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THESIS

DO U.S. SECURITY COMMITMENTS DISCOURAGE NUCLEAR PROLIFERATION?

by

John D. Wilshusen

December 1997

Thesis Advisor:

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DO U.S. SECURITY COMMITMENTS DISCOURAGE NUCLEAR PROLIFERATION?

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B.A., University of Missouri-Columbia, 1990

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF ARTS IN NATIONAL SECURITY AFFAIRS

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ABSTRACT

U.S. policy makers claim that nuclear weapons are needed to guarantee security commitments and discourage the international spread of nuclear weapons. This thesis evaluates the link between security guarantees and efforts to prevent nuclear proliferation. It draws three conclusions based on case studies of the use of conventional security commitments and nuclear security guarantees to prevent nuclear weapons development in South Korea and Taiwan. First, nuclear security guarantees alone are not sufficient to prevent proliferation. Second, strong conventional commitments made credible by visible presence of forces are sufficient to prevent nuclear proliferation when the direct security threat is conventional. Third, when the security threat being faced includes nuclear weapons, nuclear proliferation prevention requires both a nuclear security guarantee and a physically evident conventional military guarantee. Two implications for security policy follow from these findings. First, nuclear weapons are necessary in the modern security environment. Second, nuclear security guarantees are not credible without the stationing of conventional forces.

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EXECUTIVE SUMMARY

U.S. policy makers claim that nuclear weapons are necessary to guarantee security commitments and discourage the international proliferation of nuclear weapons. South Korea and Taiwan are often cited as cases of successful nuclear nonproliferation efforts. These countries have had the technical capability to build nuclear weapons for more than two decades, yet according to the conventional wisdom they chose not to pursue that option because of their inclusion under the U.S. nuclear umbrella.

This thesis evaluates the conventional wisdom linking nuclear security guarantees and nonproliferation. A close examination of the evidence suggests that nuclear security guarantees might not always be as important to the containment of nuclear proliferation as is widely believed. The cases examined in this thesis, South Korea and Taiwan, were selected to develop broader understanding of the relationship between security commitments and nuclear proliferation.

In the case of South Korea, when the physical manifestations of commitment show signs of decline, South Korean leaders can be expected to consider the acquisition of nuclear weapons. As events cause them to question the legal and behavioral components of the security commitment, the argument for the nuclear option becomes even more persuasive. When the threat was conventional—that is, before North Korean initiated its nuclear weapons program—the continued stationing of U.S. troops in South Korea country physically demonstrated the U.S. commitment to South Korean security and was sufficient to persuade South Korean leaders to shelve their plans for the development nuclear weapons.

The main lesson of Taiwan case study is that while nuclear security guarantees might be important, visible and strong conventional proof of the commitment was required to keep the Taiwanese interest in nuclear weapons at a low level. Once it became apparent that the U.S. commitment to Taiwanese security was declining, the government of Taiwan took the action it saw as necessary to protect its citizens. Because the United States could not restore the physical signs of security commitment to Taiwan without seriously damaging or destroying the budding relationship with China, it was no longer in a position to do much more than slow Taiwanese progress toward development of nuclear weapons.

This thesis has three major findings. First, a nuclear security guarantee alone is not sufficient to prevent nuclear proliferation. This was true in both cases studied.

Second, a strong conventional military commitment made credible by visible presence of forces is sufficient to prevent nuclear proliferation when the direct security threat is conventional. This finding is very firm in the case of South Korea, less so in the case of Taiwan. Finally, when the security threat being faced is believed to involve nuclear weapons, the discouragement of nuclear proliferation requires both a nuclear security guarantee and a conventional military guarantee. This finding appears to be true in both cases.

These findings suggest two important policy implications. First, while nuclear security guarantees are not nearly as important as they are often portrayed, they are needed to dissuade countries from seeking to acquire nuclear weapons when those countries face their own nuclear threat. To fulfil that need, maintenance of the U.S.

nuclear arsenal is necessary until there is a fundamental change in the global security environment.

Second, discouraging nuclear weapons proliferation requires strong conventional forces deployed in forward positions. When U.S. defense planners consider overseas conventional military force posture issues, the role of those forces in preventing the international spread of nuclear weapons must be understood. Failure to prevent further instances of nuclear proliferation is practically assured if the credibility and strength of conventional force presence of the United States is not maintained.

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I. INTRODUCTION

A. PURPOSE OF THE THESIS

U.S. policy makers claim that nuclear weapons are necessary to guarantee security commitments and discourage the international proliferation of nuclear weapons.¹ Others, including former commander of the Strategic Air Command General George Lee Butler and ex-chief of the Central Intelligence Agency Admiral Stansfield Turner, argue that nuclear weapons are no longer necessary, that the risks posed by nuclear deterrence are far greater than the presumed benefits, and that nuclear weapons cause, rather than prevent, the proliferation of nuclear weapons.²

Are nuclear security guarantees required to prevent the spread of nuclear weapons? Germany, Japan, South Korea and Taiwan are often cited as successful cases of nuclear nonproliferation efforts. These countries have been technically capable of building nuclear weapons for more than two decades, and their positions astride the front

As Walter B. Slocombe, Undersecretary of Defense for Policy, testified before a Senate hearing, "The extension of a credible U.S. nuclear deterrent to our allies and friends has been an important nonproliferation tool. It has removed incentives for key allies in this still dangerous world to develop and deploy their own nuclear forces, as many are quite capable of doing from a technical point of view. Indeed, our strong security relationships have probably played as great a role in nonproliferation over the past forty years as the N.P.T. or any other single factor." U.S. Senate, *The Future of Nuclear Deterrence: Hearing before the Committee on Governmental Affairs, Subcommittee on International Security, Proliferation, and Federal Services*, 105th Cong., 1st sess., 12 February 1997, 9.

² George Lee Butler, "The General's Bombshell: What Happened When I Called for Phasing Out the U.S. Nuclear Arsenal," *Washington Post*, 12 January 1997, C1; Keay Davidson, "Pulling Back from the Brink of Annihilation: Ex-CIA Chief Stansfield Turner Has Sound Ideas to Reduce Threat of Nuclear Aggression," *San Francisco Examiner*, 19 October 1997, A17.

lines of the Cold War gave them strong national security reasons to acquire their own nuclear arsenals. Yet according to the conventional wisdom, they chose not to pursue that option because of their inclusion under the U.S. nuclear umbrella. Decisions by nations such as Israel, India, and Pakistan—all of which were excluded from this select group—to go forward with nuclear weapons programs, are cited as further evidence in support of the contention that nuclear security guarantees are a necessary and valuable addition to the nuclear nonproliferation toolbag.

The nuclear nonproliferation policies of several U.S. administrations have drawn heavily on this conventional wisdom. Presidents Carter and Reagan appear to have accepted without question the assumption that nuclear security guarantees are necessary for nonproliferation policy. Presidents Bush and Clinton explicitly linked that assumption to the necessity of maintaining a nuclear arsenal.³ Yet, as popular as this assumption has been, it remains relatively unchallenged by academics and policy makers.

This thesis evaluates the conventional wisdom linking nuclear security guarantees and nonproliferation. A close examination of the evidence suggests that nuclear security

The Bush administration claimed, "we have traditionally maintained other [non-strategic] nuclear forces for a variety of purposes. They have highlighted our resolve and have helped link conventional defense to the broader strategic nuclear guarantee of the United States. This has helped remove incentives that otherwise might have accelerated nuclear proliferation." George Bush, *National Security Strategy of the United States* (Washington D.C.: The White House, August 1991), 26. According to the Clinton administration, "Nuclear weapons serve as a hedge against an uncertain future, a guarantee of our security commitments to our allies and a disincentive to those who would contemplate developing or otherwise acquiring their own nuclear weapons." William J. Clinton, *A National Security Strategy for a New Century* (Washington, D.C.: The White House, May 1997), 9.

guarantees may not always be as important to the containment of nuclear proliferation as is widely believed. National decisions to pursue the nuclear option are made for a variety of complex and intertwining reasons.⁴ These decisions can be heavily influenced by the existence or absence of security commitments, but *the nature of those security guarantees* is critical when the goal is to prevent the proliferation of nuclear weapons. This thesis tests the proposition that physical evidence of a strong *conventional* commitment (i.e., troops on the ground) is most important to nonproliferation, rather than the repetition of political promises or the presence of nuclear weapons in the country.

