strong support base in the military and police.

He conducted the relinquishment process and accession to the NPT as a *fait accompli* from the perspective of his successors. It was, for him, wiser to make a binding unilateral decision than to enter into a naïve and inappropriate public negotiation process that would have fanned proliferation fears at an international level, and would have been condemned as appeasement to international pressure at the domestic level, perhaps from elements within the political left and right alike. (My viewpoint is that this was a very important reason underpinning the success of the process in South Africa.)

Seventh, Mr de Klerk realised, after Mr Pik Botha had failed to achieve a quid pro quo from the US in the form of a reduction of sanctions at the November 1989 meeting, that the pursuit of a deterrent trade-off should be abandoned. He learned from this failure.

Eighth, the matter was conducted in camera so as to ensure that it was not portrayed in the media as some type of concessionary game, where every move might be interpreted in the media as a 'win–lose' interchange. He was acutely cognisant that gallery-playing had retarded the pursuit of peace in Israel, Palestine, Lebanon and Syria, and many other places as well.

All of the above considerations interacted and contributed to a successful outcome.

Chapter Seven

A Comparison of How South Africa and Iraq Relinquished their Nuclear Weapons in Terms of International Law

7.1 Introduction

This chapter is dedicated to comparing how South Africa's nuclear relinquishment process was conducted with the way in which Iraq's was conducted. The purpose of presenting this comparison of the way in which South Africa and Iraq's nuclear relinquishment processes were carried out was to discover the prognosis for successful interstate knowledge transference relating to nuclear relinquishment and accession. The two cases are most certainly comparable; but comparability does not necessarily imply that the knowledge is transferable. The substantiating evidence that informed this comparison of how the nuclear relinquishment processes were conducted was derived from UN General Assembly and Security Council resolutions on the inspection regimen in Iraq, the literature on the subject, and the cumulative testimony of the respondents. It was Iraq's obdurate and cumulative breaches of international law, manifested in its ignoring of United Nations Security Council resolutions, which precipitated the decision to invade that country in 2003. Iraq's contraventions of the IAEA, UNMOVIC[654] and UNSCOM[655] inspection and Safeguards regimens resulted in increasing levels of international frustration that eventually erupted into an invasion of that country.

I contend that the invasion itself was illegal in the absence of this authorisation. The logic behind my contention is that on 8 November 2002 the United Nations Security Council unanimously adopted Resolution 1441 (2002), which held that Iraq was in material breach of its disarmament obligations, which had been established by Resolution 687 (1991). Resolution 1441 instructed that the weapons inspections should resume within 45 days and reiterated that serious consequences would arise from

[654] United Nations Monitoring, Verification and Inspection Commission for Iraq.
[655] The United Nations Special Commission.

continued violations. Security Council Resolution 1441 can be understood as providing a distillation of the actions that needed to be conducted by Iraq in order to avoid 'serious consequences' – an allied invasion led by the United States. It provided a summary of the remit and knowledge that needed to be transferred for Iraq to avoid war. According to Mary Ellen O'Connell, Resolution 1441 did not provide the United States with automatic authorisation to "take unilateral military action to effect regime change in Iraq, certainly not before another meeting of the Security Council".[656] Suffice it to say that this additional meeting of the Security Council did not take place, and the allied invasion brought about regime change in Iraq.

Resolution 1441 provided Iraq with a final period within which to comply substantively with the Safeguards, but the allied invasion of Iraq took place before this final offer had expired. It was therefore illegal in terms of international law.[657] The legal authority to embark on war is sourced in Article 2(4) of the United Nations Charter, which prohibits states from using force against one another, barring only two exceptions to this rule. The first exception is when force is required in self-defence (authorised by Article 51); and the second exception is when the United Nations Security Council grants this authority to protect international peace and security (contained in Chapter VII), as occurred in the case when the allies responded militarily to Iraq's invasion of Kuwait. Neither of these two circumstances pertained to the allied invasion of Iraq on 8 March 2003, and it is my contention that the 'Bush Doctrine' attempted to create new international law to justify this invasion.[658]

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[656] O'Connell, Mary Ellen. 2002. 'UN Resolution 1441: Compelling Saddam, Restraining Bush'.: *Jurist Legal Intelligence*, 21 November. University of Pittsburgh School of Law.

[657] Press Release SC/7564, Security Council 4644th/Meeting (AM). 2002. 'Security Council Holds Iraq in Material Breach of Disarmament Obligations, Offers Final Chance to Comply: Unanimously Adopting Resolution 1441'. [Online]. Available: http://www.un.org/NEWS/docs/2002/SC 75664.

[658] President George W Bush outlined the argument for pre-emptive self-defence in an Address to the United Nations General Assembly on 12 September 2002 (the National Security Strategy/Bush Doctrine), asserting that the US government: "... will defend the United States, the American people, and our interests at home and abroad by identifying and destroying the threat before it reaches our borders. While the United States will constantly strive to enlist the support of the international community, we will not hesitate to act alone, if necessary, to exercise our right of

This comparative analysis of South Africa and Iraq's nuclear relinquishment processes will show that the invasion was perhaps justifiable when seen against Iraq's consistent breaches of international law with regard to how it conducted the nuclear relinquishment process. It is hoped that this comparison may be of assistance in cases where a state has proliferated nuclear weapons and wishes to relinquish them and to accede to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), and where it may be confronted by similar challenges to those experienced by the divergent experiences of either South Africa or Iraq. Comparative knowledge about the merits and de-merits of how the alternative relinquishment and accession approaches were undertaken in both South Africa and Iraq in terms of international law may have practical and beneficial outcomes, by reducing nuclear proliferation and ameliorating the associated international conflict.

The phases of the research that comprise this chapter are sequenced as follows. The research is introduced by presenting an analysis of South Africa's failed attempt in 2003 at knowledge transfer to Iraq relating to nuclear relinquishment. This failed attempt at knowledge transfer represents the intellectual challenge that will need to be overcome if the lessons learned are to be transferable. Thereafter the reader is introduced to an important delimitation of this study. South Africa's nuclear relinquishment programme pertained only to nuclear weapons as such.

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self-defence by acting pre-emptively against such terrorists, to prevent them from doing harm against our people and our country … given the goals of rogue states and terrorists, the United States can no longer solely rely on a reactive posture as we have in the past. The inability to deter a potential attacker, the immediacy of today's threats, and the magnitude of potential harm that could be caused by our adversaries' choice of weapons, do not permit that option. We cannot let our enemies strike first … for centuries, international law recognized that nations need not suffer an attack before they can lawfully take action to defend themselves against forces that present an imminent danger of attack. Legal scholars and international jurists often condoned the legitimacy of pre-emption on the existence of an imminent threat – most often visible in the mobilization of armies, navies, and air forces preparing to attack. We must adapt the concept of imminent threat to the capabilities of today's adversaries … The United `States has long maintained the option of pre-emptive actions to counter a sufficient threat to our national security. The greater the threat, the greater is the risk of inaction- and the more compelling the case for taking anticipatory action to defend ourselves, even if uncertainty remains as to the time and place of the enemy's attack. To forestall or prevent such hostile acts by our adversaries, the United States will, if necessary, act pre-emptively."

Iraq's relinquishment programme had a broader and more complex remit than South Africa's, and included the relinquishment under Safeguards of its chemical and biological weapons programmes as well. The nuclear relinquishment in Iraq therefore needed to be disaggregated from its chemical and biological weapons programmes in order to render clarity to the comparative nuclear weapons study of South Africa and Iraq.

The literature analysis was purposefully edited to remove an analysis of the relinquishment of chemical and biological weapons from this comparison. This means that the logic that underpinned the relinquishment of nuclear weapons in Iraq was simplified, but that the case was even more complicated than that presented here. The comparison itself between South Africa and Iraq's nuclear relinquishment programmes was structured according to a simple sociology of law framework that allowed for comparison of four important variables that underpinned the nuclear relinquishment in both countries. These variables included substance, comity, relationships and time, and they are discussed in separate sub-sections of this chapter.

The comparative analysis of South Africa and Iraq's nuclear relinquishment processes that follows reveals that South Africa's nuclear relinquishment process was inspired by a greater vision of implementing a social contract in the form of a non-racial democratic Constitution. A voluntary and shared vision of a desired constitutional future gripped the country at the time of the accession process. The deeper underlying constitutional reasons as to why South Africa relinquished its nuclear arsenal set the standards for how this process of relinquishment and accession would be conducted. Iraq's nuclear relinquishment process was complicated by the fact that it was conducted under international compulsion and was not inspired by a greater constitutional vision. It was not conducted voluntarily, as was the case in South Africa. The relinquishment process itself in Iraq was regarded by Saddam Hussein's military regime as a national humiliation, a forfeiture of sovereignty, and a

display of weakness.[659] The underlying antagonistic presumptions as to why Iraq relinquished its nuclear arsenal provide insight into why it was fraught with such difficulty.

Iraq's nuclear relinquishment process is introduced through the writings of two expert participants in Iraq's weapons inspectorate, namely; Dr Hans Blix, who led it, and Scott Ritter, who was personally involved as an inspector and therefore had close involvement in the matter. Iraq, in contrast to South Africa, submitted a substantively flawed Initial Report/ Opening Inventory to the Inspectorate. It was indeed so flawed that it could not be recommended for approval for Comprehensive Safeguards. Iraq's nuclear audit therefore failed to be ratified by the United Nations. The failure to submit the Initial Report was interpreted by the international inspectorate as indicating uncertainty about whether or not Iraq was proliferating nuclear weapons. With this flawed information at its disposal, the inspectorate could neither claim with certainty that Iraq was proliferating nuclear weapons nor disaffirm this.

The Karama Barracks incident revealed a serious disregard for creating comity and trusting relationships with the international inspectorate on Iraq's part. The international UNSCOM inspectorate was duped on the authority of the state, which led them astray, into inspecting the Karama Barracks, which was actually a sewage reticulation plant located in Baghdad. This signified an absence of ceremonial appropriateness and a flagrant abuse of comity. The head of state should have co-operated and provided active assistance and direction to the international inspectorate. This misdirection was additionally intended to humiliate the inspectorate and was also indicative of personal relationships conducted with contempt. My personal interpretation of the Karama Barrack incident is that this type of incident can irreparably destroy trust and the prognosis for future healthy relationships. The humiliation of the inspectors might have created residual antagonisms and could even have led to unsympathetic

[659] Ritter, Scott. 1991. *Endgame: Solving the Iraq Problem – Once and For All*. Rockefeller Center, New York: Simon & Schuster.

judgement on the Safeguards. In short, it created a hostile ethos between the Iraqi state and the inspectorate. It was a childish gesture that could have galvanised the political power of those militarists who wished for war and were hostile to the idea that the inspectors might produce a report which showed that Iraq was compliant with the Safeguards. Another example of Iraq's poor relationships with the inspectorate is that of an orchestrated event, when members of the Iraqi public heaped verbal abuse on the United Nations inspectors while they were visiting a mosque in their private capacity as tourists.

A comparative analysis of the impact of United Nations General Assembly and Security Council Resolutions on the inspection regimen in Iraq and South Africa is then conducted. This covers a period of about a decade. The reader is provided with a chronology of United Nations resolutions involving condemnation of Iraq's various and cumulative breaches of international law during the course of the inspection of weapons of mass destruction. This chronology of resolutions is annotated in terms of breaches and violations of substance, comity, relationship and time, and subjected to light phenomenological reduction where and when appropriate. It is triangulated with the previous research contained in this thesis.

The data that emerged from the assessment of the chronology of breached United Nation's resolutions are presented in summarised and comparative columnar format for easy understanding and straightforward comparative analysis of South Africa and Iraq's relinquishment process. The method of phenomenological reduction was applied to compress the data into these themes. The reader is then presented with the general findings arising from the comparison of how South Africa and Iraq set about relinquishing their nuclear arsenals. The research found that the 'how' question could not be disaggregated from 'why' the nuclear arsenals were relinquished in both countries, and for this reason, the general findings are introduced with a brief comparison of South Africa and Iraq's respective responses to the 'why' question. It is shown that the reason that

these weapons were relinquished was based on fundamentally different suppositions in both countries. Iraq did not want to relinquish its nuclear arsenal, because it foresaw that this would undermine its national security and sovereignty. Iraq's relinquishment process was not voluntary and was conducted begrudgingly under international compulsion. South Africa pursued its relinquishment process voluntarily because it was perceived by Mr de Klerk that this process would enhance national and international security. After briefly introducing the underlying logic pertaining to these divergent views on why the nuclear arsenals were relinquished, the general comparative findings of how the nuclear arsenals were relinquished in South Africa and Iraq are presented.

Thereafter I offer a brief reflection on the legality of the use of force against Iraq in terms of anticipatory self-defence. The comparative analysis lends itself to an explanation as to why this invasion was conducted in spite of its illegality. I contend that this invasion was conducted because Iraq's cumulative breaches of international law occurred over a long period of time, and were combined with its failure to comply with the Safeguards. They were all-too-frequently accompanied by an illegal disregard for substance, process, relationships and time with respect to its interaction with the international inspectorate. This tardiness eventually led to such frustration from the United States and United Kingdom concerning Iraq's questionable motives with respect to its suspected possession of weapons of mass destruction that the country was invaded. Finally, I once again revert to a reflection on the transferability of the knowledge that was created from the nuclear relinquishments conducted in both these countries, seen through the lens of the deeper analysis and understanding that was created in this exposition.

7.2 South Africa's Failed Attempt in Iraq at Transfer of Knowledge relating to Nuclear Relinquishment

The legal challenge that confronted the South African delegation which visited Iraq just two weeks prior to the allied invasion in March 2003 was to assist Saddam Hussein's regime to comply with United Nations Security Council Resolution 1441.[660] The challenge of creating a meaningful knowledge transfer from this comparative analysis of South Africa and Iraq's nuclear relinquishment processes is formidable. South Africa attempted to assist Iraq in relinquishing its nuclear arsenal in 2003 about two weeks prior to the allied invasion of that country. A small contingent of South African experts on weapons of mass destruction visited Iraq at the behest of President Thabo Mbeki, and with the consent of the Iraqi government, just prior to the outbreak of the Second Iraq War in 2003. This group possessed expert knowledge on atomic, biological and chemical warfare. They attempted to offer the Iraqis advice on how they should best proceed with relinquishing their weapons of mass destruction to the satisfaction of the weapons inspectorate of the IAEA, UNSCOM and UNMOVIC, on the basis of South Africa's successful experience in this regard. The South Africans were unsuccessful in their mission.[661] This failure to transfer the knowledge of the relinquishment of nuclear weapons and accession to the Treaty on the Non-Proliferation of Nuclear Weapons is conceded up-front, because it represents an important limitation on the research. It cautions the reader that the transference of this regulatory knowledge is a serious and difficult challenge.

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[660] According to Mary Ellen O'Connell op cit: "... [t]he resolution places a set of difficult although not impossible demands on Iraq with regard to weapons of mass destruction: Saddam Hussein must allow unimpeded access by UN and International Atomic Energy Agency Inspectors. (Para 5) He must declared within thirty days of the resolution all details of any Iraqi weapons of mass destruction (WMD), delivery systems, and/or WMD programs. (Para 3) The inspectors will have UN Security guards, facilities and broad authorities to support their work. (Para 7) The inspectors will report obstruction of their efforts to the Security Council. (Paras 4 and 11.) The Council will convene immediately upon such a report. (Para12.) The resolution calls for serious consequences in the event of continuing Iraqi non-compliance. (Para 13) Weapons inspectors will make an interim report within 60 days of the resolution. 7 January 2003. (Para 5)"

[661] Interview with Professor Waldo Stumpf at the University of Pretoria, Minerals Science Building, Pretoria on 18 October 2007.

The attempted knowledge transfer which was conducted in the hurly-burly of the events that galvanised into war was unsuccessful. This practical failure is a sobering criticism of the intention of this chapter. Professor Waldo Stumpf participated in the South African delegation that visited Iraq and tried to assist them to abide by the Safeguards in 2003, two weeks before the war began. He is sceptical about the prognosis for knowledge from these events being successfully transferred from South Africa to other threshold states that might wish to relinquish their nuclear arsenals and to accede to the NPT. He submitted that a delimitation on his assessment of the prognosis for a successful transfer of this knowledge might be that he is a specialist in neither politics nor international relations. He contended that South Africa's nuclear relinquishment circumstances were singularly unique, and therefore arguably of questionable general applicability to other countries. His overriding criticism of the notion of knowledge transfer was that South Africa's nuclear relinquishment process involved two processes that were conducted simultaneously. The first was the nuclear relinquishment and accession process, and the second was the constitutional settlement. Both of these were deeply interrelated and interdependent.

Professor Stumpf contended that South Africa's nuclear relinquishment process might possibly prove to be of relevance to North Korea and South Korea should they enter into constitutional negotiations to reunify. A constitutional reunification of these two countries would probably require North Korea to relinquish its nuclear arsenal and accede to the NPT as a fundamental condition for negotiations to proceed. This would require these countries to embark, like South Africa, upon a simultaneous process of constitutional negotiations and nuclear relinquishment if they were to be conducted in good faith and succeed. Stumpf did not raise the subject of the potential transferability of this nuclear knowledge to Iran. This was because Iran's controversial nuclear stance had not manifested at the time of the interview. It is my view that Iraq's nuclear relinquishment process might prove to be relevant to Iran, because both countries share a similar outlook to nuclear relinquishment and accession to the NPT. They both

seem to regard nuclear relinquishment and accession to the NPT in an involuntary and begrudging light and show antagonism to submitting to the Safeguards.

Professor Stumpf argued that South Africa's case of nuclear relinquishment and accession does not provide a relevant case for Israel. I respectfully differ with this view, because I think that a constitutional settlement between Israel and Palestine would not be able to proceed without Israel relinquishing its nuclear weapons capability and acceding to the Treaty on the Non-Proliferation of Nuclear Weapons. In that sense, it bears some resemblance to the case of South Korea and North Korea under a reunification scenario. It also bears a degree of resemblance to South Africa's case, which was conducted in the context of deep mistrust of the ANC. Finally, Professor Stumpf contended that the cases of India and Pakistan's nuclear status bear little resemblance to the case of South Africa.