To test this proposition, I explore two cases in which nuclear security guarantees are generally perceived as the critical factor in preventing proliferation of nuclear weapons. In the case of South Korea, the credibility of U.S. security commitments has been questioned seriously enough that South Korean leaders considered developing nuclear weapons on more than one occasion. The existence of a U.S. nuclear security

⁴ Lavoy suggests four general categories: 1) Technological determinism. Possession of technological capability to manufacture nuclear weapons will inevitably lead to actual production. This theory implies that little can be done to prevent nuclear weapons development short of reversing the advancement of technology. 2) Enhanced national prestige. Nuclear weapons are the ultimate form of military power. Nations with aspirations to world power and leadership will make the sacrifices necessary to acquire nuclear capability. 3) Nuclear myth makers. National elites who want their states to develop nuclear weapons will emphasize the country's insecurity or its poor international standing to popularize the myth that nuclear weapons provide military security and political power, and thus push their states to build nuclear weapons. 4) Concern for national security. States relentlessly pursue acquisition of increasingly capable military armaments and methods out of fear for theior security. Possession of a nuclear arsenal is a logical way to ensure national security. For further explanation of the various sets of theories and their corresponding strengths and weaknesses, see Peter R. Lavoy, "Nuclear Myths and the Causes of Nuclear Proliferation," Security Studies 2, Nos. 3/4 (Spring/Summer 1993): 192-212.

guarantee was not questioned; however, the security fears of the South Korean government could be alleviated only through the reassurance of a continuing physical presence of conventional forces. In the case of Taiwan, the perceived credibility of U.S. security commitments, nuclear as well as conventional, suffered repeated blows during the process of U.S. normalization of relations with communist China. This has resulted in a very pragmatic approach to the nuclear option decision by Taiwan's leaders, who are satisfied to develop the capability for nuclear weapon construction, but do not actually construct the weapons (a state of affairs sometimes referred to as "virtual" nuclear status.)

B. THESIS METHODOLOGY

Researching questions dealing with nuclear weapons development is a complicated endeavor. Because of their very nature as vital national security measures, nuclear weapons development programs are shrouded in secrecy and protected behind thick walls of classification. Understanding the sequence of events leading to particular policy decisions often requires years of waiting for documents to be declassified or for information to filter out of the bureaucracy. However, recent U.S. government releases of declassified information have yielded a treasure trove of previously unavailable documents that may allow fresh perspectives on old events. This thesis uses a significant number of recently declassified documents to develop better understanding of the role of conventional and nuclear security commitments in U.S. nonproliferation efforts.

The case studies used in this thesis, South Korea and Taiwan, were selected to develop broader understanding of the relationship between security commitments and nuclear proliferation. A focused comparison case study methodology was chosen

because it allows a focus on specific aspects of the case in question without requiring an exhaustive recounting of peripheral details. The cases selected are evaluated with the following questions serving as an analytical template:

- 1. What primary concerns led to the consideration of the nuclear option?
- 2. How could nuclear weapons capability help address those perceived concerns?
- 3. What was the extent of the U.S. security commitment?
- 4. To what extent did U.S. security commitments affect the country's decision to pursue a nuclear option?

C. CASE SELECTION

Five criteria have been used to govern the selection of cases. First, the country must have the political will, industrial base, and technical capability to carry out a nuclear weapons development program. Second, there must exist, or have existed, some type of security relationship with the United States containing an implicit or explicit nuclear dimension. Third, at some point the country must have seriously pursued the nuclear option while under the U.S. security umbrella. Fourth, the cases should fall as close to each other in time as possible to reduce temporal disparities in U.S. foreign policy and domestic politics. Finally, as this is an unclassified thesis, information must exist in the public domain that will provide evidence for the case studies.

South Korea and Taiwan fit these criteria well. Both countries have a history of strong leaders, are firmly committed to increasing and diversifying their industrial base, and have relentlessly pursued technological development. Both are long-term security partners with the United States, and they share the unique experience of having their major security threat develop military nuclear capability while fully engaged in the security partnership. Both countries have had occasion to doubt the credibility of the

U.S. security commitment, and have considered developing their own nuclear weapons as a defense option. Because of the extensive nature of their ties with the United States, both countries have been subjected to regular media coverage, Congressional scrutiny, and academic study of their security situation and general development; thus, information exists for informed analysis. Chronologically similar industrial development and geographical co-location are additional factors favoring their selection.

D. CHAPTER SUMMARY

Chapter I introduces the central question of the thesis, explains the methodology for answering that question, and specifies the criteria used to select cases for study and analysis. Chapter II explores the concept of "security commitment" in its various forms and develops a model for use in the analysis of security commitments. Chapter III furnishes an historical overview of trends in U.S. security commitments to orient the reader to the information provided in the case studies. Chapters IV and V examine the relationship between U.S. security commitments and nuclear nonproliferation initiatives in the cases of South Korea and Taiwan. Chapter VI uses the evidence developed in the case studies to reach some conclusions about the role of nuclear and conventional security commitments in nonproliferation efforts and makes recommendations for future research.

⁵A caveat is in order. The declassified information which is available is limited and exists only on the U.S. side. The two countries under examination are noted for their secrecy and to date have not willingly or intentionally released any major details of their nuclear weapons programs.

E. SUMMARY OF FINDINGS

This thesis has three major findings. First, a nuclear security guarantee alone is not sufficient to prevent proliferation. This was true in both cases studied. Second, a strong conventional commitment made credible by the visible presence of forces is sufficient to prevent proliferation when the *direct* security threat is conventional.⁶ This finding is very firm in the case of South Korea, less so in the case of Taiwan. Finally, when the security threat being faced is believed to include nuclear weapons, the prevention of nuclear proliferation requires both a nuclear security guarantee and a conventional military guarantee. This finding appears to be true in both cases.

These findings suggest two important policy implications. First, while nuclear security guarantees are not nearly as important as they are often portrayed, they are necessary in some cases for the prevention of nuclear weapons proliferation. To fulfil that need, maintenance of the U.S. nuclear arsenal is necessary for the foreseeable future. Second, prevention of nuclear weapons proliferation requires strong conventional forces deployed in forward positions. When U.S. overseas conventional military force posture decisions are being considered, the role of those forces in preventing the international spread of nuclear weapons must be a major consideration. Failure to prevent nuclear

⁶ The term *direct threat* is used here to mean a threat that is visible and immediate, as opposed to a more general threat that cannot be seen every day. South Koreans contend with the direct threat of a North Korean invasion as part of daily life. Failure to meet the threat could mean failure to survive as a nation. While they may also view communist China as threatening, it is not the same palpable and visible threat to survival that comes from North Korean military forces, and therefore it lacks the same impact.

proliferation is practically assured if the credibility and strength of conventional force presence is not maintained.

II. A SECURITY COMMITMENT MODEL

A. INTRODUCTION

Any evaluation of the current U.S. policy that nuclear weapons serve as "a guarantee of our security commitments to allies and a disincentive to those who would contemplate developing or otherwise acquiring their own nuclear weapons" first requires an understanding of the term "security commitment." The notion that one state may desire or need to ensure the safety and security of another is not a new concept to the field of international relations. However, the process by which security commitments are formed and carried out is not well understood. This chapter examines the concept of security commitment, identifies key components and characteristics, and provides a model for use in analyzing the case studies which follow.

The chapter is divided into four sections. Section A introduces the chapter.

Section B develops a definition of the term "security commitment" and discusses some elements common to all security commitments. Section C provides a general model of a security commitment, and describes the components of the model. Section D explains the relationship between the model components and nuclear weapons in a security commitment.

B. SECURITY COMMITMENTS: CONCEPT AND DEFINITION

What is a "security commitment" and why is it important? Thucydides commented on this phenomenon in his discourses on the Peloponnesian War: "the two

⁷ National Security Strategy for a New Century, 9.

sides were at the very height of their power and preparedness . . . the rest of the Hellenic world was *committed to one side or the other*; even those who were not immediately engaged were deliberating on the course they were to take later." His report of the exchange between Melians and Athenians (the famed "Melian Debate") captures the litany of problems inherent to inter-state security commitments: Can allies be trusted? Does honor matter in international relations? Will an ally be willing to devote the required resources to another's security? Does he have the will to follow through in the face of danger? What are the potential costs of betrayal? All the issues that plagued security commitments so many centuries ago remain unresolved; they will likely remain salient issues for the foreseeable future.