Stumpf commented that while Iraq's nuclear weapons were in an advanced weaponisation phase both prior to and during the Gulf War of 1991, Iraq was simply too exhausted and financially ruined by the Gulf War to proceed with their nuclear weapons programme. They had already been defeated in 1991, and the British and American invasion of 2003 consolidated the extent of their 1991 defeat with the imposition of comprehensive and mandatory sanctions. Professor Stumpf contended that Iraq's battle fatigue would have been so pervasive and intense that the military establishment would simply not have had the wherewithal to pursue a nuclear weapons programme that required such intense focus, energy and co-ordination. He submitted this suggestion to President Thabo Mbeki at the Union Buildings in Pretoria before the group visited Baghdad in 2003. He recalled that:

"Hans Blix is retired now. But the UN did use him before the Second Iraq War. He made himself very unpopular with the Americans by saying that the Iraqis had nothing. We had all expected this. In the First Iraq War (the Gulf War), yes, you could have expected

nuclear weapons, but not in the Second. They were too depleted from the First Iraq War. I want to relate quite an interesting story to you. About two weeks before the Second Iraq War invasion, I was asked to go to the Union Buildings and have a meeting with Mr Mbeki. Aziz Pahad was there. They said that they wanted to send a team to Iraq to tell the Iraqis that the Americans are serious, and that they are going to invade Iraq. They wanted to convince the Iraqis to play open cards with the Americans. Mr Mbeki asked us and the guys from ARMSCOR if the Iraqis had any nuclear weapons. I said to Mr Mbeki that it was highly unlikely that the Iraqis were able to make anything after the First War. 'They have expended themselves', I said. 'I think that we must accept what the IAEA and UNMOVIC have said. There is nothing now as far as nuclear weapons are concerned.' Mr Mbeki accepted that. Then he put together a small team including nuclear, biological and chemical weapons guys and we went across to Iraq to try to convince the Iraqis that they should disclose everything. What I am saying is that it would just have been impossible for Iraq to have done anything after their First War (the Gulf War). You need big facilities. It is not like chemical weapons, where you can do something in a small laboratory. You need big facilities to make nuclear weapons. You mentioned in your introductory commentary that you were interested in understanding the transferability of this nuclear relinquishment process to other countries. The South African nuclear weapons situation was in my view unique. Each situation is unique. Our scenario, as you know, involved a contiguous political handover together with a nuclear rollback. I am not so certain whether one could apply this knowledge and experience directly to any other countries. It might be applied in a very limited manner, partially and indirectly, to nuclear rollback in other countries.

I need to make it clear that I am not a specialist in politics and international relations. The nuclear situations that exist around the world are varied and very different. South Africa represents a very different situation from that of Israel. There are differences between India, Pakistan and South Africa. The situation in North Korea might possibly offer some similarities to the South Africa case.

Perhaps if a new government were to assume power in North Korea at some time in the future, then the South African nuclear weapons relinquishment process might be applicable in some respects. The North Korean scenario might possibly involve some type of contiguous handover of political power and relinquishment of the nuclear arsenal. If this situation sketched about North Korea were to materialise, it is possible. I think that part of the rollback process might be partially informed by aspects of the South African experience. The South African experience of nuclear rollback and constitutional settlement was unique."[662]

[662] Loc cit.

Phenomenological Reduction

Professor Waldo Stumpf's deep involvement in project managing the world's first voluntary nuclear relinquishment and accession process lends credibility to his deduction that Iraq had no nuclear weapons prior to the allied invasion of Iraq in 2003. It should be acknowledged that this diagnosis converged with and validated the IAEA's, UNSCOM's and UNMOVIC's Safeguards audit, which concluded that it had not been positively confirmed that Iraq possessed nuclear weapons at the time of the invasion of Iraq in 2003. The subsequent war and defeat of Iraq proved that this assessment was correct. Why, then, did the nuclear weapons experts (who are scientists) in the United States and the United Kingdom not collaborate upon the conclusions of the international inspectorate who deduced that Iraq was free of nuclear weapons? This cross-country comparison of South Africa and Iraq is intended to assist in providing some clarity on the matter. There was clearly a failure of knowledge transfer between the international inspectorate and the United States and United Kingdom nuclear inspectors. This failure might have been of some purpose if the United States and United Kingdom had been hell-bent on invading Iraq, regardless of whether it had possession of weapons of mass destruction or not. Equally, if the United States and United Kingdom had already made up their minds to invade Iraq, they would have wished that South Africa's good faith effort in sharing its nuclear relinquishment experience would fail.

Stumpf offered a caution about assuming naïve presumptions on the transferability of knowledge from these cases. This caution is based on his own personal life experience, which showed just how difficult this knowledge transfer might prove to be. The South African mission entered Iraq with good intentions, but they were far too late to be effective. By this time, the negative pattern of obstructive behaviour exhibited by the Iraqis towards the inspectorate had already long been entrenched. The situation in Iraq had already entered a point of irreversibility. The invasion had gathered momentum and could not be stopped.

One could submit that the South African experience of relinquishment and accession might possibly have been assimilated by the Iraqis, had it been presented to them years earlier. But would they have been ready for the message? Dr Hans Blix corroborated Professor Stumpf's recollection of the South African information-exchange visit, and reflected:

"While we were in Baghdad, we met one delegation from the Government of South Africa. It was there to explain how South Africa gained the confidence of the world in its dismantling of the nuclear weapons programme, by a wholehearted co-operation over two years with the IAEA inspectors. I have just learned that Iraq has accepted an offer by South Africa to send in a group of experts for further talks."[663]

In another commentary about the South African mission, Dr Blix recollected:

"We also met with a group of officials sent by the South African government to talk to the Iraqis about the successful experience they had had of carrying out internationally verified nuclear disarmament. This was friendly advice, but it did not seem to change anything in the Iraqi attitudes." [664]

Dr Blix, like Professor Stumpf, confirmed that the South African mission to Iraq was a failure. The challenge created by Professor Stumpf's critique is to contribute to mitigating the failure of knowledge transfer in the future. It is intended that a deep comparative analysis using a clear sociology of law framework will help in this regard.

7.3 The Disaggregation of Iraq's Nuclear Relinquishment Process from the Chemical and Biological Weapons Programme

The research attempted to use meticulous analysis to disaggregate Iraq's nuclear weapons programme syntactically from its chemical and biological

[663] Blix, Hans. 2003b. As delivered: 'Briefing of the Security Council'. Executive Chairman, UNMOVIC. New York. 14 February.
[664] Blix, Hans. 2004. *Disarming Iraq: The Search for Weapons of Mass Destruction*. London: Bloomsbury. 164–165.

weapons programme, although it was, of course, intrinsically integrated.[665] [666] In South Africa, the nuclear weapons programme was clearly discrete from the chemical and biological weapons of mass destruction programmes. It fell under the mandate of the Atomic Energy Agency (AEC), and there was little or no interference in its jurisdiction by other government ministries. I saw no evidence of the existence of a similar agency in Iraq to which the task of nuclear relinquishment was delegated. Indeed there was a plethora of ministries and agencies, none of which appeared to have coherent authority.[667] Iraq also had neither a dedicated oversight auditor to perform the relinquishment task as was performed by Professor Wynand Mouton, nor a dedicated project manager to run the project, as was done by Professor Waldo Stumpf. Needless to say, Saddam Hussein showed no signs of emulating Mr FW de Klerk's 'authorising document' to guarantee ministerial support for the relinquishment process under Iraqi municipal law. The scope of the research in this chapter was thus de-limited to a specific focus on nuclear weapons. The research did not consider biological and chemical weapons, the inclusion of which would have obviated the relevance of the comparison between South Africa and Iraq's nuclear relinquishment processes.

The terms of reference for disarming Iraq were hence much broader than was the remit for South Africa's nuclear relinquishment and accession process. In Iraq, they extended to all weapons of mass destruction – atomic, biological and chemical. The remit was therefore more complex in Iraq than it was in South Africa. It will be agreed that Iraq regularly, systematically and flagrantly flouted both international law and international humanitarian law, while South Africa did not. Iraq did not seem to pay too much heed to United Nations resolutions that condemned its conduct with respect to nuclear weapons. In so doing, Iraq ensured that

[665] Keegan, John. 2004. *The Iraq War*. London: Hutchinson.
[666] Burgess, Stephen & Purkitt, Helen. 2001. 'The Rollback of South Africa's Chemical and Biological Warfare Program'. USAF Counterproliferation Centre, Air War College, Air University, Maxwell Air Force Base, Alabama. April. [Online]. Available: http://www.au.af/awc/awcgate/awc-cps.htm
[667] Op cit Ritter (1991).

its nuclear relinquishment process was further complicated than it in fact needed to be.

In South Africa there was a single inspection regimen that was applied to nuclear weapons. Chemical and biological weapons were not the responsibility of the inspectorate. They were a separate entity and did not fall under the mandate of the IAEA. In Iraq, on the other hand, there was a combination of three simultaneous inspection regimens for nuclear weapons, biological weapons and chemical weapons. The production processes associated with manufacturing nuclear weapons are very different from those processes required to make chemical and biological weapons. The entire inspection process in Iraq was therefore, by its nature, considerably more complicated than it was in South Africa. All three weapons of mass destruction (WMD) manufacturing processes (nuclear, biological and chemical) are scientifically discrete. This means that the inspections were also conducted on varying, and markedly different, weapons processes in the case of Iraq, from those pertaining to South Africa.

The manufacture and storage of nuclear weapons requires substantial capital investment and large and stable industrial facilities. Chemical and biological weapons, on the other hand, have very different manufacturing processes, which require considerably less capital investment, and can be conducted in small facilities, such as a private home. Lethal chemical and biological weapons can quite easily be stored in a domestic refrigerator. Storage of this type would be inconceivable in the case of nuclear weapons. Concealment of clandestine chemical and biological weapons is therefore much easier than it is for nuclear weapons. The search for nuclear weapons leads the inspectorate to different prospective sites from the search for chemical and biological weapons. Concealed chemical and biological weapons can almost literally be hidden like ‘a needle in a haystack’.

Iraq had to deal with multiple inspection stakeholders, including UNMOVIC[668], IAEA, UNSCOM[669], and also the active intervention of inter alia the United States and the United Kingdom's intelligence agencies. This meant that Iraq's relinquishment process had multiple inspection authorities, while South Africa's relinquishment and accession process had to address the single regulatory authority of only the IAEA and its Extra Team, and logically, by extension, the Department of Energy (DOE).

7.4 Towards Developing a Sociology of Law Framework for Comparing the Nuclear Relinquishment Processes in South Africa and Iraq

Konrad Zweigert and Hein Kötze offered an excellent treatise on comparative international law, and I drew inspiration from their study[670] in the task of conducting the comparison of how South Africa and Iraq relinquished their nuclear armaments in terms of international law. Zweigert and Kötze contended that one of the big challenges in comparative law is to construct a relevant sociology of law framework, and they concede that this is a difficult undertaking. The two countries' respective relinquishment processes are compared by creating a simple sociology of law framework to synthesise the facts at hand. Zweigert and Kötze pointed out that comparative law and the sociology of law have much in common:

"Sociology of law aims to discover the causal relationships between law and society. It seeks to discover patterns from which one can infer whether and under what circumstances law affects human behaviour and conversely how law is affected by social change, whether of a political, economic, psychological, or demographic nature. This is an area where it is very difficult to construct theories, but if one can support one's theory

[668] United Nations Monitoring, Verification and Inspection Commission (UNMOVIC) is an integrative body for UNSCOM and the IAEA and presided over the relinquishment of the WMD in Iraq.
[669] The United Nations Special Commission (UNSCOM) is responsible only for chemical and biological weapons and long-range missiles.
[670] Zweigert, K & Kötze, H. 1997. *An Introduction to Comparative La*w (translated from the German by Tony Weir, Fellow of Trinity College, Cambridge). Third Edition. Oxford: Oxford University/Clarendon Press.

with comparative data from other nations and cultures, it will become much more persuasive."[671]

Zweigert and Kötze's reflections upon the pursuit of a framework for comparative legal analysis is a useful starting point for comparing South Africa and Iraq's relinquishment processes. The relationship between law and society is not only highly complex it is also often tendentious. Both societies were far too complex to impute neat causal relationships between law and society. It is therefore my view that the relationship between law and society is often better understood as an art rather than as a science, although scientific frameworks are very helpful. The law as it was encoded in the NPT most certainly effected social change in both countries in profound and different ways. In South Africa the outcome of the interrelationship between the NPT and social change was peace, while in Iraq, the outcome was war. I propose that the comparative sociology of law framework for analysing the nuclear relinquishment process in terms of international law should be simple and easily understandable.

Firstly, the relinquishment processes in both South Africa and Iraq took place at a substantive level of international law, where there had to be exact submissions to Safeguards. The nuclear programmes in South Africa and Iraq were indigenous and for this reason Safeguards in these countries would have different nuances. The substantive elements of the respective relinquishment processes are comparable. Dr Blix asserted that "[t]he war in Iraq was triggered and indeed legitimated by Iraq's failure to comply with the Safeguards Agreement of 1991".[672]

It is important to note that one of the factors that triggered the war in Iraq was its substantive failure in 1991 to safeguard as required by the IAEA. For Dr Blix:

[671] Op cit Zweigert & Kotze at 11.
[672] Blix, Hans. 2003a. 'An Update on Inspection Presented to the United Nations Security Council'. New York. 27 January.

"The substantive co-operation required relates above all to the obligation of Iraq to declare all programmes of weapons of mass destruction and either to present items and activities for elimination or else to provide evidence supporting the conclusion that nothing proscribed remains. Paragraph 9 of Resolution 1441 (2002) states that this co-operation shall be 'active'. It is not enough to open doors. Inspection is not a game of 'catch as catch can'. Rather, as I noted, it is a process of verification for the purpose of creating confidence. It is not built upon the premise of trust. Rather, it is designed to lead to trust, if there is both openness to the inspectors and action to present them with items to destroy or credible evidence of the absence of such items."[673]

Dr Blix offered a good, practical definition of substance.

Secondly, comity relates to matters such as state considerateness and helpfulness; the effectiveness of the ceremony of meetings; respect for United Nations Resolutions; facilitating access to inspection sites; provision of guides; and the civility that is displayed towards the inspectorate and the inspected. Meetings need to be conducted in a spirit of comity with appropriate protocol, due process and civility. The ceremony of meetings should be congruent with their substantive purpose. Comity also denotes helpfulness in expediting legal processes and procedures. It implies a seriousness of intention and not playing games with nuclear inspectors. An overly pedantic, bureaucratically obstructive and nitpicking approach would be indicative of poor comity. Comity can therefore be broadly understood as comprising the 'process element' of the relinquishment interaction. Dr Hans Blix designated co-operation on process or comity as having:

"... regard to the procedures, mechanisms, infrastructure and practical arrangements to pursue inspections and seek verifiable disarmament. While inspection is not built into the premise of confidence but may lead to confidence if it is successful, there must nevertheless be a measure of mutual confidence from the very beginning in running the operation of an inspection".[674]

This is a good, practical definition of the process of comity, in the context of nuclear relinquishment and accession to the NPT.

[673] Loc cit.
[674] Ibid.

Thirdly, the relinquishment of the nuclear weapons took place at a relationship level. How did the quality of the human relationships that accompanied the relinquishment of the nuclear weapons in South Africa compare with those manifested in the same process in Iraq? Were the relationships respectful and considerate, or were they destructive? In the following discussion, Dr Blix offered what he regarded as the relationship criteria that are appropriate, and should be assumed by inspectors. Dr Blix commented thus:

"On another matter, I felt and continue to feel that I had the wiser view. Inspectors, I believe, should avoid humiliating the inspected. I think a Rambo-style attitude on the part of inspectors antagonises more than it intimidates. Inspection is not the pursuit of war by other means. Inspectors are not occupiers and should neither shoot nor shout their way in. Many inspectors have told me that Iraqi scientists and technicians provided more information in the wake of the 2003 Iraq war when they were talked to calmly than when they were bullied. This is not to suggest that in a brutal police state either method will stand much chance of eliciting information, when the revelation might mean torture and death to the witness.[675] …

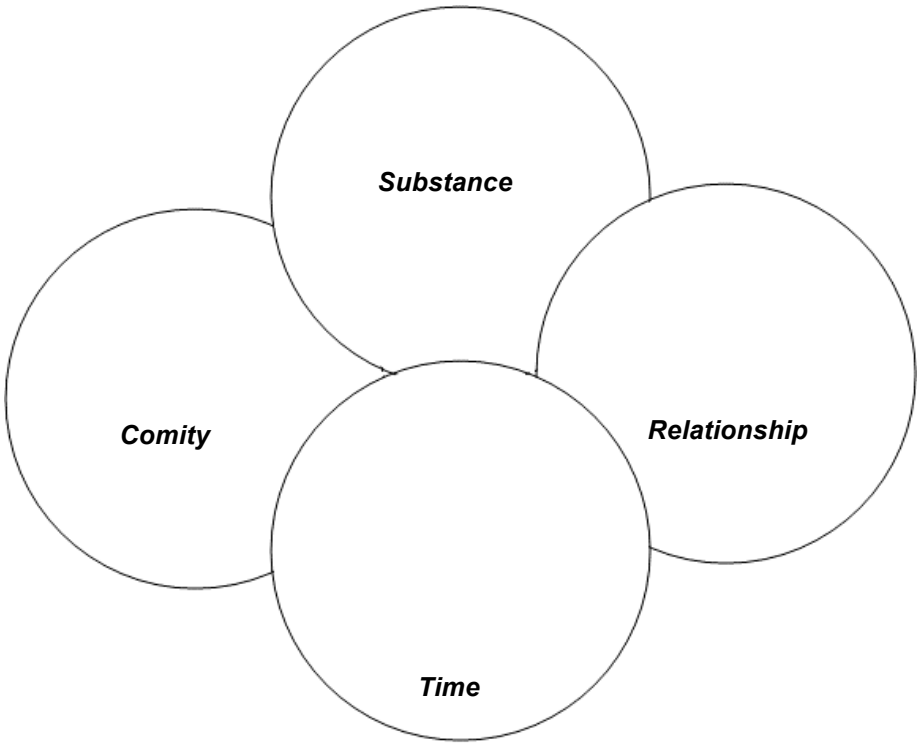
I tried to describe with some adjectives the way I thought inspectors should conduct themselves: Driving and dynamic – but not angry and aggressive; Firm – but correct; Ingenious – but not deceptive; Somewhat flexible – but not pushed around; Calm – but somewhat impatient; Keeping some distance – but not arrogant and pompous; Friendly – but not cosy; Respectful of those you deal with – and also demanding of respect yourself."[676]

The above criteria offered by Dr Blix are excellent ingredients for both comity and ensuring healthy relationships. Fourthly, the relinquishment in both countries took place according to stringent deadlines; it was a temporal and deadline-driven process. The comparison between South Africa and Iraq concerns the extent to which these deadlines were adhered. Was there punctuality, or was there dilatoriness? How did the temporal aspects of South Africa's nuclear relinquishment compare with that of Iraq, and what lessons, if any, can be extracted from this

[675] Ibid.
[676] Ibid. Also discussed by Blix (2004) in *Disarming Iraq* at 52.

comparison? It has already been shown that Mr de Klerk created an Announcement Plan and insisted that the relinquishment process should be carefully synchronised. Synchronisation includes both project managing a process and timing in harmony. These four dimensions of comparative change have been inserted into a Venn diagram in order to clarify the comparative variables of analysis.