In the broadest sense, the term "security commitment" refers to an agreement between two or more sovereign states, in which one or more of the parties express an interest in the security affairs of the other. Traditionally, security commitments have been military in nature, although this has changed as the concept of national security has evolved over time to include factors such as national economy, trade, human rights, and environmental issues.¹⁰

⁸ Thucydides, *History of the Peloponnesian War*, trans. Rex Warner (Baltimore, Maryland: Penguin Books, 1903); reprinted as "Reflections on the Peloponnesian War" in *Classic Readings of International Relations*, ed. Phil Williams, Donald M. Goldstein, and Jay M. Shafriz, (Belmont, Calif.: Wadsworth Publishing, 1994), 183.

⁹ See ibid., 184-9, for the full flavor of the difficulties inherent in security commitments. The list that follows is only a short summary of the discussion.

¹⁰ This concept is discussed by Virginia I. Foran, "Overview," in Virginia I. Foran, ed., *Security Assurances: Implications for the N.P.T. and Beyond* (collection of

For the purpose of this thesis, a security commitment is defined as a formal or informal understanding, involving two or more parties, reflecting some common goal(s) or objective(s) important to the security interests of one or more of the parties, which requires actions that could entail significant human, economic, or political costs if the obligations of the commitment are fully met. In its most basic form, a security commitment has three major elements: an "if," a "then," and a "why." The "if" is the triggering cause requiring action by a committed party. The "then" is the pledged response that must be made. And finally, the "why" is the underlying reason for entering into the commitment—in other words, the security need or problem of the pledged respondent which the commitment addresses.¹¹

C. THE SECURITY COMMITMENT MODEL

A security commitment is at heart a psychological phenomenon built around perceptions of the motivations and intentions of another party.¹² The commitment

papers presented at the Carnegie Endowment for International Peace Security Assurances Workshop, 1 February 1995), 1. Foran uses the term "security assurances" in discussing this idea; I use the more general term "security commitments" because the term "security assurance" is usually associated with the N.P.T.. See discussion below.

¹¹ The "if" and "then" portions of this construction are proposed by Terry L. Deibel in *Commitment in American Foreign Policy: A Theoretical Examination for the Post-Vietnam Era*, National Security Affairs Monograph Series 80-4 (Washington, D.C.: National Defense University, April, 1980), 7. The "why" component is my own.

¹² For the sake of simplicity, this model uses only two participants, a provider (the party offering the needed security resources) and a recipient (the party with the security need.) Multilateral models can also be constructed, but making predictions about them is more complicated because of the number of permutations of constituent combinations that is possible.

provider contributes to the relationship some combination of three components: a legal component, a physical component, and a behavioral component. The manner in which the recipient perceives the actions of the provider in each of the three areas is the basis for psychological evaluation of the value of a commitment to the particular security needs of the recipient. This in turn provides the foundation for decisions regarding security matters.

Understanding the relationship between the three provider components is crucial to understanding how the security commitment will be perceived. Before describing that relationship, it is helpful to examine each of the three components in more detail, and to discuss other analytical factors that should be considered.

1. Legal Component

The legal component of a security commitment is greatly influenced by the manner in which it is given. This component of a security commitment can be described by degree of formality and by form:

a. Formal Commitment

A formal security commitment is one in which the participants conclude a codified agreement which is then ratified according to their respective constitutional or statutory processes. This is sometimes known as a *de jure* commitment; it is (theoretically) binding and recognizable under international law.

b. Informal Commitment

An informal security commitment is one in which there is no formally codified structure outlining its terms and requirements upon participants. Such *de facto*

commitments may be the result of a "gentlemen's agreement" between heads of state, the result of specific foreign policy doctrines proclaiming intent to ensure the security or stability of nations or regions, the side effect of other more formal agreements such as trade pacts or non-proliferation treaties, or a variety of similar situations. The legal status of informal commitments may be questionable; their strength depends greatly on the circumstances and situation surrounding their creation.¹³

c. Treaties

Treaties are formal bilateral or multilateral security commitments. They may be "open"—that is, the text of the treaty is available for public inspection—or they may be secret documents known only to a few selected parties. Treaties contain language detailing the duration of the agreement and terms for renewal; obligations of signatories and burdensharing arrangements; conditions under which the commitments assumed by treaty parties will be activated; and the decision-making process for carrying out the various functions of the treaty. The precision of the language used in a treaty to describe triggering events and promised responses is important. Ambiguous language tends to reduce the strength of commitments, because it allows loopholes for escape when the required action might be unpleasant or costly. The currency of the commitment (how

¹³ Alan Ned Sabrosky, "Alliances in U.S. Foreign Policy," in *Alliances in U.S. Foreign Policy: Issues in the Quest for Collective Defense*, with a foreword by Charles F. Doran, ed. Alan Ned Sabrosky (Boulder: Westview Press, 1988), 3.

¹⁴ Ibid., 4.

old the commitment is) is meaningful also, because the original reason for concluding the agreement may have changed.

d. Security Guarantees

Security guarantees are one step removed from treaties. Normally bilateral arrangements, security guarantees might be formal agreements between heads of state based on a verbal or written exchange, or they might be an informal understanding or protocol to a more formal agreement. From the U.S. perspective, the distinguishing feature is that treaties require Senate approval, while security guarantees may be negotiated and put into place by the Executive without formal Congressional approval. As an example, the Mutual Defense Treaties signed between the United States and South Korea and the United States and the Republic of China (Taiwan) were formal treaties which required Congressional approval. After Taiwan was "derecognized," a series of Executive branch efforts was made by President Reagan to reassure the Chinese Nationalists of U.S. intent to protect them if necessary. These efforts would be classified as informal security guarantees.

In the nuclear context, a security guarantee may be a formal or informal positive commitment in a bilateral (NATO being the multilateral exception) security arrangement that promises response up to and including the use of nuclear weapons.

Nuclear security guarantees tend to be informal and implicit accessories to conventional security commitments, thus allowing the guarantor an opportunity to avoid becoming involved in a nuclear exchange in the event that an overly adventurous non-nuclear partner tried to provoke a fight with a nuclear-equipped opponent. The Mutual Defense

Treaty between the United States and South Korea is one example of a formal mutual defense treaty with an informal and implicit nuclear guarantee.

e. Security Assurances

Security assurances differ from security guarantees in that they are unilateral statements issued by states regarding their intentions in certain security matters. Security assurances are the weakest of the three types of commitments; their strength under international law is often suspect because they are verbally offered and there is not an enforceable penalty for breaking them. Most commonly, the term is used in the context of the Nonproliferation Treaty (N.P.T.) and nuclear arms control efforts, where it is further broken down as being either negative or positive in nature.

A negative nuclear security assurance is a general promise by a declared nuclear weapon state (NWS) that it will not use or threaten to use nuclear weapons against a non-nuclear weapon state (NNWS). To date, negative assurances have unilaterally been given by all NWS parties to the N.P.T., although each state attaches various caveats as it sees necessary to meet its own security needs.¹⁵

A positive nuclear security assurance declares that a NWS will come to the aid of a NNWS if the NNWS is threatened or attacked with nuclear weapons. The United Nations Security Council adopted a resolution on the subject in 1968, in which it

The subject of security assurances as they pertain to the nuclear non-proliferation regime is discussed in general terms by Boutros Boutros-Ghali, "The Nuclear Non-proliferation Regime," in *The United Nations and Nuclear Non-Proliferation*, with introduction by Boutros Boutros-Ghali, United Nations Blue Book Series, vol. III (New York: United Nations Department of Public Information, 1995), 18-19. For full texts of each state's negative security assurance, see pp. 122-3, 131, 137, 174.

1) recognized that nuclear aggression or threat of nuclear aggression would require the Security Council to act, and 2) welcomed the expressed intention of certain states to provide or support immediate assistance to N.P.T. parties who were victims of such an act or threat.¹⁶

2. Physical Component

Physical manifestations are extremely important in determining the relative strength of a commitment. Military forces stationed abroad are strong proof of a state's dedication to the security of another. Maintaining overseas bases, participation in joint exercises and coalition operations, and routine port visits and flag-showing operations also give indication of the intent of a state to live up to its proclaimed level of military commitment.

Economic ties are also very important. The level of trade between security partners, the amicability of trade relations, direct and indirect foreign investment levels, and governmental willingness to hold foreign debt instruments of a partner all provide evidence of commitment health, strength, and viability. Finally, the presence of citizens overseas, as well as domestic ownership of foreign property, are important elements in some situations.¹⁷

¹⁶ United Nations, Security Council, S/RES/255 (1968), 19 June 1968. Reproduced in ibid., 63.

¹⁷ Deibel, Commitment in American Foreign Policy, 14-17.

3. Behavior

Behavior is the most important of the three provider components in the security commitment, because it is the filter through which the recipient views the legal and physical evidence of commitment by the provider. Consistent behavior over a prolonged period indicates that the security partner values the commitment and will probably honor it should the need arise. Behavior inconsistent with the physical and legal components of the commitment causes the recipient to question the actions and intentions of the provider. Repeated incidents of perceived inconsistent behavior may lead the recipient to doubt that the provider will be there when needed, and so the recipient may take other actions to provide for its security needs.

An example illustrating this point is in order. The United States had maintained a strong commitment to the security of South Korea throughout the 1950s and 1960s. This relationship included a visible legal component in the Mutual Defense Treaty, and a robust physical component which included two army divisions and various air units stationed on South Korean soil. In this security relationship, the United States was perceived as a friend, and the perceived enemies were North Korea and communist China. When Nixon traveled to China in 1972, that behavior was seen as inconsistent with the South Korean perception of appropriate behavior for the relationship, and it caused many South Korean leaders to wonder what the real commitment level of the United States was toward its South Korean partner.

4. Other Factors

Two other factors important for understanding how a security commitment functions deserve mention. They are:

a. Number of Parties in the Commitment

The number of parties to a security commitment is an important factor for determining how functional and durable a security commitment will be. In general, the more partners there are, the more complicated the security arrangement will be and the more difficult it becomes to deal with the day-to-day business of the accord.

There are three basic arrangements: Unilateral commitments, bilateral commitments, and multilateral commitments. *Unilateral* commitments are made by one state to another, with no reciprocal commitment requirement. More common are *bilateral* commitments, in which two states make security pledges to each other against certain sets of conditions or events. *Multilateral* commitments, in which three or more states share a common set of security goals and objectives, are also common in the modern security environment.

b. Relative Power Status

Parties to a security commitment can be considered as belonging to the set of "major powers," the set of "minor powers," or the more recently identified set of "middle powers." Major powers include the United States, China, and probably Russia. Examples of minor powers might include Italy, Sweden, Denmark, and Spain. France

¹⁸ Sabrosky, "Alliances in U.S. Foreign Policy," 3.

and Japan are often cited as examples of middle powers. Taiwan and South Korea could be considered as aspirants to middle power status in this hierarchy.

Power status gives rise to important nuances in security commitment relationships. For example, commitments between two powers of roughly equal status promote equitable sharing of the costs and benefits of the relationship. Disparities in power status tend to result in the stronger partner bearing a greater share of the burden, while the weaker party enjoys an inordinate share of the benefits. Over time, unequal sharing of the burdens may lead to resentment and discord within the security relationship, and may eventually result in its dissolution.

D. NUCLEAR WEAPONS AND SECURITY COMMITMENTS

How do nuclear weapons fit in the security commitment model? What role do they play, both when the potential opponent is believed to have them and when the security provider possesses them? These questions have as many answers as there are scholars of security studies. I offer the following explanation.

The entry point of nuclear weapons into the security commitment model provided above is in the perceptions of the recipient. As the recipient of the commitment surveys the security scene, an evaluation of the behavior, physical factors and legal strength of the commitment is performed. A similar evaluation is made of the threat. When the strength of the security commitment is perceived to be greater than that of the threat, the recipient is content with the status quo. When the threat is stronger, the recipient will move to meet the threat by acquiring additional security resources, either through the security relationship, or unilaterally. If the security relationship between provider and recipient is

perceived by the recipient as being unstable, unreliable, or inadequate, the recipient will choose the unilateral option and work toward gaining self-sufficiency in security matters.

In practical terms, this means that a partner such as South Korea or Taiwan can be expected to work within the security commitment framework with the United States to meet conventional threats, regardless of their strength, as long as the United States maintains the legal, physical, and behavioral components in a way that gives a perception of strength and commitment. If the commitment of the United States is perceived to be wavering, then South Korea and Taiwan will look for other, probably indigenous solutions, possibly including nuclear weapons. Therefore, strong conventional commitment in the face of a conventional threat should be sufficient to counter moves toward the development of nuclear weapons.

If the threat is nuclear, the United States will have to offer a nuclear guarantee along with a conventional commitment for the security relationship to be perceived as credible. Nuclear security guarantees alone will not be sufficient because they do not contain the legal and physical components necessary to convey credibility of commitment. Physical presence indicates that the United States takes its commitments seriously and believes in the cause strongly enough to put assets at risk to defend it.

To summarize the argument presented in this chapter, legal and physical manifestations of commitment are the foundations upon which the security relationship is built. The behavior of the provider can be likened to a lens which either focuses or distorts the legal and physical components in the perceptions of the recipient. The presence or absence of nuclear weapons directly affects the perceptions of the recipient.

Nuclear security guarantees are not necessary for the prevention of nuclear proliferation when the threat is conventional, but they are essential if the threat is nuclear.

III. SECURITY COMMITMENTS IN THE AMERICAN EXPERIENCE

A. INTRODUCTION

"I believe that it must be the policy of the United States to support free peoples who are resisting attempted subjugation by armed minorities or by outside pressures." With these words to Congress in early 1947, President Harry S Truman set in motion forces that would change the face of U.S. foreign policy. Prior to 1947, the United States had firmly adhered to a policy of remaining outside of entangling alliances. Post-1947 foreign policy would eventually result in formal and informal security commitments with more than forty states at the pinnacle of American involvement abroad.

Before proceeding with the case studies, an overview of the application of security commitments in U.S. foreign policy is helpful to orient the reader to the context within which the commitments were made. The American experience with security commitments is divisible into three or possibly four phases. The first phase, discussed in section B, developed alongside the strategy of containment during the Truman years.

Section C covers the second phase, which transpired largely during the Eisenhower era, with repercussions extending to the late 1970s and perhaps beyond. The third phase, the subject of section D, was born in the tumult surrounding the Soviet invasion of Afghanistan, and extends at least through 1990. Today, as discussed in section E, we may be witnessing the birth of a fourth phase, as international security problems

¹⁹ Harry S Truman, speech to joint session of Congress, 12 March, 1947; quoted in Stephen E. Ambrose, *Rise to Globalism: American Foreign Policy Since 1938*, 5th rev. ed. (New York: Penguin Books, 1988), 85.

are increasingly dealt with through multilateral response mechanisms aided and abetted by a rejuvenated United Nations.

B. PHASE ONE

The set of security commitments formed by President Truman and Secretary of State Dean Acheson in the early postwar period was a result of the emerging hostility between the Soviet Union and the United States.²⁰ These commitments were constructed around a broad strategic goal: containment of the Soviet Union to prevent it from expanding into war-devastated areas and the "free" world. Truman and Acheson first insured American security in the rear areas by concluding the Rio Treaty in 1947, after which they moved further abroad to stabilize the war-torn countries of Western Europe and the Pacific. The commitment to Europe was formalized in April 1949 with the birth of NATO, an event which marked the first-ever participation by the United States in a peacetime military alliance outside the Americas. The Pacific region was secured via the Australia-New Zealand-United States (ANZUS) treaty, which was completed in 1951. Also, as a result of Japan's unconditional surrender at the end of the war, the United States took on the commitment to defend Japan, formalizing this obligation through a Mutual Security Treaty.

C. PHASE TWO

The security commitments formulated by President Dwight D. Eisenhower and Secretary of State John Foster Dulles were of a much different ilk than those of the

²⁰ Terry L. Deibel, "Changing Patterns of Collective Defense: U.S. Security Commitments in the Third World," in *Alliances in U.S. Foreign Policy*, 108.

preceding administration. While superficially similar (in that most were based on formal treaties to which the Senate had consented, many were multilateral in character, and they often contained an organizational component), the commitments crafted during this phase were "tactical artifacts designed to make the Eisenhower strategy of massive retaliation credible in local situations."²¹ This pointed to a fundamental change in foreign policy objectives. While containment of the Soviet Union was still the foremost objective, the occurrence of a variety of smaller conflicts in diverse locations pointed to a gap in American ability that could not be credibly filled with a strategy of massive retaliation. To plug this gap, Dulles negotiated a series of security commitments. The Southeast Asia Treaty Organization (SEATO) was designed to "shore up western positions in Indochina." The Central Treaty Organization (CENTO) had responsibility for securing the Middle East against the possibility of Soviet aggression through Egypt. The Taiwanese were extended a protective shield to fend off the Communist Chinese, and South Korean leaders were offered a mutual security pact to "stabilize the shaky armistice ending the Korean War."22

Two features are notable about this second round of U.S. commitments. First, the countries that received the commitments were far different from those of the previous phase. Truman and Acheson had concluded treaties with nations similar to the United States, sticking to advanced industrial societies with close personal and cultural ties to the

²¹ Ibid.