Figure 7.1: Relinquishment of Atomic Weapons at the Levels of Legal Substance, Comity, Relationships and Time



Copyright © 2006 by the President and Fellows of Harvard College: Adapted by Heald 2008. [I added the fourth circle, designated as 'Time' and changed the term 'Process' to 'Comity', because I held the view that the latter was more apposite.]

7.4.1 Iraq's Initial Report for Safeguards Consists of 12 000 Pages of Unrefined Information – A Substantial Problem

Although Iraq acted in breach of international law most frequently and cumulatively over a long period of time, there was no hard evidence and

factual basis in this chronology to justify the allied invasion from the perspective of international law. Iraq's obstructive and unco-operative conduct must have been deeply frustrating for the international inspectorate, but in my view did not provide a legal basis for authorising the war. Dr Hans Blix mentioned that Iraq's Initial Report and data submission to the inspectorate were fundamentally and substantively flawed, rendering them un-creditworthy:

"On 7 December 2002, Iraq submitted a declaration of some 12 000 pages in response to paragraph 3 of Resolution 1441 (2002) and within the time stipulated by the Security Council. One might have expected that in preparing the Declaration, Iraq might have tried to respond to, clarify and submit supporting evidence regarding the many open disarmament issues, which the Iraqi side should be familiar with from the UNSCOM document S/1999/94 of January 1999 and the so-called Amorim Report of March 1999 (S/1999/356). These are questions which UNMOVIC, governments and independent commentators have often cited."[677]

Iraq submitted 12 000 pages of unfiltered and unrefined information to the inspectorate. This was a problem of substance. It meant that the inspectorate could not endorse the Safeguards in Iraq with authority and contend – beyond reasonable doubt – that they were correct. The result of this lack of clarity on the Safeguards was that the country was framed internationally with a degenerate pariah recognition status. This presentation of 12 000 pages of unrefined information can be contrasted with the conciseness, accuracy, and deadline-driven submission of the Initial Report/Opening Inventory submitted by the South African relinquishment team.

The reader will recall the pride that Professor Stumpf revealed in his Safeguards Manager, Dr Nick van Wiellig's, submission of a perfectly reconciled and audited Initial Report in record time. The Iraqis did not refine the information; they dumped documentation on the inspectorate. The substance of the Iraqi case was therefore poorly presented. Iraq's unco-operative approach towards the inspection regimen created a haze

[677] Op cit Blix (2003a).

of inaccurate speculation about their proliferation inclinations. Amidst this confusion was an ominous ambiguity on their WMD status, which could, and ultimately did, trigger anticipatory self-defence.

7.4.2 Iraq Dupes UNSCOM into Inspecting the Karama Barracks, a Sewage Reticulation Plant, Masquerading as a Nuclear Weapons Site – Abuse of Relationships and Absence of Comity

On one occasion, while in Baghdad, UNSCOM received incorrect intelligence reports from Iraq that the Karama Barracks might have been a site generating weapons of mass destruction. The Iraqi minders (who were representatives of the state) failed to take UNSCOM into their confidence and inform them that they were hopelessly and embarrassingly on the wrong track in their assessment, and that the Karama Barracks was actually a sewage reticulation site. The Iraqi minders allowed the UNSCOM inspectors to be publicly humiliated by inspecting the raw sewage facility. The Iraqi minders appeared to enjoy the ridicule of the UNSCOM inspectors.

Scott Ritter recalled:

"We made our way back to our parked Nissan Patrol, enduring the smiles and laughter of our Iraqi minders, who were clearly having a good time at our expense."[678]

It is noted that the conduct of a person or group of persons will be regarded as an act of state under international law if the individual or group acts under the instructions of that State. I interpreted Saddam Hussein's acquiescence, whether passive or active, to the humiliation of the inspectorate at the Karama Barracks as an act of state. Saddam Hussein was the president and head of the Iraqi state and therefore had a special representative relationship with the United Nations and its various weapons inspectorates.

[678] Ritter, Scott. 2005. *Iraq Confidential – The Untold Story of America's Intelligence Conspiracy*. London: I.B. Taurus. 29.

John Dugard contends that:

"As a general principle the conduct of private persons is not attributable to a state under international law, but where there is a special relationship between the persons and the state their conduct is attributed to the state."[679]

Saddam Hussein was not acting as a private person when he authorised the inspectors to audit the Karama Barracks. He did this cognisant of his special authority that arose from statehood. It can therefore be argued that the solicitation of the visit to the Karama Barracks by the Iraqi minders was intended to cause embarrassment and indignity, and damage relationships. This incident was inappropriate and undignified. It was indicative of a singular lack of comity and disregard for the dignity of relationships. This created mistrust and damaged relationships, because of the escalatory urge to retaliate.[680] John Dugard offered a further authority for contending that this visit constituted an act of state:

"According to art 9, the conduct of a group of persons may be attributable to a state if the group was in fact exercising elements of governmental authority in default of the official authorities. This principle is illustrated by *Yeager v Islamic Republic of Iran*, in which the acts of the Revolutionary Guards as immigration officials in Teheran airport were held to be attributable to Iran on the basis that the Guards, although not actually authorised by the new government, at least exercised elements of governmental authority in the absence of official authorities, in operation of which the new Government must have had knowledge and to which it did not specifically object."[681]

I therefore deduce that the Iraqi minders could be held attributable to Iraq on the basis that they, too, also exercised official elements of governmental authority to which they did not specifically object. Again John Dugard's reflection provides further authority to the assertion that this humiliation on the UNSCOM inspectorate by the Iraqis was indeed an act of state.

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[679] Dugard, John. 2007. *International Law: A South African Perspective* (with contributions by Bethlehem, Daniel, du Plessis, Max & Katz, Anton). Third Edition. Lansdowne: Juta & Co Ltd. 274–275.
[680] *Yeager v Islamic Republic of Iran* (1987) 17 Iran-USCTR 92; 82 ILR 178.
[681] Op cit Dugard (2007) at 275.

7.4.3 Verbal Abuse by Iraqi Public to UN Inspectors – The Mosque Incident

The example presented in this specific discussion is in my view equivocal. Dr Blix offered an interesting criticism of the case of an abusive public outburst to a tourist visit to a mosque by five weapons inspectors. He asserted that the demonstration was orchestrated by the Iraqi authorities, and attested:

"I am obliged to note some recent disturbing incidents and harassment. For instance, for some time far-fetched allegations have been made publicly that questions posed by the inspectors were of an intelligence character. While I might not defend every question that inspectors might have asked, Iraq knows that they do not serve intelligence purposes and Iraq should say so. On a number of occasions, demonstrations have taken place in front of our offices and inspection sites. The other day, a sightseeing excursion by five inspectors to a mosque was followed by an unwarranted public outburst. The inspectors went in without any UN insignia and were welcomed in the kind manner that is characteristic of the normal Iraqi attitude to foreigners. They took off their shoes and were taken around. They asked perfectly innocent questions and parted with the invitation to come again. Shortly thereafter we received protests from the Iraqi authorities about an unannounced inspection and about questions not relevant to weapons of mass destruction. Indeed, they were not. Demonstrations and outbursts of this kind are unlikely to occur without the initiative or encouragement from the authorities. We must ask ourselves what the motives may be for these events. They do not facilitate an already difficult job, in which we may try to be effective, professional and, at the same time, correct. Where our Iraqi counterparts have some complaint they can take it up in a calmer and less unpleasant manner."[682]

John Dugard's preceding analysis pertaining to the Karama Barracks incident can also be imputed to the Mosque incident. Dr Blix does not make it clear whether or not Iraq had appointed minders to guide the inspectors on this tourist excursion, so responsibility for this incident cannot be attributed to them, in the absence of the availability of these facts. But responsibility can be attributed to the rabble-rousers on the basis that they were exercising official elements of government authority to which the Iraqi government did not object.

[682] Blix, Hans. 2003c. 'Briefing to the Security Council'. *Guardian Unlimited*, Friday 14 February.

A further interpretation of the Mosque incident comes to mind. While Dr Blix's criticism is understandable, these Iraqi protests could equally be interpreted as a spontaneous venting of frustration against the perceived cultural insensitivity of the inspectors, whose presence was perhaps experienced by the Iraqi people as violating national pride, values and norms. Hence my assertion that this incident was equivocal. There are deep religious sensibilities in Iraq. The combination of religion combined with the humiliation of being 'occupied' by inspectors might have created a spontaneous xenophobic outburst against the inspectors. The inspectors were persons who were perhaps perceived as having an easy tourist life visiting the Iraqi people at their leisure in the context of appalling poverty, degenerate violence, exceptionally high levels of personal insecurity, sanctions, international ostracism, and pariah statehood. The aftermath of the nuclear inspection was not an innocent tourist benefit for the people of Iraq. This crowd might have become outraged because of the looming reality of sanctions, poverty, violence and a looming war, and the inspectors might have been the conductor for this anger.

7.5 Adherence and Non-Adherence to UN General Assembly and Security Council Resolutions on the Inspection Regimen in Iraq

The UN General Assembly and Security Council resolutions that pertained to Iraq's nuclear relinquishment process will be analysed and assessed against South Africa's case, which has already been presented. There is an important distinction that needs to be reiterated at the outset of this comparative analysis of the degree of adherence to United Nations resolutions, and that is that South Africa did not ever act in breach of the Treaty on the Non-Proliferation of Nuclear Weapons, while Iraq frequently did. In addition, South Africa had always acted in compliance with the IAEA's inspection and safeguards regimens. Iraq, in contrast to South Africa, acted in constant breach of the NPT, flouting many United Nations resolutions and international law. The starting point of this analysis is therefore to seek clarity on the legal status and authority of the United

Nations General Assembly and Security Council Resolutions, which should be kept in mind when conducting the comparative analysis.

"Recommendations contained in United Nations Resolutions are not binding per se, but an accumulation of UN Resolutions and recommendations might contribute to the formation of a customary rule and collective practice …[683]

A state may incur responsibility directly or indirectly. It incurs responsibility directly when, acting through its organs or agents, it violates its obligations towards another state under treaty or general international law. Indirect responsibility occurs when a state injures the person or property of a foreign national and in so doing is deemed to have injured the state of the nationality of the injured person itself."[684]

It is for this reason that I contend that Iraq incurred direct responsibility for the Mosque Incident under international law. The reader will notice that this pattern of incurring either direct or indirect responsibility is recurrent and occurs over many incidents that display a similar pattern, in this chronology of breached United Nations Security Council resolutions. Iraq might not initially have been bound in international law by the recommendations made through United Nations resolutions. But the accumulation of recommendations contained in these resolutions that were ignored did incline towards customary practice and the establishment of a binding collective set of norms. I assert therefore that with the passage of time, this cumulative flouting of the United Nations resolutions constituted a substantive breach of international law.

UNSCOM provided a useful *Chronology of Main Events* in the inspection regimen in Iraq from 3 April 1991 until 17 December 1999. The events that

[683] Op cit Dugard (2007) at 34.
[684] Op cit Dugard (2007) at 270–271. Dugard discussed the matter of serious breaches of peremptory norms under the question of the Legal Consequences of Internationally Wrongful Acts. He asserts: "Although the Final Draft Articles are concerned only with delictual responsibility, they recognise that special consequences attach the breach to peremptory norms of international law (*jus cogens*) and obligations to the international community as a whole (obligations *erga omnes*). Articles 40 and 41 provide that states shall co-operate to bring to an end through lawful means to any serious breach of an obligation arising under a peremptory norm of general international law and shall not recognise a lawful situation created by such a serious breach. Although the Draft Articles do not identify such peremptory norms, the ILC's Commentary on art 40 provides some of the examples of such norms: the prohibition on aggression, slavery, genocide, race discrimination, apartheid and torture, and the obligation to respect the right to self-determination. A breach of an obligation is serious if it involves a gross or systematic failure by the responsible state to fulfil its obligation."

are cited provide a disturbing accumulation of UN resolutions that were habitually ignored by Iraq, and led directly to the decision by the United States and the United Kingdom to invade Iraq. This chronology provides a compendium for understanding the factual extent to which Iraq breached United Nations General Assembly and Security Council resolutions pertaining to the relinquishment of weapons of mass destruction. South Africa's comparative status with respect to its adherence and compliance with United Nations General Assembly and Security Council Resolutions is weighed against the Iraqi experience in each instance, with a retrospective commentary being offered.

(1) "On *3 April 1991* Security Council Resolution 687 (1991) was breached. In section C, it was decided 'that Iraq shall unconditionally accept under international supervision, the destruction, removal or rendering harmless of its weapons of mass destruction, ballistic missiles with a range of over 150 kilometres, and related production facilities and equipment'. It also provided for the establishment of a system of ongoing monitoring and verification of Iraq's compliance with the ban on these weapons and missiles. It required that Iraq make a declaration within 15 days of the location, amounts and types of all such items. On the 6 April 1991 Iraq accepted Resolution 687 (1991) (5/22456).

From *23 to 28 June 1991* UNSCOM/IAEA inspectors try to intercept Iraqi weapons carrying nuclear related equipment (*calutrons*). Iraqi personnel fire warning shots in the air to prevent the inspectors from approaching the vehicles. The equipment is later seized and destroyed under international supervision. On the 28 June 1991 a statement was issued by the President of the Security Council deploring Iraq's denial of access to an inspection site and asking the Secretary General to send a high level mission to Iraq immediately. 15 August 1991 Security Council resolution 707 (1991) demands that Iraq provide without further delay full, final and complete disclosure of its proscribed weapons and programmes, as required by Resolution 687 (1991)."[685]

Ad (1) Iraq's conduct was illegal in terms of international law. It had breached a substantive Security Council obligation *erga omnes* to destroy weapons of mass destruction under international supervision and then reneged against its own agreement with violence. It is contended that the

[685] UNSCOM *Chronology of Main Events* at 1.

soldiers who fired the shots did so with the direct authority of the state and the state therefore assumed direct authority for this incident.

South Africa was not condemned with a single United Nations Security Council resolution to disclose further information without delay. The reader will recall that its Safeguards Manager, Dr Nick van Wiellig, provided the IAEA with an excellent Initial Report/Opening Inventory – in just six weeks. Security Council Resolution 687 (1991) evidenced a substantive breach of the terms and conditions of Safeguards. The decision by Iraq to block the inspection and to shoot warning shots constituted a gross lapse in comity and violation of relationships. Iraq repudiated Security Council Resolution 687 (1991) (5/22456), which it had previously accepted. There could consequently be little certainty about whether the state would contract in good faith or not.

(2) "*6 September 1991* The first UNSCOM inspection team is blocked by Iraq militia."[686]

Ad (2) In South Africa no inspection team was ever blocked or obstructed. They were aided and abetted in the pursuit of their duties.

Iraq's action was illegal in international law because it was obliged to assist the Safeguards inspection team in their duties in pursuit of international peace. Iraq's conduct constituted a breach of comity, substance and relationships.

(3) "*21–30 September 1991* IAEA inspectors find large amounts of documentation relating to Iraq's efforts to acquire nuclear weapons. The Iraqi officials confiscate some documents from the inspectors. The inspectors refuse to yield a second set of documents. In response, Iraq refuses to allow the team to leave the site with the documents. A four-day stand-off during which the team remained in the parking lot of the site ensues. Iraq permits the team to leave with the documents following a statement by the President of the Security Council, threatening enforcement action by members of the Council."[687]

[686] Op cit UNSCOM at 2.
[687] Loc cit.

Ad (3) Professor Wynand Mouton destroyed all residual documentation under the auspices of the IAEA and the Extra Team. In South Africa the inspectors were always treated with respect and given free and complete access to any site that they deemed proscribed. There was never any interference with any inspector. There was never a need for recourse to a threat on military escalation. Iraq's actions again constitute an affront to substance, relationships and comity.

(4) "*11 October 1991* Security Council 715 (1991) approves the plans for on-going monitoring and verification submitted by the Secretary General (S/22871/Rev.1) and the Director General of the IAEA (S/22872/Rev.1) The Commission's plan also established that Iraq shall accept unconditionally the inspectors and all other personnel designated by the Special Commission.

October 1991 Iraq states that it considers the Ongoing Monitoring and Verification Plans, adopted by Resolution 715 (1991), to be unlawful and states that it is not ready to comply with resolution 715."[688]

Ad (4) South Africa was never instructed by a United Nations Security Council Resolution to disclose information on its nuclear weapons capabilities and designs, or other related issues. It did this voluntarily and not by coercion. South Africa also never contested the legality and authority of the IAEA or the United Nations Security Council on this matter.

Iraq's refusal to comply with Resolution 715 constituted an affront to comity and substance. The contention that the Ongoing Monitoring and Verification Plans that were adopted by Resolution 715 (1991) were unlawful is an unsubstantiated allegation, and Resolution 687 read together with Security Council Resolution S/23663, cited in paragraph (5) below, renders their conduct illegal.

(5) "*28 February 1992* Statement by the President of the Security Council, upon receipt of the Special Commission's Report, reaffirming that it is UNSCOM alone to determine which items are to be destroyed under Resolution 687, and condemning

[688] Ibid.

Iraq's failure to provide full compliance with the relevant Security Council resolution (S/23663)".[689]

Ad (5) The South Africans followed a contrasting approach to the Iraqis, who contested and disputed the legality of many United Nations Security Council resolutions. South Africa did not ever contest the legality or jurisdiction of the IAEA, the NPT or the Statute of the IAEA.

Iraq's failure to comply constituted a disregard of both substance and comity.

(6) "*12 March 1992* Statement by the President of the Security Council noting a statement made in the Council by the Deputy Prime Minister of Iraq expressing the view that Iraq had not yet complied fully and unconditionally with its obligations under the relevant Security Council resolutions (S/23709)."[690]

Ad (6) The Deputy Prime Minister of Iraq indeed conceded in this incident that Iraq had acted illegally by not meetings its obligations to uphold the Security Council resolutions in terms of international law. This is the second instance of Iraq accepting its obligations to the United Nations Security Council in terms of international law, only to breach them later. This is the second breach of the UN Security Council resolution that is noted in the UNSCOM *Chronology* and constitutes a breach of international law. There was a formal and growing concern about the integrity of Iraq's WMD inventory and the data that they presented for Safeguards audit. This was in contrast to the case of South Africa, where no such concern was expressed.This was manifested in a failure on the part of Iraq to comply with substance and time.