²² Ibid., 109.

United States, historical links of extensive trade, immigration, common language, or wartime cooperation. The Eisenhower/Dulles agreements linked the United States with states that were often weak, had little industrial capability, and lay far off the beaten path of world political and politics. "Few cultural ties and little complementarity of interest underlay these commitments, and 25 years later all but the Korean treaty were gone." 23

The second notable feature of the Eisenhower/Dulles-engineered commitments is development and application of the concept of extended nuclear deterrence. In the early 1950s, when these commitments were being negotiated, U.S. policy makers relied heavily on the deterrent effect of a growing nuclear arsenal as the front line of the defense effort. Rather than paying the expense of supporting large numbers of forward-deployed troops to back security commitments, the belief was that

nuclear deterrence, once achieved by the United States, could scarcely be denied to any ally, and could be extended to all allies without incremental cost. In other words, nuclear deterrence was thought to possess the dual characteristics of a public good: nonexclusiveness of distribution and jointness of supply. It was both universal and cheap. . . . Combined with wall-to-wall security alliances . . . , nuclear deterrence could substitute efficiently, it seemed, for actual defense. ²⁴

The inaccuracy of this belief finally became fully apparent in the following decade, when the United States became inextricably involved in a struggle in which nuclear weapons and the high theories of extended nuclear deterrence made no difference. The impact of the Vietnam experience was made clear by the proclamation of the Nixon Doctrine in

²³ Ibid., 110.

²⁴ Earl C. Ravenal, "Extended Deterrence and Alliance Cohesion," in *Alliances in U.S. Foreign Policy*, 27.

1969. Bruised and sore, tired of the seemingly ceaseless string of wars and crises brought on by alliance commitments, the administration began the painful process of partial disengagement from its web of security commitments, shifting primary responsibility for self-defense to the ally and offering compensatory packages of economic and military aid to those who needed it. Although it provoked outcries of alarm from allies and caused a general erosion of faith in American security commitments, this process continued until the last year of the Carter Administration, when renewed aggressiveness by sinister forces sparked a fundamental re-evaluation of policy and resulted in a new phase of American security commitments.

D. PHASE THREE

U.S. foreign policy suffered a difficult year in 1979. Renewed aggression by

Vietnam in Southeast Asia, the ouster of the Shah of Iran and the subsequent hostage

crisis, a second oil crisis, Sandanistas in Nicaragua, and the Soviet invasion into

Afghanistan all pointed to reductions in U.S. security commitments that had gone too far.

President Jimmy Carter responded slowly, first by freezing reductions in commitments to
the Third World, then with a gradual renewal and strengthening of security ties. These

commitments were fundamentally different, however, and the precedent set in the wake
of the chain of debacles in 1979 was to be a staple of the Reagan foreign policy effort.

For at least the next decade, new or renewed U.S. security commitments would be largely
informal, but backed by strong behavioral and physical indicators of intent. It was the
only feasible option in the face of a Congress which was deeply suspicious of Executive
branch activities and loath to give its imprimatur to any foreign policy ventures that had a

remote possibility of resulting in another imbroglio á la Vietnam.

President Carter's efforts were focused mostly in the Far East, Africa, the Middle East, and the newly-created region of Southwest Asia. He began by canceling the announced withdrawal of forces from South Korea and providing them strong verbal reassurances of U.S. intent to honor their treaty obligations.²⁵ Thailand was also the beneficiary of a renewed security relationship, receiving a pledge of commitment to its security, integrity, and freedom.²⁶ Diplomatic relations with China were normalized and an offer of dual-use technology and non-lethal military equipment was made.²⁷ Taiwan, although officially derecognized as a result of the rapprochement with China, was the recipient of a U.S. security commitment via Congressional passage of the Taiwan Relations Act.²⁸ In Africa, support was offered to Morocco for its counter-insurgency efforts in the Western Sahara, while Zaire began receiving help in modernizing its military.²⁹ In the Middle East, Carter brokered the Camp David accords between Israel and Egypt, promising both sides high levels of financial and security assistance if they

²⁵ International Institute for Strategic Studies (IISS), *Strategic Survey 1979* (London: IISS, 1980), 36. See also Deibel, "Changing Patterns of Collective Defense," 112.

²⁶ Ibid.

²⁷ Ibid.; A. James Gregor and Maria Hsia Chang, *The Iron Triangle: A U.S. Security Policy for Northeast Asia*, (Stanford, Calif.: Hoover Institution Press, 1984), 23.

²⁸ Ibid., 77.

²⁹ IISS, *Strategic Survey 1979* (London: IISS, 1980), 96-97; Deibel, "Changing Patterns of Collective Defense," 112.

would agree to a peace settlement.³⁰ In Southwest Asia, the Carter administration sought to build security links with the moderate Arab states, backing its efforts with large military aid packages and military support in crises. The administration also began to strengthen military presence in the Indian Ocean region. This process required the negotiation of a variety of agreements to provide basing rights and support facilities, agreements which were the *de facto* basis for a number of informal but very important security commitments.³¹

President Ronald Reagan picked up where the Carter administration left off, but with one significant change. Whereas the Carter administration forged security commitments out of a sense of necessity, the Reagan agenda was driven by a mission to restore American power, of which strong security commitments were an "essential instrument." Pledging in his first Inaugural Address to "match loyalty with loyalty," Reagan pursued a policy of arms transfers, military aid, basing rights, and overt and covert aid to countries around the world, building in the process an informal structure of U.S. security commitments far more extensive than anything preceding it. The edifice so constructed survived to the end of the Cold War, and much of it is still operative today,

³⁰ IISS, *Strategic Survey 1979*, 73-83; Deibel, "Changing Patterns of Collective Defense," 113.

^{.31} Deibel, "Changing Patterns of Collective Defense," 113-15; IISS, *Strategic Survey 1979*, 36-7.

³² Deibel, "Changing Patterns of Collective Defense," 115.

³³ Ibid., 116.

albeit reduced somewhat in size and scope due to U.S. post-Cold War defense drawdowns.

E. PHASE FOUR?

The world may be witnessing the start of a fourth phase in American security commitments. Since the conclusion of the Persian Gulf War, the U.S. inclination seems to be toward coalitional security arrangements which try to underwrite various states' security needs through U.N.-sponsored activities (Somalia, Haiti, and Bosnia are a few examples). Whether this means the United States is shifting toward a consistent foreign policy of involving the United Nations as a party in carrying out security commitment obligations is unclear. Only time will tell.

IV. SOUTH KOREA: THE THIRD TIME IS A CHARM?

A. INTRODUCTION

South Korean leaders have seriously considered the development of nuclear weapons on at least three occasions in the past twenty-five years. In each instance, their consideration was prompted by of a perceived decline in the strength of the U.S. commitment to South Korean security needs. This case study examines these three occasions in chronological order, and demonstrates how actual or proposed reductions in physical presence led directly to the perception of declining U.S. commitment, which in turn led to the renewal of South Korean interest in nuclear weapons.

This chapter contains six sections. Section A introduces the case study and lays out the general structure of the chapter. Section B provides a brief history of U.S. involvement in South Korean security affairs up to the early 1970s. Section C examines the causes for the initial interest of the Park regime in nuclear weapons and the U.S. reaction to that interest. Section D investigates the renewal of interest in the wake of President Carter's withdrawal decision and the U.S. attempt to persuade South Korean leaders to renounce consideration of the nuclear option. Section E examines the recent renewal of interest in nuclear weapons by the South Korean government and scientific community. Finally, section F concludes that declines in U.S. presence led to perceptions of declining American commitment to South Korea, and that the perception of a weakening U.S. commitment caused South Korean leaders to search for other ways to ensure the survival of their country, including the development of nuclear weapons.

B. AMERICAN INVOLVEMENT WITH SOUTH KOREA TO 1970

American involvement in South Korean security affairs came as a result of victory in the Second World War. The defeat of Japan left the United States in control of the southern part of the Korean Peninsula, while the Soviet Union controlled the northern section. Although the U.S. intent was eventual restoration of Korean sovereignty, developing tensions between the Soviet Union and the United States soon solidified the division of Korea into two states. As the United States continued its post-war military drawdown, U.S. military forces stationed in South Korea gradually were withdrawn, so that by mid-1950 only a small contingent of American troops remained.