(7) "*9 April 1992* Iraq calls a halt on UNSCOM's aerial surveillance flights, making reference to the possibility that the aircraft and its pilot would be endangered.

10 April 1992 Statement by the President of the Security Council concerning Iraq's threats to the safety and security of UNSCOM's surveillance flights over Iraq and reaffirming UNSCOM's right to conduct such flights (S/23803). Subsequently, Iraq

[689] Ibid.
[690] Op cit UNSCOM at 3.

affirms that it does not intend to carry out any military action aimed at UNSCOM's aerial flights."[691]

Ad (7) This is the third recorded breach by Iraq of a United Nations Security Council Resolution, and of international law. These threats were at the behest of Iraqi soldiers under the responsibility of the Iraqi state. They could have been interpreted as an intentional, premeditated act of international aggression against the inspectorate. This matter of contesting aerial surveillance was echoed in South Africa, in the case of the *US Spy Plane* incident, discussed previously. Iraq transgressed on substance, comity and relationships. The threat to shoot down surveillance flights conducted by UNSCOM was provocative, as UNSCOM had United Nations Security Council authorisation to conduct the inspectorate. There was no equivalent transgression of international law exhibited by the South Africans that even vaguely compared with this incident. This is the reason that Iraq was increasingly recognised as a pariah state.

(8) "*6–29 July 1992* Iraq refuses an inspection team access to the Ministry of Agriculture. UNSCOM had reliable information that the site contained archives relating to proscribed activities."[692]

Ad (8) This is a repeated contravention of international law. Iraq was obliged to facilitate access to the inspectorate. In South Africa there was no such substantive restriction on access and ingress. This incident confirms a neglect of comity and substance.

(9) "*24 November 1992* Statements made by the President of the Security Council concerning statements by the Deputy Prime Minister of Iraq and regretting threats, allegations and attacks made by him regarding various United Nations operations in Iraq (S/24839)."[693]

Ad (9) This is the second recorded instance of the Deputy Prime Minister of Iraq showing an acceptance of the applicability of international law to their case and regret at Iraq's non-adherence. This is the fourth breach of

[691] Op cit UNSCOM.
[692] Loc cit.
[693] Ibid.

a United Nations Security Council Resolution. In addition, the Deputy President of Iraq was compelled to retract a statement which was damaging to relationships, and could have even been interpreted as an intended act of international aggression. Given the fact that these breaches are repetitive and cumulative the time aspect is now becoming significant, as ultimatums and deadlines start becoming increasingly conspicuous. It was evident that the inspectorate would eventually lose patience.

This refers again to Iraq's disregard of comity, substance, relationships and time.

(10) "*January 1993* Iraq refuses to allow UNSCOM the use of its own aircraft to fly into Iraq. Furthermore, Iraq starts incursions into the demilitarised zone between Iraq and Kuwait and increases military activities in the no-fly zones."[694]

Ad (10) Iraq's refusal to allow UNSCOM flight rights in Iraq was a substantial rescinding of comity. This might be regarded as akin to the South African Defence Force resuming its military activities in a de-militarised Angola and Namibia after the implementation of Resolution 435. These actions were yet again in breach of international law, as they obstructed UNSCOM from performing its United Nations-authorised inspections. Underpinning this illegality was a severe disregard for comity.

(11) "*8 January 1993* Statement by the President of the Security Council, noting that Iraq's action in prohibiting the use of UNSCOM aircraft is an 'unacceptable and material breach' of Resolution 687 (1991) and warns Iraq of 'serious consequences' were it to continue (S/22081).[695]"

Ad (11) This is the fifth breach of a UN Security Council Resolution by Iraq cited in the UNSCOM *Chronology of Main Events*. The President of the Security Council resorted to threatening 'serious consequences' for the cumulative breaches of international law by Iraq. This is indicative of growing impatience. The time element was significant here. At this stage

[694] Ibid.
[695] Op cit UNSCOM at 4.

of the analysis, it should be evident that Iraq habitually breached international law. Iraq's conduct was provocative and indicative of a serious escalatory conflict.[696] This snowballing disregard for international law manifested in all the four selected dimensions of this comparison, and included a disregard for substance, comity, relationship and time. There was clear evidence of the application of inappropriate rules of engagement under international law.[697]

(12) "*July 1995* Iraq threatens to end all co-operation with UNSCOM and the IAEA if there is no progress towards the lifting of sanctions and the oil embargo by 31 August 1995."[698]

Ad (12) Iraq's counter-ultimatum was once again escalatory and provocative. It might be interpreted as a 'tit-for-tat' ultimatum in response to the Security Council's injunction communicated in paragraph (11). The agenda in this instance de-emphasised nuclear relinquishment and focused on the material quid pro quo of a deterrent trade-off, in exchange for nuclear relinquishment. Iraq's failed deterrent strategy is therefore exposed. It is similar to South Africa's inasmuch as it was also unsuccessful. Underlying Iraq's acquisitiveness was incongruent comity, substance and timing, which were predicated on damaged interpersonal relationships. The interaction of these four elements made Iraq's pursuit of a deterrent quid pro quo, a flight of fancy.

(13) "*8 August 1995* General Hussein Kamel, Minister of Industry and Minerals and former Director of Iraq's Military Industrial Corporation, with responsibility for all of Iraq's weapons programmes, leaves Iraq for Jordan. Iraq claims that Hussein Kamal had hidden from UNSCOM and the IAEA important information on the prohibited weapons programmes. Iraq withdraws its 'Third Biological Full, Final and Complete Disclosure' and admits a far more extensive biological warfare programme than previously admitted, including weaponization. Iraq also admits having achieved greater progress in its efforts to indigenously produce long-range

[696] Rapoport, Anatol. 1997. *Fights, Games and Debates*. Ann Arbor: The University of Michigan Press; Schelling, Thomas. 1980. *The Strategy of Conflict*. Cambridge, MA: Harvard University Press.
[697] Brzoska, Michael & Pearson, Frederic. 1994. *Arms and Warfare: Escalation, De-Escalation and Negotiation*. Columbia: University of South Carolina Press.
[698] Op cit UNSCOM at 5.

missiles than had previously been declared. Iraq provides UNSCOM and the IAEA with large amounts of documentation hidden on a chicken farm ostensibly by Hussein Kamel, relating to prohibited weapons programmes, which subsequently leads to further disclosures by Iraq concerning the production of the nerve agent VX and Iraq's development of a nuclear weapon. Iraq also informs UNSCOM that the deadline to halt co-operation is withdrawn."[699]

Ad (13) It is difficult to sort through the 'fog' of the matter. Were the Iraqi authorities attempting to scapegoat General Kamal for their self-inflicted breaches of Safeguards, or was he a criminal who had proliferated weapons of mass destruction, or was it something more opaque? The only equivalent event that the researcher could relate to the Hussein Kamal incident in 1976 was the discovery that Commodore Dieter Gerhardt, who was in charge of the Simonstown Naval Dockyard, was a Soviet spy. It has been alleged that it was Commodore Gerhardt who led the Soviet Union to the discovery of the nuclear test site that was situated at Vastrap in the Kalahari Desert. I am not sure whether similar allegations were directed at General Hussein Kamel and whether or not they had substance, because my impression is that there was misinformation associated with this incident.

(14) "*November 1995* The Government of Jordan intercepts a large shipment of high grade missile components destined for Iraq. Iraq denies that it had sought to purchase these components, although it acknowledged that some of them were in Iraq. UNSCOM conducts an investigation that confirms that Iraqi authorities and missile facilities have been involved in the acquisition of sophisticated guidance and control components for proscribed missiles. UNSCOM retrieves similar missile components from the Tigris River, which have been allegedly disposed of there by Iraq's involvement in the covert acquisition."[700]

Ad (14) The first incident in this chronology of Iraq's substantive failed and improper relinquishment process was recorded in April 1991. Four and a half years of intensive United Nation's authorised inspections had since taken place under international scrutiny. At this late juncture it now emerged that Iraq has been involved in seeking components for

[699] Loc cit.
[700] Ibid.

proscribed missiles. This was a substantive breach of international law and a provocative violation of the ethos of comity. It would have damaged trust and undermined relationships as well. It is inferred that the Nuclear-Weapons-States would have been monitoring Iraq's cumulative pattern of obstruction of the Safeguards with growing concern and impatience. There was no recorded instance of any equivalent proliferation of proscribed material in the case of South Africa. Once again, the disjuncture can be interpreted as manifesting itself at the substantive, comity, relationship and time elements of this cross-country comparison.

(15) "*March 1996* UNSCOM are denied immediate access to five sites designated for inspection. The teams enter the sites after delays of up to 17 hours.

12 June 1996 Security Council resolution 1060 (1996) terms Iraq's actions 'a clear violation of the provisions of the Council's resolutions'. It also demands that Iraq grant immediate and unrestricted access to all sites designated for inspection by UNSCOM.

13 June 1996 Despite the adoption of resolution 1060 (1996), Iraq again denies access to another inspection team."[701]

Ad (15) Five years on Iraq had still not reached a coherent arrangement regarding access rights for Safeguards Inspections. This restriction of access and breach of international law can once again be regarded as part of an escalatory reprisal game indicative of a disregard for substance, comity, relationship and time. It signified a dangerous disregard for comity. It is my view that these cumulative and consistent violations of UN Security Council resolutions contributed towards politically legitimating the allied military invasion of that country, in spite of the dubious legality of anticipatory defence under international law, as grounds for going to war-*jus ad bellum*.

(16) "*30 June 1996* Statement by the President of the Security Council in which the Council deplores the refusal of Iraq to allow the Special Commission to remove

[701] Ibid.

certain missile engines from Iraq for analysis, and demands that Iraq allow such removal (S/PRT/1996/49)."[702]

Ad (16) Iraq had once again substantively breeched international law. It is not dissimilar from the incident cited in Ad (14) in November 1995, when Jordan intercepted the shipment of proscribed missile components that were intended for Iraq. It reveals that the leadership involved in Iraq's nuclear relinquishment was unconscionable. The Security Council was invoked yet again, to deplore Iraq's breach of another resolution. It would appear as though the Iraqi regime became quite immune to the United Nations Security Council's condemnation of their conduct.

(17) "*21 June 1997* Security Council Resolution 1115 (1997) condemns Iraq's actions and demands that Iraq allow UNSCOM's team immediate, unconditional and unrestricted access to any sites for inspection and official interviews by UNSCOM. The Council also calls for an additional report on Iraq's co-operation with the Commission and suspends the periodic sanctions review."[703]

Ad (17) The Security Council issued a further ultimatum to Iraq that was duly ignored. This constitutes the eighth habitual violation of a Security Council resolution tendered against the inspectorate for inhibiting their right of access to conduct audits in respect of Safeguards noted in this chronology. The matter of achieving a quid pro quo in the form of a relaxation of sanctions was expressed in paragraphs (12) and (18).

(18) "*5 August 1998* The Revolutionary Command Council and the Ba'ath Party Command decide to halt co-operation with UNSCOM and the IAEA pending Security Council agreement to lift the oil embargo, reorganize the Commission and move it either to Geneva or Vienna. In the interim, Iraq would on its own terms, permit monitoring under resolution 715 (1991)."[704]

Ad (18) The speculation about Iraq's pursuit of a deterrent quid pro quo articulated in Ad (17) is confirmed in paragraph (18). It is recalled that Mr de Klerk pursued a diametrically opposite relinquishment methodology to that chosen by Iraq. He cast aside the notion of achieving any residual

[702] Op cit UNSCOM at 5–6.
[703] Op cit UNSCOM at 7.
[704] Op cit UNSCOM at 10–11.

deterrent quid pro quo. He also conducted the relinquishment and accession programme in camera, outside the glare of public politics. Had he chosen to conduct this matter as an open negotiation, in a public forum, he would have similarly risked being accused of weakness by friend and foe alike. The instance that is recalled in Iraq and discussed above is again indicative of an absence of comity.

(19) "*13 September 1997* One of UNSCOM's personnel is manhandled by an Iraqi officer on board one of the Commission's helicopters while the inspector was attempting to take photographs of the unauthorized movement of Iraqi vehicles inside a site declared by Iraq to be 'sensitive', that was designated for inspection. Two days later, Iraq again failed to freeze movement inside another 'sensitive site' designated for inspection."[705]

Ad (19) This is part of a pattern of threats and coercion that was directed at the international inspectorate by Iraq: paragraph (1) warning shots; paragraph (2) confiscation of documents from the inspectorate, and stand-off and locking of inspectors into parking lot for four days; paragraph (10) refusal to allow inspectors flights using their own aircraft to perform their United Nations Security Council-authorised duties; paragraph (15) denial of access to suspected sites; and paragraph (19) manhandling of UNSCOM official. International law was yet again disregarded by virtue of their refusal to allow the Commission the necessary access for it to conduct its United Nations-sanctioned inspection, for the purpose of Safeguards. It is again reiterated that in South Africa, no IAEA official was ever manhandled, and access was never impeded.

Iraq's actions again constituted an indifference towards substance, comity, relationship, and time.

(20) "*17 September 1997* While seeking access to a site for inspection declared by Iraq to be 'sensitive' UNSCOM inspectors witness and videotape the movement of files, the burning of documents and dumping of ash-filled waste cans into a nearby river."[706]

[705] Op cit UNSCOM at 7.
[706] Op cit UNSCOM.

Ad (20) The attempt to destroy the evidence upon which the Initial Report would be audited constituted a breach of international law. There was not a single equivalent example in South Africa of the substantive factual evidence of the nuclear programme being tampered with. Iraq's destruction of evidence constituted a violation of substance, which obviated the creation of trust, and was unlawful.

(21) "*23 October 1997* Security Council Resolution 1134 (1997) demands that Iraq co-operate fully with the Special Commission, continues the suspension of the periodic sanctions reviews and foreshadows additional sanctions pending a further report on Iraq's co-operation with UNSCOM."[707]

Ad (21) This is another Security Council ultimatum directed at Iraq to abide by international law. It is contended that the repetitious and cumulative ignoring of these ultimatums foreshadowed the eventual loss of international patience and invasion of that country. The Security Council had repeatedly demanded that Iraq should abide by international law. The suspension of the sanctions review and enactment of additional sanctions on Iraq by the Security Council can be regarded as punitive and as a 'tit-for-tat' against Iraq's escalatory breach of UN Security Council resolutions. This conduct revealed a breach of comity, although the substance, relationship and time elements were also neglected.

(22) "*29 October 1997* The Deputy Prime Minister of Iraq, Mr Tariq Aziz, sends a letter to the President of the Security Council, informing the Council of policy decisions taken by the Government of Iraq. The letter includes a decision not to deal with personnel of United States nationality working for UNSCOM, a demand that all personnel of United States nationality working for UNSCOM leave Iraq by a given deadline, and a request that UNSCOM withdraw its 'cover' for the 'spy plane' U-2 provided by the United States."[708]

Ad (22) This is an interesting revelation about the conflict of laws in Iraq. In contrast to the South African case, Iraqi municipal law appeared not to have been reconciled with international law. The reader will recall that in

[707] Loc cit.
[708] Op cit UNSCOM at 8.

the previous chapter, a conscious effort was made by the South Africans to cultivate a trusting relationship with the Extra Team, of which the Americans constituted the most influential and vocal component. Iraq's display of an absence of comity towards the American contingent of UNSCOM's inspectorate was rash. It might have even contributed towards the political legitimating of the military invasion of Iraq.

(23) "*12 November 1997* Security Council resolution 1137 (1997) condemns the continued violation by Iraq of its obligations, including its unacceptable decision to seek to impose conditions on co-operation with UNSCOM. It also imposes a travel restriction on Iraqi officials who are responsible for or participated in the instances of non-compliance."[709]

Ad (23) This is again indicative of the conflict of laws. The expulsion of the Americans who performed UNSCOM's inspectorate might have been lawful under Iraq's municipal law, but this was most certainly not authorised by international law. In this paragraph, UNSCOM confirmed Iraq's tenth violation of a United Nations Security Council resolution and breach of international law. This resolution represented but one of many imprecations from the Security Council to Iraq to abide by international law. The imposition of travel restrictions upon the Iraqi leadership represents a personalisation and escalation of the conflict. There is again evidence of transgressions by Iraq of the substantive, comity, relationship and time elements of this comparison.

(24) "*13 November 1997* Iraq requires the personnel of United States nationality working for UNSCOM to leave Iraq immediately. The Executive Chairman decides the majority of UNSCOM personnel should withdraw temporarily from Iraq. A skeleton staff remains in Baghdad to maintain UNSCOM's premises and equipment."[710]

Ad (24) The expulsion of the Americans who were in Iraq performing a remit, which was authorised by the United Nations Security Council, was a further indication of a breakdown in relationships with the inspection authority. It is inferred that this gesture was probably a tit-for-tat in response to the travel restrictions imposed upon the Iraqi leadership. The

[709] Loc cit.
[710] Ibid.

recurrent theme is again that Iraq displayed a persistent absence of comity and disregard for relationships. It is noted that Iraq's focus on the United State's inspectors had become escalatory, and the matter of national prestige would undoubtedly have complicated the prognosis for a successful relinquishment exercise.

(25) "*9 September 1998* Security Council Resolution 1194 (1998) unanimously condemns Iraq's decision to suspend co-operation with UNSCOM, terming Iraq's actions a totally unacceptable contravention of Iraq's obligations; demands Iraq rescind its decision and decides not to conduct 60 day sanctions reviews until Iraq does so and the Commission reports to the Council that it is satisfied that it has been able to exercise its full range of activities, including inspections."[711]

Ad (25) The United Nations Security Council Resolution (1194) (1998) cited Iraq's eleventh violation of a Security Council resolution and breach of international law. The breach appears to have been manifested in an absence of concern about substance, comity, relationship and time.

(26) "*31 October 1998* Iraq announces that it will cease all forms of interaction with UNSCOM and its Chairman and halt all UNSCOM's activities inside Iraq, including monitoring. The Security Council, in a statement to the press, unanimously condemns Iraq's decision to cease all co-operation with UNSCOM.

5 November 1998 Security Council Resolution 1205 (1998) unanimously condemns Iraq's actions and demands that Iraq rescind immediately its decisions of 31 October and 5 August."[712]

Ad (26) Iraq disengaged from substantive consultations with the international weapons' inspectorate. This created the pre-conditions for the US and British invasion of Iraq. The invasion was legitimated by Iraq's inappropriate conduct with respect to the UN authorised inspections. The invasion was partially caused by Iraq's absence of substantial compliance with international law, disregard for international comity, contempt for nurturing respectful interpersonal relationships and dilatoriness with regard to time.