It was at this point that the North Korean leadership made a bid for reunification of the two Koreas by military means. The invasion of South Korea in the summer of 1950 caught the United States completely off-guard. North Korean troops managed to capture a significant portion of South Korea before U.S. troops could be rushed into the country under the flag of the United Nations. By the summer of 1951, a military stalemate had developed along the original north-south line of separation. Two agonizing years of fighting and negotiating then ensued before an armistice was finally agreed upon in July 1953.

Following the end of the war, U.S. leaders realized that American forces would have to remain in South Korea for the foreseeable future. The war had been tremendously costly to the South Korean economy.³⁴ Almost four million Korean lives

Some estimates hold the cost as high as two times South Korean gross domestic product (GDP) at that time. Koji Murata, "The U.S.-Japan Alliance and the

were lost during the conflict, and large regions of the peninsula (including Seoul, the center of South Korean economic and political power) were completely devastated.³⁵ In short, the impact of the war meant that South Korea was incapable of self-defense, with no likely change in the situation for the near future.

The conclusion of the Mutual Defense Treaty in 1953 formalized what was to become a long-standing American commitment to the security and stability of the Korean peninsula. Over the next two decades, the United States "poured vast quantities of economic and military aid into South Korea," working on the assumption that South Korean economic recovery was a vital first step in restoring self-sufficiency and security to the nation. The large investment of American resources paid off in rapid economic recovery and growth. By 1970, the United States was supplying about 22 percent of direct foreign investment in the South Korean economy, purchased approximately one-third of all South Korean exports, and supplied about one-fourth of all South Korean imports. The United States also maintained a significant physical presence in South Korea, stationing two Army infantry divisions and a variety of Air Force assets on the peninsula as visible evidence of the American commitment to South Korean security.

U.S.-South Korean Alliance: Their Origins, Dilemmas, and Structures," *Comparative Strategy* 14, no. 2 (1995): 188.

³⁵ Gregor and Chang, The Iron Triangle, 58.

³⁶ Ibid., 59,

³⁷ Ibid.; Janne E. Nolan, *Military Industry in Taiwan and South Korea* (New York: St. Martin's Press, 1986), 22-3.

Despite the apparent harmony of U.S.-South Korean goals and aspirations, a fundamental difference existed in the reasons for the entry of the United States and South Korea into a defensive alliance. South Korean needs were local. The South Koreans existed in uneasy proximity to a state whose leadership held the avowed goal of reunification by any means necessary. The United States saw itself involved in a much larger conflict against the forces of communism, and perceived the situation on the Korean peninsula as one more manifestation of a "communist conspiracy" to take over the free world. The basic difference of viewpoints was not problematic in the early years of the alliance, because the hardline stance that the South Korean leadership took against North Korean communism fit well with U.S. requirements for staunchly anti-communist allies. However, as the Cold War slowly thawed and the United States, China, and the Soviet Union began to explore the possibilities of detente, the underlying differences in security needs became apparent and the previously unquestioned U.S. support for South Korea became the object of increasing scrutiny.

C. THE NUCLEAR OPTION, PHASE ONE

The initial South Korean move toward the nuclear option occurred as the United States struggled to extricate itself from Vietnam. The prolonged nature of the war and its increasing unpopularity among American citizens led to questioning not only of the U.S. commitment to South Vietnam, but all other U.S. commitments in Asia as well. As the war effort passed its peak in 1969, recently–elected President Richard Nixon began to search for some way out of the war, preferably with a minimum of damage to the credibility of U.S. security commitments elsewhere. The result was a new policy,

commonly referred to as the Nixon Doctrine, which proclaimed (among other things) that the United States would now be promoting self-reliance among its allies. Rather than physical presence, allies would receive security assistance packages of training and material assistance that would allow them to meet their own defense needs without the presence of U.S. troops. No longer would the United States provide unlimited numbers of troops to back up its security commitments.³⁸

As the South Korean leadership began to assimilate the meaning of the Nixon Doctrine, concern grew over the potential impact on South Korean security. President Nixon's unilateral decision to withdraw the Seventh Infantry Division from South Korea in 1970 (despite previous public promises to the contrary from President Lyndon Johnson) caused the South Korean leadership to become further alarmed at what they perceived as imminent abandonment by the United States.³⁹ And if the continuing American debacle in Indochina and the announcement of the Nixon Doctrine were not sufficient to alarm South Korean observers, North Korean President Kim Il Sung interpreted those events as a lowering of American resolve and promptly initiated a massive five-year military build-up. When President Nixon continued this series of unsettling events with a trip to Peking in 1972, many South Koreans began to feel great

³⁸ Nolan, Military Industry, 25.

³⁹ Murata, "U.S.-South Korea Alliance," 189-90. The South Koreans must have found this move particularly galling after the significant level of support they had given the United States in Vietnam, where some sources estimate the South Korean contribution to have been as great as 300,000 combat troops between 1965-1972. Nolan, *Military Industry*, 23, 149 (n11).

alarm for their security. From their perspective, communist China was a principal underwriter of the hated North Korean regime; dealing with China was consorting with the enemy as far as South Korean leaders were concerned. From the American perspective, the chance to co-opt China was beneficial in the larger global game the United States was playing. Local South Korean concerns would just have to take a back seat to higher U.S. priorities.

The outlook, already gloomy for many South Koreans by late 1972, steadily worsened. Despite U.S. promises of military aid to make up for the troop strength drawdown, an increasingly restive American Congress was not inclined toward providing U.S. support to a regime which many Congress members found increasingly distasteful. ⁴⁰ In addition, there was the tendency to reduce levels of aid in proportion to troop strength reductions; as one scholar stated, "Intensity of commitment, presence of troops, and level of aid are intimately related. . . . [A] decline in troop presence inevitably meant a lessening of American commitment and that, in turn, meant reduced, not increased military aid." As a result, the promised aid shifted from the expected grants and preferential loans to cash sales. This was a double blow to South Korean defense officials, who already were struggling to deal with the increased defense expenditures

Walter F. Hahn, "American Introversion Post-Vietnam," *Strategic Review* 3 no. 4 (Fall 1975): 19.

⁴¹ Stephen P. Gibert, *Northeast Asia in U.S. Foreign Policy*, Washington Papers, vol 7 (Beverly Hills and London: Sage Publications, 1979), 43; quoted in Nolan, *Military Industry*, 147 (n18).

necessary to plug the gaps left in South Korean defenses by the departure of the Seventh Infantry.⁴²

According to a South Korean National Assembly Representative and member of the Defense Committee, Kang Chong-sung, it was during this period that President Park Chung-hee decided it was "necessary to develop nuclear weapons to achieve an independent national defense." The course of action he pursued, however, indicates that Park was well aware of growing world concern over the proliferation of nuclear weapons. Because of this, his program for weapons development would have to be covered by the development of a respectable and justifiable civilian power program. As it happened, world events presented the South Korean president with a ready-made cover story when the energy crisis struck South Korea with crippling force in 1973-74. With a rapidly industrializing economy, no indigenous oil production, little coal, and hydroelectric capabilities already nearing full utilization, South Korea was soundly battered by the jump in oil prices.

Nuclear power offered a potential solution to both South Korean problems. If the relatively new breeder reactor concept and plutonium reprocessing industry turned out to

⁴² Nolan, Military Industry, 25, 146 (n12), 147 (n18).

⁴³ Foreign Broadcast Information Service, *FBIS Special Memorandum: ROK Nuclear Potential*, 23 February 1996, 8, Internet, http:/fbis.fedworld.gov/cgi-bin, document id. 0dqr8pu03tepwv. The comment was made by Kang during an inspection of South Korea's Agency for Defense Development (ADD), was reported in *Hanguk Kyongie Sinmun* on 06 October 1995. Kang's comments were also reported in "South Korean Programme: New Details," *Jane's Defence Weekly* 24, no. 15 (14 October 1995): 6.

be as good as industry advocates maintained, the South Korean nuclear industry would be able to provide freedom from dependence on foreign energy resources. And if plutonium reprocessing were allowed in South Korea, that would allow development of nuclear weapons, which might solve the security problem.

President Park apparently realized that getting assistance in nuclear development from the United States would be a problematic undertaking due to increased American political awareness about nuclear issues in the wake of the May 1974 Indian nuclear explosion. Representative Kang maintains that President Park decided to "put his efforts into nuclear development through contacts with the French," an allegation supported by press reports of South Korean attempts to purchase plutonium reprocessing technology from France. Park also attempted to purchase nuclear equipment from Canadian sources during this period, but met with little success because of Canadian concerns over safeguards and potential diversion of materials into clandestine weapons programs. Canada had supplied the reactor used by India to produce the plutonium for their nuclear device, and the fallout from that mistake made Canadian officials more than a little nervous about dealing with another potential nuclear weapons proliferator.

⁴⁴ Ibid.

As Richard L. Madden, "Senators Differ on Arms Cutbacks as Debate Closes," New York Times, 4 June 1975, 1; "A-Plant Deal Being Negotiated," Washington Post, 6 June 1975, A16.

⁴⁶ Richard Halloran, "South Korea Stressing Nuclear Energy," New York Times, 9 February 1975, 18; Kim Sam-O, "Seoul: US tightens its nuclear grip," Far East Economic Review 88, no. 16 (18 April 1975): 44; "Safeguards Promised in A-Pact," Washington Post, 26 June 1975, A24.

In addition to his international activities, President Park also made substantial administrative efforts in his own country to pave the way for eventual nuclear weapons capability. Under his direction, the Agency for Defense Development (ADD) was formed in the late 1960s, and began research on a nuclear device in the early 1970s. ⁴⁷ By 1975, more than 20 scientists had been recommended to Park for this project by the Ministry of Science and Technology (MOST), and their research results were reportedly briefed to Park on a regular basis. ⁴⁸ The Korea Atomic Energy Research Institute (KAERI), founded in 1962, was also involved. It oversaw the operation of the two South Korean research reactor facilities as well as developing plans and technology for fuel recovery and fabrication facilities (including chemical reprocessing facilities). ⁴⁹

Although they struggled publicly to maintain the image of good relations and strong commitment to South Korea, U.S. officials were growing increasingly concerned about the possibility of a South Korean nuclear weapons program. This concern was evident as early as 1974, when a secret Central Intelligence Agency (CIA) report noted that "South Korea would not be able to build bombs until at least 1984." Members of

⁴⁷ Maynard Parker, "One of Four," Foreign Policy, no. 20 (Fall 1975): 215.

⁴⁸ Comments by Kang Chong-sung as reported in *Hanguk Kyongje Sinmun*, 6 October 1995. Quoted in *FBIS Special Memorandum: ROK Nuclear Potential*, 8.

⁴⁹ Young-sun Ha, "Nuclearization of Small States and World Order: The Case of Korea," *Asian Survey* 18, no. 11 (November 1978): 1135-9.

Weapons, 4 September 1974, contents summarized in David Burnham, "C.I.A. Said in 1974 Israel Had A-Bombs," *New York Times*, 27 January 1978, 5. According to the CIA, the report was mistakenly released to the Natural Resources Defense Council in response to a Freedom of Information Act request; the NRDC then made the report public.

the National Security Council (NSC) also were closely watching nuclear developments in South Korea, and at the same time searching for ways to keep South Korean nuclear activities concentrated on peaceful uses. They were concerned that the existence of a "PNE loophole" in the U.S.-South Korean agreement on cooperation in the peaceful uses of atomic energy might somehow be exploited by South Korea in the production of nuclear explosives.⁵¹

By early 1975, high-level U.S. government officials were developing a secret official policy toward South Korean nuclear weapons development. The "basic objective" of this policy was "to discourage and to inhibit the ROK effort to develop a nuclear explosive capability or delivery system." The policy was to be developed "within the multilateral framework which we [the United States] are using for global policy on the nonproliferation of nuclear weapons." To enforce the new policy, several approaches were proposed, including "inhibit[ing] ROK access to sensitive technology and equipment both through unilateral U.S. action and through development of common supplier nation policies" and pressuring South Korea to ratify the N.P.T.⁵²

David Elliot to General Scowcroft, "Sale of Canadian Nuclear Reactor to South Korea," National Security Council Memorandum 5612, 18 November 1974. The "PNE loophole" (whereby diversion of plutonium is foresworn for nuclear weapons but not specifically for peaceful nuclear explosives use) was used by India in developing a nuclear device with Canadian-supplied nuclear material; members of the NSC had no desire to see the Canadian mistake replayed in South Korea using American technology.

⁵² W.R. Smyser and David D. Elliot to Secretary Kissinger, "Development of U.S. Policy Toward South Korean Development of Nuclear Weapons," National Security Council Memorandum 1267, 28 February 1975. South Korea had become a signatory 1 July 1968, but had never ratified the treaty. Congress, Senate, Committee on Government Operations, *Facts on Nuclear Proliferation: A Handbook*, report prepared

While U.S. policy makers struggled to develop workable solutions to the looming problem of a South Korean nuclear capability, events in the world arena continued to edge the South Korean administration toward developing nuclear weapons. U.S. responses to the rapidly deteriorating situation in Vietnam were being watched by allies and opponents alike for signs of strength or weakness. American failure to "save" its friends and allies would be perceived as a signal that the United States was no longer a reliable security partner in East Asia.

Officials in the NSC were well aware of the scrutiny being leveled at them by governments around the world. One month prior to the fall of Saigon, General Scowcroft, then National Security Advisor, met with U.S. Ambassador to South Korea Richard L. Sneider. The suggested talking points for this meeting included such topics as "President Park's view of the strategic balance on the Korean Peninsula," whether his doubts about U.S. reliability had increased substantially over the last year," and how far President Park was "likely to go in trying to reduce dependence on us [the United States] in security matters . . . and the development of a nuclear weapon." 53

by Winifred Griffin Smith and Warren H. Donnelley, 94th Cong., 1st sess., December, 1975, Committee Print, p. 38. The NSC had received a report on 26 February 1975, that the South Korean government was "moving quickly in that direction" and that they were also "discussing additional safeguard agreements with IAEA as well as with Canada and France." American Embassy Seoul to Secretary of State, "Non-Proliferation Treaty," Department of State Telegram Seoul-01239, 260804Z FEB 75.

⁵³ W. R. Smyser to General Scowcroft, "Your Meeting with Our Ambassador to South Korea, Richard L. Sneider on March 27, 1975 at 5:00 p.m.," NSC Memorandum 1433, 26 March 1975.

While a report of the actual meeting is not available, the points noted above probably were discussed. Less than four weeks later, Ambassador Sneider sent a message back to Washington, in which he discussed answers to most of the issues raised by the suggested talking points. He saw the immediate problem as being "declining ROK confidence in U.S. commitment and . . . risk of North Korean provocation to test both U.S. intentions and ROK capabilities." For the long term, he saw the need for a redefinition of the U.S. relationship with a South Korea that was no longer a client state. "Korea," he wrote, "is well on [the] way to middle power status with ambitions for full self-reliance including its own nuclear potential." The immediate strategy and action the Ambassador recommended was as follows:

For the present, we propose a strategy stressing our security interests in preventing hostilities on the Korean peninsula. This strategy is designed to ease the more extreme and emotion-laden concerns prevalent in South Korea . . . (which to President Park will only be heightened by Thieu's resignation) and equally to warn North Korea and its Peking and Moscow suppliers against taking any risky provocative actions.⁵⁵

Noting the "increasing indications that President Park and other top . . . leaders are now looking for . . . concrete actions giving substance to our oral assurances," Sneider proposed a package of actions including clearing up a number of pending military assistance problems not related to basic policy considerations, and the postponement and

⁵⁴ Ambassador Sneider, American Embassy Seoul to Secretary of State, "Review of U.S. Policies Toward Korea," State Department Telegram Seoul-02807, 220932Z APR 75, 1-2.

⁵⁵ Ibid., 2.

immediate notification of the Korean government "of any action . . . which would reduce U.S. presence in Korea."⁵⁶

The emergency evacuation of U.S. troops and subsequent surrender of Saigon to North Vietnamese troops wrote a sad *finis* to two decades of American involvement in Indochina. It also struck fear into the hearts of observing allies. As columnist George Will observed, "Many nations have based their security plans on the assumption the United States has the will to make its power an actuality." With this apparently no longer the case, observers argued that such nations would now "find it prudent to develop nuclear weapons, nuclear nonproliferation agreements notwithstanding." Administration officials in Washington evidently agreed with this assessment, at least in the case of South Korea, for in May 1975 President Gerald Ford ordered an assessment of U.S. policy toward the Korean peninsula, to include examination of "U.S. military assistance, including the transfer of advanced weapons and technology and the South Korean interest in nuclear weapons development."