[711] Op cit UNSCOM at 11.
[712] Op cit UNSCOM at 11–12.

7.6 A Taxonomic Comparison of South Africa and Iraq's Nuclear Relinquishment Processes

In addition to Iraq's material breach of the above-mentioned resolutions, it breached a total of 16 prior United Nations Security Council resolutions over a period of 12 years.[713] [714] In the next section of this research, the reader is presented with four tables that provide a taxonomic comparison of South Africa and Iraq's nuclear relinquishment process viewed from the perspective of international law. They include sociology of law comparisons inspired by Konrad Zweigert and Hein Kötze that were conducted along the lines of substance, comity (process), relationships and time. Phenomenological reduction was used to synthesise the data into deeper linkages. The outcome of this is that it provides a concentrated comparative synthesis and analysis of the two nuclear relinquishment cases. It is clear that South Africa and Iraq undertook the respective nuclear relinquishments in profoundly different ways, with divergent objectives. The differences in conduct and objectives were deep seated and had been entrenched over years, to the extent that they had become habitual in the respective states. Iraq regularly and purposefully breached international law with respect to the Safeguarding process on the grounds of substance, comity, relationships and time, while South Africa did not. Iraq was often reprimanded by the United Nations Security Council by virtue of resolutions that attempted to impel it into compliance with Safeguards. These resolutions were regularly ignored over a long period of time. This was certainly not the case in South Africa, which took every effort to achieve compliance with the Safeguards.

[713] World Press Review. (Undated.) 'The United Nations, International Law and the War in Iraq'. [Online]. Available: http:www.worldpress.org/specials/Iraq [Accessed 25 March 2010].
[714] Kimball, Daryl & Crail, Peter. 2003. 'Disarming Saddam – A Chronology of Iraq and UN Weapons Inspections from 2002–2003'. Arms Control Association. July. [Online]. Available: http://www.armscontrol.org/factsheets/iraqchron

Table 7.1: A Substantive Comparison of South Africa and Iraq's Nuclear Relinquishment Processes

Key Issue of *Substance*	South Africa's Approach	Iraq's Approach	Commentary
Compliance with the NPT.	Never in breach of NPT.	Iraq acted in breach of NPT.	Iraq's substantive breach of the NPT in 1991 created a legacy of mistrust that complicated its relinquishment and accession. South Africa took a great deal of effort to comply to the letter with all terms and conditions of the NPT.
Military/operational usage of nuclear weapons.	Never contemplated.	Saddam Hussein contemplated dropping an atomic bomb unannounced on Israel.	Saddam Hussein did not have qualms about contravening international law and committing crimes against humanity. Indeed, he deployed chemical and biological weapons against the Kurds in northern Iraq and killed thousands in what has been alluded to as genocide. Hussein is cited as saying: "Don't tell me about the law. The law is anything I write on a piece of paper."[715]

[715] Hamza, Khidhir & Stein, Jeff. 2001. *Saddam's Bombmaker*. New York: Simon & Schuster. Frontispiece.

Key Issue of *Substance*	South Africa's Approach	Iraq's Approach	Commentary
Policy of nuclear deterrence.	South Africa never contemplated using nuclear weapons operationally. They were used for a limited deterrence purpose only. The rationale for deterrence was a positive law interpretation along the lines of the *Lotus* case. This assumed that what is not expressly prohibited is allowable. South Africa had an explicit written nuclear deterrent policy written by the Witvlei Committee.	Iraq used its nuclear weapons for deterrent purposes. The researcher was not able to discover a clear written deterrent policy in Iraq, although there might have been such a document.	South Africa had an explicit written deterrent policy. This afforded integrity to its municipal law and regulatory policies. South Africa created regulatory credibility for its municipal law, while Iraq did not.
International lifting of sanctions as trade-off and quid pro quo for the relinquishment of nuclear weapons and accession to the NPT.	South Africa failed to achieve a nuclear deterrent quid pro quo for relinquishment and accession to the NPT.	Iraq also failed to achieve a nuclear deterrent quid pro quo for relinquishment and accession to the NPT.	The researcher's view is that there was wisdom in not granting any tangible quid pro quo for the relinquishment and accession processes in both countries, because this might have been interpreted as condoning escalatory relationships that could place humanity at risk. The granting of trade-offs may be a dangerous precedent.
The presentation of factual material on nuclear weapons to the inspectorate.	South Africa was meticulous about presenting comprehensive, precise, factually verifiable material.	Iraq lied about its nuclear resources and capabilities. They dumped 12 000 pages of unrefined data on the inspectorate.	Trust developed in South Africa, but was eroded and corroded in Iraq.

Key Issue of *Substance*	South Africa's Approach	Iraq's Approach	Commentary
The deployment of a competent project team to relinquish nuclear weapons and accede to the NPT	South Africa's approach was carefully structured, and conducted as a high priority legal–technical project-management exercise, aimed at ensuring smooth accession to the NPT.	Iraq's approach was diffuse and very badly structured.	The approach that South Africa selected created trust in the inspectorate, while the approach that Iraq followed created mistrust and failed to imbue confidence. It created anxiety, fear and confusion.
Compliance with Comprehensive Safeguards.	South Africa's compliance with the Comprehensive Safeguards Agreement was regarded with professional pride.	There is little evidence in the literature of Iraq seeking to comply urgently with the Comprehensive Safeguards Agreement. Indeed, Iraqi conduct was characterised by obfuscation.	South Africa's diligence and proven sincerity in complying with Safeguards resulted in its gaining the support of the IAEA, the General Assembly of the United Nations and the 'Big Five'. It took her out of her international isolation. It assisted in the constitutional objective of achieving a positive recognition status. Iraq did not gain this support, because of its failure to comply to the letter with the NPT.
The 'driving force' behind the relinquishment and accession process.	The decision was voluntary in order to pursue the greater vision of securing a nationally and internationally acceptable constitutional settlement. The hostile military threats dissipated with the fall of the Berlin Wall and the withdrawal of the USSR, Cuba and the East Germans from Angola.	The decision was involuntary and imposed by the United Nations. In Iraq, the hostile military threats still remained.	Both South Africa and Iraq were under deep constitutional stress. South Africa developed an expansive and inclusive constitutional vision, while Iraq did the opposite.

Key Issue of *Substance*	South Africa's Approach	Iraq's Approach	Commentary
The role of the peaceful use of nuclear energy for the generation of electricity for civilian purposes.	The peaceful use of nuclear energy was used as a camouflage to screen a potentially mendacious usage.	The peaceful use of nuclear energy was also used as a camouflage to screen a potentially mendacious usage.	There is a convergence between both countries' 'peaceful' nuclear programmes. They were in both cases used as ploys to conceal a comprehensive nuclear weapons programme.
The number of inspection authorities.	South Africa's major inspection counterpart was the IAEA. It was, of course, enlarged by the addition of the Extra Team, which investigated past nuclear activities.	Iraq's situation was altogether more complicated. It had to address multiple inspection authorities. These inspection authorities included: IAEA, UNMOVIC, UNSCOM, and the national intelligence agencies of the US and UK. The terms of reference of the inspection regimen in Iraq pertained to the extended mandate of weapons of mass destruction, which included nuclear, chemical and biological weapons.	The technical problem of disarmament was much more complicated in Iraq than it was in South Africa, because of the multiplicity of powerful stakeholders involved in that country. The social problem of managing the fragmentation of views between the multiple inspection teams is referred to by Horst Rittel as a 'wicked problem'.[716] Rittel posits that wicked problems are problems whose definition constantly changes; which do not have right or wrong answers, but have better or worse answers; where the leader has no right to be wrong and where there is limited opportunity to learn by trial and error.[717]

[716] Ritttel, Horst & Webber, Melvin. 1973. 'Dilemmas in a General Theory of Planning'. Amsterdam: Elsevier Scientific Publishing Company. *Policy Sciences*, 4:155–169.
[717] Rittel, Horst. 1969. 'Reflections on the Scientific and Political Significance of Decision Theory'. Professor of Science Design, University of California, Berkeley. Working Paper No 155, February.

7.6.1 The Matter of Substance

Iraq's intention was to create a similar type of nuclear bomb to those which South Africa had produced. The difference was that Iraq intended using the bomb operationally, while South Africa did not. The absence of internal regulatory protocols and organised documentation within Iraq destroyed the substantive credibility of its case. This was one of the reasons the Iraqis struggled so hard to prove unequivocally that they had relinquished their nuclear arsenal. They did eventually co-operate on *substance*, but by the time they did so, it was substantially too late. They had cried 'wolf' too often, which itself can be regarded as a game of destructive comity.

In the next table, a comparison of comity in the context of South Africa and Iraq's nuclear relinquishment programmes is presented.

Table 7.2: A Comparison of South Africa and Iraq's Nuclear Relinquishment and Accession to the NPT in Terms of Comity

Key Issue of *Comity*	South Africa's Approach	Iraq's Approach	Commentary
Necessary information for inspections provided in a transparent, co-operative and trustworthy manner.	South Africa under the instructions of Mr de Klerk offered the IAEA a standing invitation to inspect any site, anywhere (in South Africa), and at any time.	Iraq often failed to provide co-operative access to the inspectorate. They were frequently seen as being reluctant to furnish the essential information.	South Africa placed a strong emphasis on co-operation with the IAEA, affording them open access to nuclear facilities. This South African concession on transparency was codified into United Nations Resolutions, and was cited as being an exemplar of appropriate process and procedure for nuclear inspections.
'Rules of engagement' between the inspectorate and the inspected.	South Africa decided to assume a co-operative and collaborative analytical problem-solving approach with the IAEA inspectorate – *in limine*. The IAEA inspectorate and its South African counterparts conducted joint-problem-solving seminars; and planned together in a respectful and interactive manner. The parties assumed a problem-solving and principled negotiation process. No 'games' were played. In South Africa, Mr de Klerk assumed a strong role of presidential authority.	Iraq quite frequently assumed a conflictive and competitive approach towards the inspectorate. The inspectors were of the view that their Iraqi counterparts played dangerous escalatory games. From an analytical perspective Iraq assumed a hard bargaining and zero-sum game to the relinquishment and accession process. The Iraqis did not have a clear presidential mandate from Mr Saddam Hussein.	The researcher's view is that Iraq's decision to follow a conflictive and competitive approach towards their nuclear relinquishment and accession to the NPT was the single most unwise and counterproductive feature of their chosen strategy. It prevented *in limine* clarification of the facts. Their choice of these conflictive and competitive ways of interacting was totally inappropriate and trivialised the nuclear disarmament. It destroyed comity.

Key Issue of *Comity*	South Africa's Approach	Iraq's Approach	Commentary
Relative degree of co-operation with inspectors.	Very high.	Sometimes good, but on too many conspicuous occasions, it was very bad.	Poor co-operation with the inspectorate is irresponsible because the inspectors' suggestions and recommendations are ultimately converted into United Nations Security Council Resolutions and may even result in the legitimisation of war.
Respect for ceremonial processes.	South Africa's respect for ceremonial processes was high. The Announcement Plan is an example of this respect for process and procedure. It attempted in a systematic way to ensure that the process was not jeopardised in any way. The ceremonial respect and degree of elation towards South Africa's compliance with the Comprehensive Safeguards Agreement was another example. At the celebration in Vienna of South Africa's accession to the NPT, the South African gift of the ploughshare made out of the nuclear casings was an excellent example of comity.	Iraq's respect for ceremonial processes was very low. They had breached the NPT and relinquished their arsenal reluctantly. The inspectorate's visit to the Karama sewage reticulation plant is an example of a destructive ceremonial process and poor comity.	The researcher's viewpoint is that Iraq's display of disrespect for comity and ceremonial process was an important causal factor leading to the war in 2003.
Selection criteria for relinquishment team.	Very stringent and performance calibrated.	Little evidence of stringency and performance calibration.	The care that Mr de Klerk took in selecting the right people was central to his success.

7.6.2 The Matter of Comity

The essential difference in the comparison between South Africa and Iraq's respective nuclear relinquishment programmes under the international inspections regimens is that South Africa, under the instructions of Mr FW de Klerk, set about relinquishing the nuclear arsenal voluntarily, while Saddam Hussein begrudgingly engaged in this process under compulsion. The rules of engagement with respect to the inspectorate, from the South African perspective, were those of comity in international law, and included co-operative and collaborative analytical problem-solving. In contrast, the rules of engagement with respect to the inspectorate in Iraq were often competitive and conflictive, and destroyed comity. In Iraq, the escalatory game of cat-and-mouse was played.This was extremely dangerous to international peace. The researcher's view is that Iraq had also failed to present a sufficiently compelling case in the domain of comity. Iraq did ultimately co-operate on comity, but by the time it did so, it was too late. Iraq should have done so from the beginning.

In the next table, a relationship comparison between South Africa and Iraq's nuclear relinquishment and accession processes will be offered.

Table 7.3: A Relationship Comparison of South Africa and Iraq's Nuclear Relinquishment and Accession to the NPT

Key Issue of *Relationship*	South Africa's Approach	Iraq's Approach	Commentary
Respect for personal relationships.	Trust and credibility, with respect for the integrity of personal relationships, was regarded as the essential bond for achieving substantive and procedural compliance with the Safeguards Agreement. There are many examples in this research of the pre-eminence of the integrity of personal respectful relationships. It will be recalled that the Announcement Plan was designed to ensure that Dr Hans Blix was in the country because 'he was the last person in the world that Mr de Klerk would have wished to have embarrassed'.	Iraqis elected to follow competitive and conflictive rules of engagement with respect to its disarmament and in relation to the inspections, and set a precedent of mistrustful personal relationships. This trust was never fully restored and contaminated the presentation of Iraqi data with suspicion. Iraq's approach of playing games escalated tensions and detracted from the task at hand. *Ratione personae* was poor.	Respect for personal relationships – *ratione personae* – was the starting point on which South Africa's successful nuclear relinquishment and accession to the NPT was predicated. This respect was not evident in the case of Iraq.
Respect for institutional relationships.	South Africa's deportment with the IAEA and the Extra Team was always carefully measured and appropriate. Mutually respectful institutional relationships – *ratione personae* – were based on excellent personal relationships.	Iraq's deportment with regard to institutional relationships with the IAEA, UNMOVIC and UNSCOM was often cavalier.	Respectful institutional relationships were predicated on respectful personal relationships – *ratione personae*.

Key Issue of *Relationship*	South Africa's Approach	Iraq's Approach	Commentary
Respect for international relations.	The South Africans were fully cognisant of the fact that they were regarded as international pariahs at the time of the decision to relinquish the nuclear arsenal and accede to the NPT. Mr de Klerk's stated goal was to have South Africa reaccepted as a respected member of the international community of nations. He pursued a new and positive recognition status for South Africa's new constitution. The *raison d'être* for the relinquishment and accession process and for the interlinked constitutional negotiations was for South Africa to restore its international standing.	The Iraqis were engaged in highly conflictive international relations with the US and UK and gained only dubious support from others. At the time of their disarmament process, they were highly cynical in their international relations.	The outcome in South Africa was peaceful, because this was the intended result. The outcome in Iraq was war, because they flouted international relations.

7.6.3 The Matter of Relationship

South Africa developed co-operative and respectful relationships with the inspectorate, while Iraq did not. The importance of this qualitative difference in relationships cannot be underestimated. The researcher's view is that Iraq failed at the relationship level because they consistently breached United Nations Security Council and General Assembly resolutions, and this degenerated into a regular pattern of breach of trust. Once this trust was destroyed, it was very difficult to reconstitute.

For South Africa, *relationships* led to peace; in the case of Iraq, their negative relationships led to war.

Table 7.4: A Time Comparison of South Africa and Iraq's Nuclear Relinquishment and Accession to the NPT

Key Issue of *Time*	South Africa's Approach	Iraq's Approach	Commentary
Timelines and relative urgency devoted to the process and procedure of the relinquishment of the nuclear arsenal and accession to the NPT.	In South Africa, the timelines were strictly adhered to. The relinquishment and accession process was conducted exceptionally quickly. This urgency to abide by timelines was because of the serious light in which the matter was regarded by Mr de Klerk. The decision to relinquish the nuclear arsenal was taken in September 1989. The point of accession was 10 July 1991, and the announcement was made on 23 March 1993.	Iraq's disarmament process began in 1991. It dragged on for twelve years until 2003. There was little evidence of a proactive game plan for nuclear relinquishment and accession to the NPT. There is evidence of a dilatory approach, and little evidence of proactive compliance, although there are reports of substantial compliance in certain areas and domains. The Iraqi process was reactive while South Africa's approach was proactive.	When we note the cumulative non-compliance with United Nations General Assembly and Security Council Resolutions by Iraq, it becomes self-evident that these breaches occurred over time – *ratione temporis*. Deadlines were repeatedly broken over a decade, and eventually the disrespect displayed towards *ratione temporis* resulted in Iraq being presented with an ultimatum by the US and UK. This was not heeded and the war ensued. South Africa's compliance with the timelines was seen in a positive light. Iraq's dilatory approach was seen in a very negative light.

7.6.4 The Matter of Time

Time is a vitally important but invisible dimension of international law. South Africa's approach towards *Time* was deadline driven, and the entire nuclear relinquishment and accession process took barely two years. The respondents have conveyed their deep sense of urgency about this process in the research.

Iraq's approach towards *time* was nonchalant. They were not strongly deadline driven. They had thirteen years to complete the task of nuclear relinquishment and accession to the Treaty on the Non-Proliferation of Nuclear Weapons, and they still failed.

7.7 The General Findings of the Comparison of How South Africa and Iraq Relinquished their Nuclear Weapons in Terms of International Law

This comparison of how South Africa and Iraq' relinquished their nuclear arsenals in terms of international law raises the stark questions of why was Iraq so consciously obstructive and why did it commit so many material breaches of international law, particularly in light of the fact that it did not possess any nuclear weapons at during the years preceding the allied invasion in 2003. After deep reflection, I can only deduce that Iraq's regular and cumulative disregard for international law was purposeful. It is presumed that the tyrannical regime of Saddam Hussein came to the view that they had no choice but to break international law consistently as a matter of nuclear policy. It was done for a similar reason to that which justified the first phase of South Africa's official Witvlei Nuclear Weapons Policy, which advocated a phase of planned ambiguity that neither confirmed nor denied that South Africa possessed a nuclear arsenal.

It is my view that Iraq's repeated breaches of international law were intended to create an international aura of ambiguity about its nuclear intentions. The truth that it had actually relinquished its nuclear arsenal could not be publicly admitted. This was because the Iraqi regime derived its power from uncertainty, fear and terror. The regime's intrinsic power was sourced in uncertainty, fear and terror, and the myth of its military might was fundamental to its maintenance of political power. It breached international law and showed contempt for the United Nations Security Council resolutions to perpetuate the myth of its nuclear strength, and as disinformation against the reality of its military powerlessness. Iraq therefore became a victim of its own propaganda and lies. The regime could not admit that it had relinquished its nuclear arsenal even when it had done so, because this admission would perhaps have been interpreted by the many opponents to the junta as weakening, and it might have led to an uprising and revolution. The nuclear weapons were

therefore an ambiguous bluff and camouflage, as they were non-existent. This bluff was perpetuated in the vain hope of perpetuating the continuity of Saddam Hussein's dictatorship.

The knowledge transfer attempt by South Africa failed because there was no suitable knowledge to transfer. The Iraqis were locked into a trap. Any disavowal of their nuclear weapons programme would appear to have been regarded by the regime of Saddam Hussein as an admission of sovereign weakness. Such a public admission would have placed the dictatorship at risk, because there was much internal and external opposition to it. Its foundation was based on terror and fear, and the nuclear weapons and weapons of mass destruction programmes represented an important cornerstone of that propaganda of terror. The regime therefore perpetuated its policy of nuclear weapons ambiguity for as long as possible. The United States and the United Kingdom, in my view, played along with this lie and then called the dictatorship's bluff by using Iraq's obfuscation on its nuclear weapons status as an excuse to justify their invasion of Iraq, sans Security Council authorisation. South Africa's visit to Iraq and attempted knowledge transfer was therefore a failure. The Iraqis, in spite of their numerous breaches of international law and disregard for United Nations Security Council Resolutions, had actually relinquished their nuclear weapons and had indeed complied with Safeguards, but not in the coherent and prescribed format required by the IAEA. There was a great deal of confusion in Iraq's relinquishment process at the substantive, comity, time and relationship levels, and it could aptly be described as a fog of confusion that was conveyed to conceal the fact that 'Emperor' Saddam Hussein at that stage wore no clothes.

Two important questions remain to be answered: firstly, why did the United States and United Kingdom illegally invade Iraq when it clearly had no nuclear weapons; secondly, why was the knowledge transfer between the international inspectorate and the United States and United Kingdom a failure? It is contended that the answer to the first question is that the

United States and United Kingdom illegally invaded Iraq under the pretence of accepting its propagandistic disregard for international law manifested in its numerous breaches on United Nations Security Council resolutions at face value, because they perceived that it was in their national interest to do so. Secondly, the knowledge was not successfully transferred between the international inspectorate and the United States and United Kingdom's inspectorates because the successful knowledge transfer would have been perceived to be against these national interests.

South Africa sought to relinquish its nuclear arsenal in order to ensure that the new non-racial and democratic Constitution achieved positive international recognition stature and obviated its then pariah recognition stature. Iraq, by way of contrast, did not appear to have a clear constitutional vision that was unified into its relinquishment purpose. South Africa relinquished its nuclear arsenal and acceded to the Treaty on the Non-Proliferation of Nuclear Weapons in order to seal a social contract of good faith for a unified future in a non-racial democracy. Iraq had no such comparative vision for a desired constitutional future, to be shared by its diverse population. South Africa's nuclear relinquishment process was conducted voluntarily; while Iraq's was not voluntary and was conducted under international duress.

South Africa's reason for relinquishing its nuclear arsenal included the active pursuit of constitutional continuity in the light of its national transition, and was at the same time an attempt to enhance international juridical security in the context of this change of regime. South Africa envisioned that the relinquishment of its nuclear arsenal would enhance its international security and prestige. Iraq held the opposite view. Iraq perceived that the relinquishment of its nuclear arsenal would diminish its international and domestic security. Constitutional continuity and international juridical security did not appear to be a concern in Iraq at the time of relinquishment. South Africa discovered that it could not derive a deterrent quid pro quo in exchange for its nuclear weapons. Iraq persisted with the vain pursuit of seeking a deterrent quid pro quo in exchange for

the relinquishment of its weapons of mass destruction. Iraq conjured an all-too-literal interpretation of the conversion of nuclear deterrence into political and economic advantage. The reality was that nuclear deterrence in Iraq created the opposite set of circumstances. Mary Ellen O'Connell makes the point that the controversial debate about Iraq since 1991 was whether sanctions should be lifted or implemented and "not whether states should be able to use military force to rid Iraq of weapons of mass destruction and the means to produce them. No acquiescence has occurred to allow force for enforcing weapons inspections, and certainly none has developed to authorise the ousting of Saddam Hussein".[718] It was because South Africa had a clear vision expressed by strong leadership at that particular time in its history that it was successful in relinquishing its nuclear weapons and acceding to the NPT. Iraq did not have clear leadership and a unifying vision. Its accession to the NPT was not linked with a larger and positive constitutional vision for the future.

Iraq's nuclear relinquishment process differed from South Africa's because they had neither the consent to accede to the Treaty on the Non-Proliferation on Nuclear Weapon, nor the intention of doing so. Consent and intention are, of course, the two fundamental criteria required for treaty accession. Indeed, Iraq actively opposed the relinquishment and accession process over a long period. The nuclear relinquishment decision in Iraq was not a voluntary decision; it was an imposed decision, and reluctantly enacted. This is again indicative of how diametrically opposed it was to South Africa's process, which was both consensual and intentional. Iraq appeared to become increasingly committed to obstructing the international inspectorate over a long period, and attitudes hardened. These hardened attitudes would make the transfer of knowledge of South Africa's nuclear relinquishment and accession process very difficult indeed. In my view, the only way that this knowledge could have been peacefully transferred was if the Iraqi leaders who were involved in this process had abdicated. Given Saddam Hussein's dictatorial and tyrannical

[718] Op cit O'Connell.

leadership style, this was hardly going to be feasible. The Iraqi state representatives who were vested with the responsibility for nuclear relinquishment, have, in my opinion, provided a case study of shockingly negligent and incompetent negotiation.

The researcher contends that the failure by Iraq to respect Resolution 687 (1991) wholeheartedly and to enter into the relinquishment process in a positive spirit of co-operation, together with their wrong choice of conflictive and competitive conduct, was a prime cause of the escalation of the conflict and the subsequent invasion of that country by the United States and the United Kingdom. Had Iraq followed the spirit and the letter of the South African nuclear relinquishment methodology from the beginning, they might possibly not have brought about the devastation that so tragically was visited upon them as a result of the ensuing war.

The research found that Iraq had repeatedly violated the inspection and safeguarding regimens and United Nations General Assembly and Security Council Resolutions over a period of more than a decade. There were at least twelve occasions between 1991 and 1998 alone where Iraq breached UN Security Council resolutions and where these violations were condemned by the United Nations General Assembly.[719] In contrast, not one condemnatory resolution was tabled by the United Nations Security Council with respect to South Africa's relinquishment of its nuclear arsenal and accession to the Treaty on the Non-Proliferation of Nuclear Weapons. South Africa did not default with a single breach of the Safeguards Agreements; nor was there any instance of untoward interference with the IAEA's or Extra Team's inspectorate during the entire relinquishment and accession process.

During the period between 1991 and 1998, the researcher was able to identify at least fourteen major breaches of the right of access to the United Nations inspectorate by the Iraqi authorities. In addition to Iraq's

[719] UNSCOM. *Chronology of Main Events: December 1999*. [Online]. Available: http://www.un.org/Depts/unscom/Chronology/chronology.htm

recurrent breaches of diverse United Nations resolutions, it also breached the Treaty on the Non-Proliferation of Nuclear Weapons, the Statute of the International Atomic Energy Agency, international law, and international humanitarian law.

7.8 A Brief Reflection on the Legality of the Use of Force against Iraq in Terms of Anticipatory Self-Defence

On 7 June 1981 Israeli jets bombed the nuclear reactor located at Osirak in Iraq. Israel legitimated this bombing by alleging that Iraq intended using this reactor for nefarious purposes which might have included dropping a nuclear bomb on their territory, upon the orders of Saddam Hussein.[720] In other words, they justified this bombing under the rationale of anticipatory self-defence. Khidhir Hamza was a leading figure in Saddam Hussein's nuclear bomb construction programme. He confirmed that:

"In 1971, on the orders of Saddam Hussein, we set out to build a nuclear bomb. Our goal was to construct a device roughly equivalent to the bomb the United States dropped on Hiroshima in 1945, that is to say, with the explosive power of twenty thousand tons of TNT. The first one would be a crude device, a sphere about four feet in diameter, too big and heavy for a missile warhead but suitable for a demonstration test or, as we discovered to our horror, Saddam's plan was to drop one unannounced on Israel."[721]

The threat articulated by Khidhir Hamza is undoubtedly very serious. In this instance, a serious threat to Israel's existence is alleged by an ostensibly credible witness. According to his testimony, Saddam Hussein wished to drop a nuclear bomb on Israel in 1971. The question that arises is: was there a right of anticipatory self-defence in international law?[722] Singh and Macdonald argued:

"A threat to use very serious weapons – nuclear weapons being an obvious example – could justify an earlier use of defensive force than might be justified in the case of a less

[720] Op cit Blix (2004) at 19.
[721] Op cit Hamza & Stein at 333.
[722] Singh, Rabinder & Macdonald, Alison. 2002. 'Legality of the Use of Force Against Iraq'. Opinion Public Interest Lawyers, Matrix Chambers, Gray's Inn, London. 10 September. 8.

serious threat. However, the existence of the threat, regardless of how serious that threat might be, must still be supported by credible evidence."[723]

The answer to this question in the case of the Osirak incident is therefore affirmative. The substantive justification for destroying the Osirak nuclear reactor was that the Safeguards inspections that had been conducted in Iraq by the IAEA were not trusted.[724] Nevertheless, Israel was condemned for this action of anticipatory self-defence by the International Atomic Energy Agency on 19 June 1981 in a unanimous resolution that was adopted by the United Nations Security Council. Israel's action was deemed a serious threat to the Safeguards system.[725] The United States supported this resolution against Israel, but added the rider that they supported it because Israel had failed to explore all peaceful means before bombing the nuclear reactor. This implied that the US would probably not have supported the resolution against Israel had it exhausted all peaceful means prior to this military excursion.

John Dugard asserted that:

"Legal scholars are divided as to whether art 51 allows force to be used in anticipatory self-defence. One school argues that art 51 permits force to be used in self-defence if, and only if, an armed attack occurs. Another argues that customary-law right of anticipatory self-defence is preserved by the phrase 'inherent right' in art 51, and that in the context of modern weaponry it is ridiculous to argue that the drafters of the Charter could have intended to exclude such a right."[726]

South Africa has also used the rationale of anticipatory self-defence to justify attacks on houses in Lesotho, Moçambique, Zimbabwe, Zambia, Namibia and Botswana, claiming that these pre-emptive actions would forestall subsequent acts of terror. John Dugard cited President P W Botha as legitimating the state's right of anticipatory self-defence:

[723] Op cit Singh and Macdonald at 13.
[724] Op cit Blix (2004).
[725] Mallison, WT & Mallison, SV. 1982. 'The Israeli Aerial Attack of June 7 Upon the Iraqi's Nuclear Reactor: Aggression or Self-Defence?' *Vanderbilt Journal of Transnational Law*, 15:417.
[726] Op cit Dugard (2007) at 507.

"It is a particularly serious transgression of international law for states to provide sanctuary to elements which plan, instigate and execute acts of terror against other states, as is happening in Southern Africa. It is an established principle of international law that when this occurs, the state against which such acts are perpetrated, has the right to resort to acts of self-defence and to carry out pre-emptive strikes."[727]

South Africa did not seek United Nations Security Council authorisation to embark upon these pre-emptive raids into foreign states. Quite apart from the reality of the threat of terror, these raids were therefore illegal in terms of international law. The invasion of Iraq in 2003 by the United States and United Kingdom was also justified in terms of anticipatory self-defence. A State can lawfully use force against another only if it is authorised by a United Nations Security Council Resolution and in "[i]ndividual or collective self-defence (a right under customary international law which is expressly preserved by Article 51 of the Charter)".[728]

Iraq's breaches of various United Nations General Assembly and Security Council Resolutions, Safeguards Agreements, and inspection processes legitimated the military invasion of Iraq. The fact that they legitimated the invasion does not, however, mean that the invasion was lawful in terms of international law.

Singh and Macdonald cite Professor Antonio Cassese, former President of the International Criminal Tribunal for the Former Yugoslavia, as asserting that:

"If one undertakes a perusal of State practice in the light of Article 31 of the Vienna Convention to the Law of Treaties, it becomes apparent that such practice does not evince agreement among States regarding the interpretation of Article 31 with regard to anticipatory self-defence."[729]

Singh and Macdonald then proceed to cite Oppenheim as providing an authoritative view on the legality of anticipatory self-defence:

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[727] Loc cit, referring to House of Assembly Debates 20 May 1986 (cols 6032–6034).
[728] Op cit Singh and Macdonald at 7.
[729] Cassese, Antonio. 1998. *International Law*. Oxford: Oxford University Press. 309.

"States may have the right to defend themselves by using force to pre-empt an imminent and serious attack. However, such use of force would have to be in accordance with the general rules and principles governing self-defence. The development of the law, particularly in the light of more recent state practice, in the 150 years since the *Caroline* iIncident, suggests that action, even if it involves the use of force and the violation of another state's territory, can be justified under international law where:

(a) an armed attack is launched, or is immediately threatened, against a state's territory or forces (and probably its nationals);
(b) there is an urgent necessity for defensive action against that attack;
(c) there is no practicable alternative to action in self-defence, and in particular another state or other authority which has the legal powers to stop or prevent the infringement does not, or cannot, use them to that effect;
(d) the action taken by way of self-defence is limited to what is necessary to stop or prevent the infringement, i.e. the needs of self-defence." [730]

It is quite clear that legal justification for the invasion of Iraq revolved around the implementation of the terms and conditions of United Nations Security Council Resolution 1441 of 2002. It is my contention that the anticipatory self-defence justification in Iraq was illegal because the invasion of Iraq was conducted in a manner which was not procedurally correct and with a high disregard for legal comity, because the allies did not receive explicit United Nations Security Council authorisation under Chapter VII of the United Nations Charter for the martial adventure.

Israel was condemned for bombing the nuclear reactor at Osirak because it had failed to explore all peaceful means before bombing the installation. The selfsame logic applies to the allied invasion of Iraq in 2003. There was no indication of an imminent attack from Iraq that could justify the use of force against it. Iraq was not afforded a reasonable period of time to implement Resolution 1441. The invasion took place too soon after the adoption of Resolution 1441 (2002), and Iraq's circumstances were too internally chaotic for it reasonably to provide the required information in such a short period of time. In other words, the allies did not afford

[730] Op cit Singh and Macdonald at 9–10, where they cite Jennings & Watts (eds.), 1992 at 41–43. See: Jennings, Robert (QC) & Watts, Arthur (eds.). 1992. *Oppenheim's International Law*. Ninth Edition. Harlow, Essex: Longman.

adequate time for the Iraqis to achieve compliance with Resolution 1441. The comparative analysis of the relinquishment process did not provide any clear substantive evidence that Iraq would create an overwhelming humanitarian catastrophe. It is conceded that the Saddam Hussein regime was an international menace, but it is clear that they were too depleted at that stage to be a threat to world peace. The inspections, although very messy, did not yield any evidence of retained nuclear weapons. In addition, the Bush Doctrine itself does not, in my view, withstand the scrutiny of strict compliance with international law. It seemed to be an attempt to fit the war fever that prevailed at that time into United Nations structures which governed the use of force and which are provided in the United Nations Charter.

In March 2003, the Attorney-General advised Prime Minister Tony Blair that there must be a degree of imminence to justify anticipatory self-defence, and he made the point that:

"I am aware that the USA has been arguing for recognition of a broad doctrine of a right to use force to pre-empt danger in the future. If this means more than a right to respond proportionately to an imminent attack (and In understand that the doctrine is intended to carry that connotation) that is not a doctrine which, in my opinion, exists or is recognised in international law." [731]

It is contended that the invasion of Iraq under the doctrine of anticipatory self-defence was illegal because it was disproportionate. President George W Bush indicated that if Iraq failed to implement any of the terms and conditions demanded in United Nations Security Council Resolution 1441, he would use force to effect regime change in Iraq. He ordered this invasion in spite of the fact that Iraq had not had sufficient time to comply with the implementation of these terms and conditions.

Mary Ellen O'Connell submitted that the argument justifying this threat of anticipatory self-defence resided in the argument that:

[731] British Attorney-General's Advice to Blair. 7 March 2003. Global Policy Forum. [Online]. Available: http://65.181.175.195/component/content/article168/36072.html

"... the ceasefire resolution, 687 (1990), which did explicitly authorise the use of force to oust Iraq from Kuwait and establish peace in the region. Further, members of the Security Council for about a year after the adoption of the ceasefire resolution apparently acquiesced in the interpretation that it implied authority to do more than liberate Kuwait. Few protested the creation of the Kurdish protection zone in northern Iraq or in using force to establish no fly zones in northern and southern sectors of the country. So while Resolution 687 paragraph 34 explicitly reserves to the UN Security Council the decision to take measures against Iraq beyond sanctions, using force in the no-fly zones is arguably permissible".[732]

Article 51 of the United Nations Charter provides that "the inherent right of individual or collective self-defence if armed attack occurs". Legal scholars have long contended that anticipatory self-defence is permissible in the case where an armed attack is imminent. The definition of imminence developed from the *Caroline* incident, which occurred in 1837.[733] The *Caroline* was deployed by Canadian rebels and used as a logistical supply ship in opposition to British rule. The British army duly attacked the *Caroline* in anticipatory self-defence. The *Caroline* incident itself provided tangible indications of an imminent attack by the rebels in 1837. In my view, there was no equivalent compelling evidence of Iraq machinating an imminent attack on the United States or United Kingdom circa 2003. It is very difficult to understand the United States and United Kingdom's authority under international law for invading Iraq. Questions which have yet to be answered include: Why did the allies' own nuclear inspectors reject the opinion of the international inspectorate (who were all experts) that Iraq did not possess any nuclear weapons? Why did the allies persist with pretending that they believed Iraq's propaganda of nuclear ambiguity when the facts confirmed the contrary? I can only deduce that the allies proceeded to invade Iraq because they believed that it was in their

[732] Op cit O'Connell. See also: Quigley, John. 2000. 'The United Nations Security Council: Promethean Protector or Helpless Hostage?' *Texas International Law Journa*l, 35:124; Lobel, Jules & Ratner, Michael. 1999. 'Bypassing the Security Council: Ambiguous Authorization to Use Force, Cease-Fires, and the Iraqi Inspection Regime'. *American Journal of International Law*, 93:124: Wedgewood, Ruth. 1998. 'The Enforcement of Security Council Resolution 678: The Threat or Use of Force Against Iraq's Weapons of Mass Destruction'. *American Journal of International Law*, 92:724–726.
[733] Jennings, RY. 1938. 'The *Caroline* and *McLeod* Cases'. *American Journal of International Law*, 32:82, 85.

national interest to do so, and international law was bent and disregarded to fit in with this notion ex post facto.

7.9 Completing the Circle: Is the Comparative Knowledge that Emerged from South Africa's Nuclear Relinquishment Processes Transferable to Other States?

There is a constant battle between heart and mind. If rationality is permitted to prevail, the knowledge that was created in the nuclear relinquishment cases of both South Africa and Iraq should be transferable to other states at least in part. The sociology of law framework consisting of substance, comity, relationship and time was particularly useful in organising the findings, and these criteria could well be used as broad outlines for conducting a nuclear relinquishment and accession process. The circumstances of each country though can be expected to differ greatly, and so my starting point would be a presumption of uniqueness.

This analysis has illustrated that the nuclear relinquishment and accession processes in South Africa and Iraq were conducted in qualitatively different ways from the perspective of substance, comity, relationships and time. These categories provide useful headings for identifying to the lawyer the clusters of the most generic themes that underpin the relinquishment of nuclear weapons and accession to the Treaty on the Non-Proliferation of Nuclear Weapons. It is contended that these themes will offer relevant but imperfect guidelines to any country that wishes to relinquish its nuclear arsenal and to accede to the NPT. The knowledge should therefore be imperfectly transferable from one state to the next.

Iraq's negative conduct in the domains of substance, comity, relationship and time was such that it eclipsed its own substantive case of proving that it was free of weapons of mass destruction. It was invaded in spite of the fact that there was no concrete proof of its having retained nuclear weapons. No weapons of mass destruction were discovered during or after the invasion.

The research discovered that the methodologies followed in the cases of South Africa and Iraq were diametrically opposed in terms of international law. There were some commonalities in their approaches, inasmuch as both countries failed in their endeavour to achieve a deterrent quid pro quo in the form of the lifting of sanctions. Both countries camouflaged civilian usage of nuclear power for the creation of electrical energy as a decoy to pursue their nuclear weapons objectives. South Africa presented a successful case, and Iraq presented a failed case, for nuclear relinquishment and accession. The comparison of South Africa and Iraq's nuclear relinquishment approaches reveals stark contrasts. These contrasts originate from the fact that they are very different societies with very different cultures, histories, constitutional frameworks and political circumstances. Although the specific variables in each country will always remain unique, there are a number of generic themes that would probably prevail and be of relevance to all nuclear relinquishment processes and instances of accession to the NPT.

- In Iraq, there were incessant time delays in relinquishment and providing a comprehensive opening inventory. This was not the case in South Africa.
- In Iraq, there was evidence of a contaminated inspection process including playing silly games and disrespect for comity in international law. In South Africa, great care was taken to cherish comity.
- In Iraq, there was evidence of poor substantive compliance with the terms and conditions of the NPT. The Iraqi Initial Report was imprecise and chaotic. In South Africa, it was precise and perfectly reconciled.
- In Iraq, there is evidence of acutely disrespectful relationships between the inspectors and inspected. In South Africa, great care was taken to ensure that respectful relationships were maintained.

7.10 Conclusion

The conclusion is that the knowledge that arose from this comparative analysis of South Africa and Iraq's nuclear relinquishment processes and accession to the NPT would probably hold lessons and guidelines that might well be relevant in part, or in full, to other countries contemplating a similar exercise. It would seem that the Iraqis had already transferred the necessary facts and knowledge to the inspectorate prior to the visit from the South African delegation, and that the inspectors understood that Iraq had relinquished its nuclear weapons. The South African case and visit were therefore irrelevant to the Iraqis at that time. This conclusion presumes that it was not the United Nations inspectors who took the decision on whether or not Iraq was free of weapons of mass destruction. It asserts rather that it was the United States' and British intelligence services that made the judgment call, thus mollifying the United Nations inspectors' remit. It is contended that the conflictive and competitive rules of engagement which Iraq elected to follow with respect to the inspectorate over the years were sufficiently inappropriate and destructive upon relationships to have created a negative legacy that compromised the substance, comity and time components of the interaction, and therefore negated trust. Their disregard for international law during the wasted time of the inspection regime resulted in the allies eventually losing patience and trust. They, too, sadly disregarded international law. The vitally important case of nuclear relinquishment in Iraq was therefore not adjudged on the facts, but was rather assessed on the basis of the legacy of the contaminated comity, poor substantive compliance, and disrespectful relationships that had been cultivated over a period of more than a decade.

Chapter Eight

Conclusion

8.1 A Synopsis of the Structure, Evidence and Argumentation Contained in this Research

This conclusion is introduced with a brief synopsis of the structure, evidence and argumentation contained in the chapters that comprise the research and is intended to afford the reader with retrospective clarity on the structure and organisation of this thesis as an entirety. The answers that emerged to the research questions posed in chapter one are presented. South Africa's accession to the NPT led directly to the conclusion of the Treaty of Pelindaba, which resulted in the entire African continent becoming a nuclear-weapons-free zone. The second consequence was that the remit of the Atomic Energy Corporation (AEC) in South Africa changed. The AEC's focus moved completely away from military application of nuclear science. The new focus was entirely on commercial, energy, industrial and medical nuclear applications which are authorised and indeed encouraged by the NPT. It was shown that South Africa's nuclear programme changed practically and metaphorically from a focus on swords to a focus on ploughshares.

8.1.1 Chapter One: Research Questions, Aims and Methodology

Chapter one clarified the research questions, aims, objectives and methodology. It identified the various themes that comprise this research. These included the challenge of securing and interviewing a small expert sample of respondents who were personally involved in South Africa's nuclear weapons programme from its relinquishment to its accession. The goal of the research was to seek to understand the reasons that South Africa voluntarily relinquished its nuclear arsenal and acceded to the Treaty on the Non-Proliferation of Nuclear Weapons in terms of international law.

The research design and methodology formed the conceptual cornerstone of this thesis. The research was distinguished by the fact that it set about using phenomenology as a research methodology. The research demonstrated that the methodology of phenomenology could be usefully and practically deployed in applied legal research involving lived experience. The decision to conduct this legal research as a phenomenological case study of the lived experience of key decision-makers who were responsible for the nuclear relinquishment and accession process undoubtedly created an ambitious research challenge. It was considerably more conceptually complicated than it would have been had the research been conducted as a literature review of the research questions. The results of this research, though, provide the reader with a document that may well be of practical assistance in addressing the legal aspects of nuclear relinquishment and accession to the Treaty on the Non-Proliferation of Nuclear Weapons. I initially questioned the appropriateness of the phenomenological method to this research, but gradually came to realise its robustness as I became ever more deeply involved in the dissertation. I suspect that phenomenological methodology may have a possible application in International Criminal Court investigations, for example. There are, in my view, many areas of legal research where the methodology of phenomenology may be usefully employed for both data collection and legal analysis.

The research was unique because it sought to triangulate the lived experience of the respondents with the extensive and relevant international legal knowledge that underpins the legality of nuclear weapons. The testimony provided by the respondents indicated that the original terms of reference for this research as set out in Chapter One were too narrow. The original intention was to conduct the research as a single case study of the South African experience, but its scope was enlarged upon to create a second comparative case study of the Iraqi relinquishment process. This was done in order to ascertain the extent to which the knowledge that emerged from these two cases might be transferable to other states that might wish to relinquish their nuclear

arsenals and accede to the NPT. A simple sociology of law framework was designed in order to render the two countries' nuclear relinquishment processes comparable. The design included a structured comparison of the relinquishment processes in South Africa and Iraq along the variables of: substance, comity, relationships and time. I had no knowledge prior to undertaking this research that South African nuclear weapons experts visited Iraq just prior to the 2003 invasion in order to offer advice on how to relinquish their nuclear arsenal, and that this attempt at knowledge transfer had failed. This represented an important de-limitation on the question of the transferability of the knowledge.

The introduction offered the reader:

- An historical background on the evolution of South Africa's nuclear weapons capability;
- The core phases of the relinquishment process and its legitimising function with respect to the constitutional negotiations;
- The failed mission to Iraq to transfer knowledge of the South African nuclear relinquishment process;
- Mr de Klerk's instruction to relinquish the nuclear arsenal; South Africa's recognition crisis;
- South Africa's purposeful delay in acceding to the NPT;
- A broader historical overview of nuclear relinquishment and accession to the NPT – the cases of Argentina, Brazil, South Korea, Taiwan, Libya, Byelorussia, Kazakhstan, and the Ukraine, including an exposition of the similarities and differences;
- The legal status of nuclear weapons and the evolving legal clarity of nuclear weapons;
- A discussion on the Treaty on the Non-Proliferation of Nuclear Weapons;
- The legal status of the International Atomic Energy Agency (IAEA);
- The research questions;
- The impact, if any, which international law had on the decision to relinquish the nuclear arsenal;

- An explanation of how South Africa set about acceding to the Treaty on the Non-Proliferation of Nuclear Weapons and relinquishing its nuclear arsenal; and finally
- The question of whether the knowledge experience of South Africa's relinquishment and accession is transferable.

8.1. 2 Chapter Two: An Emerging International Consensus on the Possession, Legality and Use by a State of Nuclear Weapons in Armed Conflict: The Period from 1945 to 1995

This chapter was presented as a literature study and did not involve interviewing the expert sample. Together with Chapter Three, it constituted the basic framework of international law in which the primary research would be embedded. The study of the gradually emerging clarity on the legality of nuclear weapons was contextualised towards the legality of South Africa's nuclear weapons programme during this period. Chapter Two involved an international study of the growth of international law as it pertained to all aspects of nuclear weapons.

There were three themes that informed how this chapter would be structured. Firstly, it was structured to present the reader with an understanding of the law as it evolved with respect to the usage of nuclear weapons in armed conflict. Secondly, the analysis explored how the testing of nuclear weapons had impacted on the development of international law as it pertained to an ever deeper and more subtle appreciation of their legality. Thirdly, it considered how international law had developed with respect to nuclear proliferation and accession to the Treaty on the Non-Proliferation of Nuclear Weapons. This research was presented chronologically in accordance with the development of the law over the post-World War II period up until 1995. It was shown that international law developed erratically and very often in response to deep crises that occurred in various states around the world involving diverse controversial aspects of nuclear weapons. The argumentation that was presented included:

- An analysis of Alexander Sack's seminal exploration of atomic, biological and chemical warfare in international law;
- Article 38 of the Statute of the International Court of Justice;
- The development of peremptory norms of international law – *jus cogens* and obligations *erga omnes*;
- An exploration of the startling impact of the *Lucky Dragon* incident on world opinion about the legality of nuclear testing;
- The gradual evolution of a consensus on the imperative for the establishment of nuclear-weapons-free zones;
- A detailed exploration of the *Shimoda* case and its implications in respect of the legality of nuclear weapons; and
- The very contentious and growing international consensus on the illegality of nuclear tests in the South Pacific, because of the conflicts that developed between Australia, New Zealand, the South Pacific Islands and France about her propensity to conduct nuclear tests in that region.

8.1.3 Chapter Three: The International Court of Justice's Advisory Opinion as to the Legality of the Threat or Use by a State of Nuclear Weapons in Armed Conflict

Chapters Two and Three can be regarded as constituting an integrated continuum. They are interdependent. Chapter Three revealed that there was a growing international consensus that gradually occurred in the post-World War II period as to the legality of the threat or use of nuclear weapons. On 8 July 1996 the International Court of Justice offered its seminal Advisory Opinion as to the legality of the threat or use of nuclear weapons in armed conflict. This opinion almost distils the findings of Chapter Two into a coherent framework. Chapter Three explored various important underlying questions that still pertain to the legality of the threat and use of nuclear weapons in armed conflict.

The Advisory Opinion was assessed from two perspectives that underpinned the critique of the Opinion. The *Lotus* case related to the

positivist testimony which held that 'that which is not prohibited is permitted'. The nuclear-weapons-states were shown to subscribe generally to this doctrine insofar as their testimony presented before the ICJ was concerned. The positivist testimony was juxtaposed against the Martens Clause and the testimony of natural law. The non-nuclear-weapons-states generally subscribed to a natural law interpretation of the legality of nuclear weapons under international law. In addition, the legality of the policy of nuclear deterrence was explored, because this matter emerged as being very important to both South Africa and Iraq's nuclear relinquishment.

Chapters Two and Three were used to offer a conceptual understanding for the subsequent legal triangulation of this research with the respondents' testimony which is presented to the reader from Chapter Four until the conclusion of this thesis.

8.1.4 Chapter Four: Interpreting the Respondents' Understanding of the Legality of South Africa's Nuclear Weapons Policy

This chapter focused predominantly on triangulating the respondents' testimony about the lived experience of the nuclear relinquishment and accession to the NPT with international law. It explored South Africa's changing legal relationship with the International Atomic Energy Agency, which was very troubled during the 1970s up until the early to mid-1980s but showed gradual signs of improvement from about 1985. The respondents expressed interesting and different views on the legality of South Africa's nuclear arsenal. Mike Louw subscribed to the opinion that South Africa's nuclear arsenal was illegal per se inasmuch as it was a threat to world peace; Mr de Klerk held that South Africa had an obligation *erga omnes* to relinquish these weapons. Professor Stumpf corroborated Mr de Klerk's testimony. Dr Barnard argued that international law as it pertained to both the legality of nuclear weapons and the administration of the NPT is fundamentally discriminatory; it is his contention that its structure creates a master–servant relationship between the nuclear-

haves and the nuclear-have-nots. The nuclear-weapons-states have assumed an elite master role, and international law has condoned this, allowing them to proliferate nuclear weapons legally over the post-World War II period. The non-nuclear-weapons-states have assumed a servant role and been afforded no such latitude to proliferate nuclear weapons under international law. Dr Barnard asserted that this inconsistency in international law could undermine its very credibility. He regarded this dualism as being potentially dangerous. Professor Stumpf also regarded the application of international law as it pertained to the legality of nuclear weapons as being logically inconsistent.

The respondents explored the question of the legality of the policy of nuclear deterrence. Their views were legally contradictory. They subscribed to the opinion that nuclear deterrence as a state policy was legal. Their reason for this subscription appeared to follow a legal-positivist line that gained its authority from the *Lotus* case and mimicked the application of international law as it pertains to the nuclear-weapons-states. The respondents were unanimous in their view that any testing or usage of nuclear weapons was illegal under international law. It is submitted that this contradictory interpretation of the legality of nuclear deterrence may not be unique, and could indeed be shared by the leaders in other threshold nuclear states. The lived experience of the respondents is presented in terms of seminal and often traumatic events. These important events included:

- The discovery by the Soviet Union of South Africa's nuclear arsenal that was located at Vastrap in the Kalahari Desert;
- The United State's invoke a warning of anticipatory self-defence in opposition to South Africa conducting any nuclear tests;
- The South Atlantic *Double-Flash* incident;
- The *US Spy Plane* incident;
- Mr Pik Botha's meeting with Ronald Reagan and General Haig that opened up the supply of enriched uranium to supply Koeberg nuclear power station;

- The *Uranium Red Book* incident which involved an abuse of the International Atomic Energy Agency's international communication channels for the purpose of disseminating apartheid propaganda;
- The Nkomati Peace Accord as a possible signification of the possibility of a peaceful negotiated settlement in South Africa; and finally
- Mr PW Botha's 1985 meeting with the top leadership of ARMSCOR. This meeting was discussed as it can be argued that it was on this occasion that the official nuclear rollback began.

8.1.5 Chapter Five: The Logic Underlying the Decision to Relinquish the Nuclear Arsenal and Accede to the Treaty on the Non-Proliferation of Nuclear Weapons

This chapter investigated the reasons why the nuclear arsenal was relinquished and why South Africa acceded to the NPT. It was revealed that South Africa's relinquishment of its nuclear arsenal and accession to the NPT was linked to the perceived outcome of the constitutional negotiations. It was shown furthermore that the nuclear relinquishment process and accession to the NPT was synchronised with the actual constitutional negotiation process because it was recognised that:

1. To retain the nuclear arsenal up one's sleeve and negotiate a constitutional with this hidden surprise would have been tantamount to negotiating in bad faith.
2. The retention of the nuclear arsenal would have probably been perceived in the international community as a threat to world peace and would have resulted in South Africa's new Constitution being accorded pariah recognition status.
3. Any military or operational usage was deemed to be illegal.
4. The nuclear weapons were militarily redundant.
5. Any nuclear testing would have been deemed illegal under international law.
6. Nuclear deterrence as a policy had failed and South Africa was unable to achieve a deterrent quid pro quo.

7. South Africa relinquished its nuclear weapons and acceded to the NPT in order to set a stage that would enable constitutional continuity and juridical security.

Nuclear weapons were not used as an instrument in South Africa's approach when negotiating, either domestically with the ANC, or in international forums. The ANC were completely excluded from any involvement in the nuclear relinquishment and accession process because it was adjudged that such involvement would have been a poisoned chalice to the government in waiting. An important question that informed the composition of this chapter was an exploration of the legal implications of the possible scenario of South Africa degenerating into a failed state, as had happened in the case of Iraq. One of the factors that could have been a driving force behind a failed state in South Africa would have been a situation where South Africa retained its nuclear arsenal whilst attempting to gain international recognition for its constitutional negotiations. The research also explored important matters including:

- State recognition;
- Mr de Klerk's animus and testimony;
- The notion that to have retained the nuclear arsenal whilst negotiating the new constitution would have signified a cynical and opposite intention;
- The imperative for retaining a framework of constitutionality in relinquishing the nuclear weapons and acceding to the NPT;
- The question of ensuring state continuity and the imperative to prevent internal social fragmentation;
- Professor Mouton's animus and testimony;
- Mr Pik Botha's animus and testimony:
- Professor Waldo Stumpf's animus and testimony; and finally
- The conundrum of the ANC's hypothetical nuclear proliferation inclinations.

8.1.6 Chapter Six: How the Nuclear Arsenal was Relinquished and Accession to the Treaty on the Non-Proliferation of Nuclear Weapons and Compliance with International Law was Achieved

This chapter attempted to understand the important and practical question of 'how' South Africa relinquished its nuclear arsenal and acceded to the NPT in terms of international law. The process of relinquishment and accession was successful because Mr de Klerk regarded it as an extremely important matter and assumed a clear leadership role. Topics and themes that were covered included:

- An exploration of Mr de Klerk's role in determining how the nuclear arsenal was to be relinquished;
- The Announcement Plan and the question of timing;
- Mr de Klerk's appointment of Professor Wynand Mouton as head of oversight of the nuclear relinquishment and accession process;
- The appointment of the Atomic Energy Corporation as the designated state authority;
- The matter of access to military sites and the question of sovereignty;
- Internal nuclear regulatory protocols that afforded credence to the nuclear relinquishment and accession to the NPT;
- The flexibility of the form of accession to the NPT;
- The Initial Report for Safeguards;
- The authority of the first and second Safeguards Reports;
- Building trust with the Americans and the IAEA; and
- Approval of South Africa's Comprehensive Safeguards at the General Conference of the IAEA in September 1991.

8.1.7 Chapter Seven: A Comparison of How South Africa and Iraq Relinquished their Nuclear Weapons in Terms of International Law

This chapter offered a comparative analysis of South Africa and Iraq's nuclear relinquishment processes in order to explore the important question of the possible transferability of the knowledge South Africa had gained in negotiating its nuclear relinquishment and accession to the NPT. A phenomenological reduction revealed that the allies probably invaded Iraq with the knowledge that Iraq had already relinquished its nuclear arsenal prior to the invasion. The argument supporting this deduction is essentially very simple. Iraq were too exhausted and financially depleted after their defeat in the Gulf War to have retained a nuclear arsenal. The international inspectorate subscribed to this view on the basis of careful scientific analysis. It is therefore scientifically improbable that the United States and United Kingdom's nuclear inspectors would have held a significantly differing view on the matter of Iraq's nuclear weapon status. For this reason, it is deduced that the invasion of Iraq was conducted as a political decision. Iraq's nuclear weapons status must surely have been known, but it was arguably not acted upon.

Iraq conducted itself in an inappropriate manner over a period of more than a decade by breaching numerous United Nations Security Council resolutions relating to its nuclear status. These breaches of international law were clustered in terms of substance, comity, relationship and time for the purposes of comparative international analysis. It is argued that the disregard for international law on Iraq's part was sufficiently cumulative, frequent and serious to result in the allies developing a fairly coherent political justification for the invasion of Iraq in spite of the fact that the legality of the invasion was highly tendentious in terms of international law.

More specifically, the chapter explored:

- South Africa's failed attempt at a knowledge transfer to Iraq in 2003 just prior to the allied invasion of Iraq;
- The disaggregation of Iraq's nuclear relinquishment process from its chemical and biological weapons programme;

- The development of a sociology of law framework to structure this comparative analysis of the transferability of knowledge question;
- Iraq's non-compliance with Safeguards and failed Initial Report;
- The Karama Barracks incident; the Mosque incident;
- Adherence and non-adherence by Iraq to UN Security Council resolutions;
- A taxonomic comparison of South Africa and Iraq's nuclear relinquishment processes in terms of substance, comity, relationship and time;
- A reflection of the legality of anticipatory self-defence in the use of force against Iraq; and finally
- An interrogation of whether the comparative knowledge that emerged from South Africa (and Iraq's) relinquishment process is transferable to other states.

8.2 The Answers to the Research Questions

It will be recalled that four questions were posed at the outset of this research. These questions were:

1. Why was the decision reached to roll back the nuclear arsenal in South Africa?

2. What impact, if any, did international law have on the decision to relinquish the nuclear arsenal?

3. How did South Africa set about acceding to the Treaty on the Non-Proliferation of Nuclear Weapons and relinquishing its nuclear weapons in terms of international law?

4. To what extent, if any, is the knowledge created by South Africa's experience under international law of relinquishing its nuclear arsenal and acceding to the Treaty on the Non-Proliferation of Nuclear Weapons transferable? This led logically to the researcher conducting a comparative analysis of the South African and Iraqi nuclear relinquishment processes and identifying criteria that might assist in

rendering the knowledge creation that took place in South Africa transferable to other states.

These matters have already been extensively addressed and interrogated in the main body of this research. The answers to these questions will therefore be offered in synoptic form, in accordance with the *Dispositif*. All of the questions have complex and systemically interrelated answers, and the reader is cautioned that there is a danger of being simplistic in the presentation of the distilled essence of the research findings.

Answer 1

- The reason it was decided to relinquish the nuclear arsenal in South Africa and accede to the Treaty on the Non-Proliferation of Nuclear Weapons at the specific time when the decision was reached was because it was realised that the entire constitutional transition would have been placed in profound jeopardy had this action not been taken.

  The nuclear relinquishment and accession to the Treaty on the Non-Proliferation of Nuclear Weapons was intrinsically linked to the constitutional transition, which was being negotiated in public. It was conducted in order that the new Constitution would be accorded a positive international recognition status and to reverse the pariah recognition status that had accompanied the previous policy of apartheid.

  A compelling case was presented that the very security of the State might have been threatened had these weapons been retained, and had South Africa not acceded to the Treaty on the Non-Proliferation of Nuclear Weapons. Concerns existed about the potential nuclear proliferation inclinations that might exist within certain elements of the African National Congress as an unproved national liberation movement, and these fears were regarded as having substance. It could conceivably have precipitated a civil war if the far right had

engaged in conflict over the matter of nuclear weapons. South Africa could have been regarded as a threat to world peace had it retained these weapons, and this could even have justified a military invasion of the country to negate such a threat to international peace. South Africa would, at best, have been most reluctantly re-accepted into the community of nations, with a tainted recognition status had it retained possession of these weapons and had it not acceded to the Treaty on the Non-Proliferation of Nuclear Weapons. It would conceivably have been placed at grave risk of becoming a failed state.

Answer 2

- Aspects of international law permeated the entire process of nuclear relinquishment and the decision to accede to the Treaty on the Non-Proliferation of Nuclear Weapons. The theme of the conflict of laws was important inasmuch as South African municipal law needed constantly to be reconciled with international law. The impact of international law on the decision to relinquish the nuclear weapons and to accede to the NPT was not explicitly acknowledged by the respondents as such, but it was implicitly acknowledged in all of the responses as a continual and converging theme. The respondents agreed that these nuclear weapons could never have been used militarily; that any such usage would probably have constituted a crime against humanity; and that genocidal trials would therefore have been instituted after any such usage.

  The respondents clearly took a natural law position on the operational deployment of nuclear weapons. They held that such weapons would not have been able to distinguish friend from foe; their use would have been disproportionate and cruel, causing unnecessary suffering; they would permanently have contaminated the natural environment; their use would have been escalatory and provoked retaliatory strikes; and they would have been

indiscriminate and a threat to humankind. The respondents articulated that there was a *jus cogens* norm that these weapons could never be lawfully deployed under international law.

South Africa's policy of nuclear deterrence was justified as having been in legal compliance with the position that had been assumed by the nuclear-weapons-states. It was encapsulated in the adage that derives from the *Lotus* case, which contends that that which is not prohibited is permitted. There were logical contradictions between the assumptions of natural law and positive law, which were poorly reconciled, and for which the researcher created a logical fault-line. In essence, the respondents equated international law with acting in complete compliance with all the terms and conditions of the Treaty on the Non-Proliferation of Nuclear Weapons.

This was a practical and sensible starting point. But the full scope of international law, including international humanitarian law as it pertains to the threat or use of nuclear weapons, needs to be deeply and intrinsically considered, and incorporated into, all the strategic thinking of each and every nuclear programme, whether this is for civilian or military usage. It was for this logic that the respondents articulated an *erga omnes* norm to relinquish these weapons.

Answer 3

- The answer to the question of how South Africa relinquished its nuclear weapons and acceded to the NPT under international law is complex. It was conducted voluntarily, although extensive international pressure was placed upon South Africa, particularly by the United States of America, to perform this duty. South Africa followed the provisions of the Treaty on the Non-Proliferation of Nuclear Weapons to the letter.

Mr de Klerk developed a dedicated project-management team of the highest integrity and competence to perform the duty of relinquishment and accession. This duty was performed in camera. The researcher was of the opinion that this was a wise decision, given the circumstances that prevailed in South Africa at the time.

The relinquishment and accession process was conducted according to high internal regulatory standards, specified by South African municipal law, which were designed to harmonise with the terms and conditions of the safeguards specified by the IAEA, and embodied in international law. The potential for a conflict in laws between South African municipal law and international law was therefore eliminated, and the process was harmonised.

The relinquishment process was synchronised via the design of an Announcement Plan, which Mr de Klerk instructed should be fine-tuned continuously, and adapted according to the radically-changing and often tempestuous political vicissitudes that were the reality of the time. The relinquishment and accession process was conducted so as to be balanced and appropriate from the perspectives of substance, comity, relationship and time. These matters were four balancing themes that needed to be kept in harmony.

Answer 4

- Finally, the response to the question of whether the knowledge that arose from South Africa's relinquishment of its nuclear arsenal and its accession to the Treaty on the Non-Proliferation of Nuclear Weapons is transferable to other countries is intricate. If the country that is relinquishing its nuclear weapons is reluctant to do so, and is defiant of international law, then it will be very difficult to transfer the knowledge. But if that country is acting in harmony with the Treaty on the Non-Proliferation on Nuclear Weapons and international law, and wishes to relinquish its nuclear arsenal voluntarily, then the

application of the knowledge that was acquired in the case of South Africa might be partially transferable, if implemented selectively and with care and discretion.

8.3 The Pelindaba Treaty: An African Nuclear-Weapons-Free Zone

The Pelindaba Treaty was concluded in terms of Article VII of the Treaty on the Non-Proliferation of Nuclear Weapons. It confirms that:

"[n]othing in this Treaty affects the right of any group of States to conclude regional Treaties in order to assure the total absence of nuclear weapons to their respective territories".[734]

The South African Parliament passed the Non-Proliferation of Weapons of Mass Destruction Act 87 of 1993. The effect of this legislation was to regulate through an Act of Parliament South Africa's relinquishment of nuclear weapons, accession to the NPT, and all possible future proliferation of weapons of mass destruction. This Act made it illegal to conduct any activities that aid or abet proliferation in any way. It created a prospective and future prohibition on the possession, usage, and threat of all nuclear weapons and research-based activities connected thereto. In addition to its orientation towards the future, the Act also created a retrospective obligation which declared any past proliferation activities illegal. This retrospective obligation was included to ensure that there could be no basis for concluding that South Africa had salted away and retained any of its nuclear weapons.

[734] Treaty on the Non-Proliferation of Nuclear Weapons.

Jozef Goldblat[735] maintained that:

"In 1995, as a result of several years work, OAU and UN experts succeeded in elaborating a draft treaty which, after some amendments, was approved by the OAU Assembly. The treaty is also called the Treaty of Pelindaba, after the former seat of South Africa's nuclear-weapons-related activities. Other aspects of the Treaty of Pelindaba also followed the pattern of the NWFZ arrangements in force in Latin America and the South Pacific. On December 12, 1995, the UN General Assembly welcomed the Treaty of Pelindaba, and in April 1996, the treaty opened for signature. The Treaty of Pelindaba prohibits the manufacture, testing, stockpiling, or acquisition by other means, as well as possession and control of, any nuclear explosive device (in assembled, unassembled, or partly assembled forms) by the parties. In addition – and this is an important novelty – research on, and development of, such a device are banned. Moreover, the treaty bans seeking, receiving or encouraging assistance in the above-enumerated activities (Articles 3 and 5). Under Protocol II, open for signature by the five Nuclear-Weapons-States, the signatories should undertake not to test or assist in or encourage the testing of any nuclear device within the African zone."[736]

The Treaty of Pelindaba was swiftly concluded, in the researcher's opinion wisely, immediately after South Africa's accession to the NPT. Had there been a delay in the conclusion of this treaty, it is possible that the memory of the seriousness of South Africa's case would have diminished and this would have opened up the opportunity for future nuclear proliferation by other African states.

8.4 The Atomic Energy Corporation in South Africa: From Swords to Ploughshares

Mr Pik Botha kindly provided the researcher with the minutes from the Atomic Energy Corporation Overview of Activities 1997/1998.[737] These minutes need to be read in terms of the Preamble to the Treaty on the Non-Proliferation of Nuclear Weapons together with Articles IV and V of

[735] Goldblat, Jozef. 1997. 'Nuclear-Weapon-Free Zones: A History and Assessment'. *The Nonproliferation Review*, 8–19.
[736] Op cit Goldblat at 25.
[737] Atomic Energy Corporation: Overview of Activities 1996/97 Budget for 1997/98 Reference HUB 150/5.1. 6 March 1997.

this Treaty. They pertain to the peaceful and economic applications of nuclear energy.[738]

The minutes confirm the peaceful turnabout of South Africa's nuclear weapons programme. However, the most important element of the minutes is that they confirm that a plan was initiated by the AEC in 1990 to convert the Corporation from being state-funded to becoming financially self-sufficient, by focusing on developing a profitable portfolio of commercial opportunities focused on selected niche markets. It was intended that the AEC would develop nuclear-related technologies for peaceful purposes, including nuclear medicine and nuclear energy in the form of a pebble-bed nuclear reactor system.

"It will act as South Africa's national nuclear authority, serving the State's objectives in terms of national institutional responsibilities, international nuclear relations, the maintenance of supportive technologies and appropriate socio-economic development."[739]

These minutes also provide the final confirmation that South Africa relinquished its nuclear weapons and acceded to the NPT in accordance with all its international obligations, and in compliance with international law.

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[738] Treaty on the Non-Proliferation of Nuclear Weapons:
"Affirming the principle that the benefits of peaceful applications of nuclear technology, including any technological by-products which may derive by nuclear-weapon States from the development of explosive devices, should be available for peaceful purposes to all Parties of the Treaty, whether nuclear-weapon or non-nuclear-weapon States.
Article IV: Nothing in the Treaty shall be interpreted as affecting the inalienable right of all Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination.
Article V: Each Party to the Treaty undertakes to take appropriate measure to ensure that, in accordance with this Treaty, under appropriate international observation, and through appropriate international procedures, potential benefits from any peaceful applications of nuclear explosives will be made available to non-nuclear-weapon States Party to the Treaty on a non-discriminatory basis and that the charge to such Parties for these explosive devices used will be as low as possible and exclude any charge for research and development. Non-nuclear-weapons-states Party to the Treaty shall be able to obtain such benefits, pursuant to a special international agreement or agreements, through an appropriate international body with adequate representation of non-nuclear-weapon States. Negotiations on this subject shall commence as soon as possible after the Treaty enters into force. Non-nuclear-weapon States Party to the Treaty so desiring may also obtain such benefits pursuant to bilateral agreements."
[739] Op cit Atomic Energy Corporation Overview of Activities.

8.5 Postscript

The nuclear relinquishment process and accession to the NPT could easily have gone completely wrong. Professor Mouton referred to an incident where he was in a vehicle that was transporting highly enriched uranium that was intended for de-enrichment. He recalled that:

"We bolted the Highly Enriched Uranium, when it was to be melted down and de-enriched, into the back of a vehicle – a Toyota – when we transported it. A General Opperman (I think that was his name) was placed in charge of overseeing that this de-enriched HEU was transported safely. The military were involved, but no one besides General Opperman was informed about what was going on.

I remember one incident vividly. I was in the vehicle transporting the HEU which was to be melted down. Suddenly, out of nowhere, the most enormous black snake that you could ever imagine crossed the road directly in our path. The driver got the fright of his life and swerved the vehicle carrying the HEU to avoid running over the snake.

I blasted the driver and said: 'Why did you not just run over the snake? You know what we are carrying and how totally, extremely dangerous it is!'

The driver's response was: 'Sorry, I avoided the snake because I did not want the vehicle to stink, after I had flattened it.'"[740]

Human fallibility and error are among the greatest dangers that could result in a nuclear disaster. Even the most meticulously-stored nuclear device might inadvertently be triggered, totally by accident.

[740] Interview with Professor Wynand Mouton at his apartment at Gordon's Bay in the Strand in Western Cape on 30 October 2007. See also Schelling, Thomas. 1980. *The Strategy of Conflict*. Cambridge, MA: Harvard University Press.

Chapter Nine

Bibliography

9.1 Interviews with the Respondents

1. Interview with Mr Mike Louw, firstly Deputy Director General, then Director General: National Intelligence Service at La Patt Café, Hatfield Plaza, Pretoria on 18 March 2005 from 09h00 to 12h00.

2. Interview with Mr FW de Klerk at the Offices of the FW de Klerk Foundation in Plattekloof, Cape Town on 4 October 2007 from 11h00 to 12h00.

3. Interview with Professor Waldo Stumpf at the University of Pretoria, Minerals Science Building, Pretoria on 18 October 2007 from 14h00 to 16h45.

4. Interview with Dr Neil Barnard at the Chameleon Restaurant in Plattekloof, Cape Town on 29 October 2007 from 14h00 to 15h00.

5. Interview with Professor Wynand Mouton at his apartment at Gordon's Bay in the Strand in Western Cape on 30 October 2007 from 10h00 to 12h00

6. Interview with Mr Pik Botha in Pretoria North on 18 February 2008 from 10h30 to 12h45.

9.2 Amended Research Proposal

1. Professor Waldo Stumpf kindly presented a most detailed written editorial analysis of the original research proposal that was offered to Professor Jonathan Klaaren at the University of Witwatersrand Law School who supervised this research in its entirety. The proposed title of the research proposal just prior to its final acceptance was:
   The Influence of International Humanitarian Law on South Africa's Decision to Implement a Voluntary Relinquishment of its Nuclear Arsenal

9.3 Cases and Supporting Literature

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12. *Guatemala Genocide Case* (2003) 42 ILM 683.

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14. International Court of Justice Case Summaries. '*Legality of the Use by a State of Nuclear Weapons in Armed Conflict*'. The International Court of Justice. The Hague. Advisory Opinion of 8 July 1996. [Online]. Available: http://www.icj-cij.org

15. *Judgment of the Nuremberg Tribunal* (1947) *American Journal of International Law Reports*.

16. *Legality of the Threat or Use by a State of Nuclear Weapons in Armed Conflict*, 1996 ICJ Reports 66, 226.

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20. *Nicaragua Case*, 1986 ICJ Reports 14.

21. *Nottebohm (Second Phase)*, 1955 ICJ Reports 4.

22. *Nuclear Test Case (Australia v France)*, [1974] ICJ 253*; Nuclear Test Case (New Zealand v France)*, [1974] ICJ 457; *Nuclear Test Case (Australia v France) (Interim Measures of Protection)*, [1973] ICJ 99; *Nuclear Test Case (New Zealand v France) (Interim Measures of Protection)*, [1973] ICJ 135.

23. *Peruvian Genocide Case* (2003) 42 ILM 1200.

24. *Rainbow Warrior Case*, (1987) 26 ILM 1346.

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9.4 Books

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