In a lengthy response expanding on his previous recommendations, Ambassador Sneider noted that U.S. officials still had not "made clear to the Koreans what the

⁵⁶ Ibid., 2-3.

⁵⁷ George F. Will, "When Power Is Not Power," Washington Post, 3 May 1975, A19.

⁵⁸ Ibid. See also Rowland Evans and Robert Novak, "South Korea as a Nuclear Power," *Washington Post*, 4 May 1975, C7.

⁵⁹ National Security Council to Secretary of Defense, Deputy Secretary of State, and Director of Central Intelligence, "Review of U.S. Policy Toward the Korean Peninsula," National Security Study Memorandum 226, 27 May 1975.

prospects are for a continued, long-term U.S. military presence." This miscommunication, when combined with failure to provide certain military technologies while discouraging Korean efforts to develop those technologies, resulted in uncertainties leading "President Park into preparations for what he sees as our eventual withdrawal, preparations which include . . . plans for the development of nuclear weapons." 60

Public statements by President Park on the topic of South Korean nuclear weapons potential were ambiguous during this period. An example is his denial of the report that he had ordered ADD to begin a study of nuclear weaponry. In refuting this allegation, Park pointed out the recent South Korean ratification of the N.P.T. and claimed, "'We have no plan or active research at this time for development of weapons in that field." Immediately after making this statement, he then told reporters that "South Korea would do everything in its power to defend its own security—including the development of nuclear weapons if necessary. . . . "61 In another case, Park supposedly told two reporters: "'We have the capability [to develop nuclear weapons] but are not developing it and are honoring the nuclear non-proliferation treaty." Then, according to the news report, "he bluntly added: 'If the U.S. nuclear umbrella were removed, we would have to start developing our nuclear capability to save ourselves."

⁶⁰ American Embassy Seoul to Secretary of State, "U.S. Policy Towards Korea," State Department Telegram Seoul-04544, 240621Z JUN 75, 1.

⁶¹ Dan Oberdorfer, "Park: Seoul Target Of North," Washington Post, 27 June 1975, A32.

⁶² Rowland Evans and Robert Novak, "Korea: Park's Inflexibility...," Washington Post, 12 Jun 1975, A19. Park later claimed that the report took his words out of context,

When media reports emerged of South Korean attempts to purchase reprocessing facilities from the French, administration officials redoubled their efforts against what they perceived to be the alarming elements of the South Korean nuclear program. The subject was discussed by representatives from the Arms Control and Disarmament Agency (ACDA) in bilateral talks with French and Canadian officials at the London meeting of the Suppliers group in late June, and tremendous pressure was evidently applied to both countries to back out of potential deals with South Korea. ACDA also got Congress to agree to postpone Congressional hearings on an Export-Import Bank loan request for construction of a second power reactor (KORI-II) until the South Korean government agreed to drop reprocessing plans. Diplomatic pressure was applied to the South Korean government through the American Embassy, which was authorized to approach the South Korean government directly, "ask them not to proceed with planned

saying that Robert Novak had "questioned him on what the ROK would do in case the U.S. nuclear protection was removed," an eventuality which Park "did not think" would occur. Memorandum of Conversation between South Korean President Park Chung Hee, Senior Protocol Secretary Choi Kwan-soo, U.S. Secretary of Defense James R. Schlesinger, and U.S. Ambassador to South Korea Richard L. Sneider, undated, 1. The conversation took place sometime around 26 August 1975, during the course of Schlesinger's visit to South Korea. A similar claim was made by a Blue House official close to President Park; see William H. Overholt, "Nuclear Proliferation in Eastern Asia," in *Asia's Nuclear Future*, ed. William H. Overholt, (Boulder, Colo.: Westview Press, 1977), 145-6.

⁶³ Arms Control and Disarmament Agency, "ROK Nuclear Fuel Reprocessing Plans," ACDA message X27771, 30 June 1975, 1.

⁶⁴ Ibid., 1-2.

reprocessing plant," and "offer support for ROK participation in an eventual multinational regional processing plant in East Asia."65

The record is frustratingly silent about what transpired between this point and the subsequent announcement in January 1976 that negotiations for the reprocessing facility had been halted. Secretary of Defense James R. Schlesinger traveled to South Korea in late August 1976, where he met with President Park and Minister of Defense Suh Jyonchul. During his meeting with President Park, Schlesinger reassured him of President Ford's "unequivocal support of Korea," and noted that "pressures to reduce the U.S. overseas deployment in Congress have weakened." After discussing his assessment of likely future Congressional behavior, Schlesinger commented that he expected President Ford to be re-elected, "but if not the Democrats are not likely to eliminate U.S. support for South Korea." He then wrapped up his comments on U.S. commitment to Korea with the following statement:

One of the lessons of the Vietnam is that the left now understands the illusion of U.S. withdrawal and that the Paris Peace Accords would bring

This solution was originally proposed in Jan M. Lodal and Dave Elliot to Secretary Kissinger, "Approach to South Korea on Reprocessing," National Security Council Memorandum, 8 July 1975, 1. Due to the workings of the bureaucracy, a much longer version of this original draft was submitted about two weeks later after several iterations in the interim. See John A. Froebe, Jr. to Secretary Kissinger, "Draft State Cable on Approach to South Korea on French Reprocessing Plant," National Security Council Memorandum 4578, 11 Jul 1975; John Marcum to Brent Scowcroft, Cover Sheet for Revised Memorandum, 24 July 1975; and Jan M. Lodal and Dave Elliot to Secretary Kissinger, "Approach to South Korea on Reprocessing," National Security Council Memorandum, 24 July 1975. The last document listed was the final draft.

peace. They now understand that if the balance of power shifts the Communists will act aggressively. This lesson is specifically relevant to Korea.⁶⁶

During his meeting with Minister of Defense Suh Jyong-chul, the South Korean Minister of Defense told Schlesinger that "if we receive enough appropriate aid from the U.S. we can take care of the fighting on the ground." By "appropriate aid," Suh continued, he meant "fire power, . . . air, and logistics . . . and naval support." He noted that South Korea expected "rapid countermeasures from the U.S. in the case of war," as well as "reassurances from the U.S. so that there is no chance of miscalculation on the part of North Korea." Finally, Suh noted that what he had said about taking care of the fighting on the ground "does not mean we do not need the Second Division. . . . U.S. forces must continue to be stationed in Korea at the current level." Schlesinger acknowledged the South Korean Defense Minister's remarks, and told him, "We do not plan any fundamental changes in U.S. support." A subsequent evaluation of the impact of his trip noted: "There is no doubt Secretary Schlesinger's trip was highly successful in

⁶⁶ Memorandum of Conversation between President Park Chung Hee, Senior Protocol Secretary Choi Kwan-soo, Secretary of Defense James R. Schlesinger, and Ambassador Richard L. Sneider, 27 August, 1975. Secretary Schlesinger also Spoke with Park regarding nuclear issues; however, this portion of the memorandum has been censored with the exception of a few ambiguous comments regarding South Korean adherence to the N.P.T..

⁶⁷ Memorandum of Conversation between Minister of Defense Suh Jyong-chul, Director of Joint Chiefs of Staff Lt. Gen. Yu Pyong-hyon, Secretary of Defense James R. Schlesinger, Deputy Assistant Secretary of Defense Morton I. Abramowitz, and Military Assistant to Secretary of Defense Maj. Gen. John A. Wickham, 26 August 1975, 1-2, 4.

manifesting our commitment to our South Korean allies. . . . "68 Four months later, South Korean officials announced the end of their attempts to obtain reprocessing facilities from France, 69 and, if Representative Kang can be believed, shelved their nuclear weapons program. 70

D. THE NUCLEAR OPTION, PHASE TWO

When U.S. President Jimmy Carter announced on 9 March 1977 that he intended keep his campaign promise to withdraw most of the American ground troops from South Korea by 1982, a resurgence of security anxiety occurred in the peninsular nation.⁷¹ Coming as it did less than two years after Schlesinger's assurances of long-term U.S. troop presence, the Carter plan to withdraw troops was widely viewed by many South Koreans as a betrayal at the hands of the United States.⁷² As South Korean leaders considered their options for assuring the security of their country, they were once again drawn to an option they had put aside only a year and a half before: nuclear weapons.

⁶⁸ Thomas J. Barnes to General Scowcroft, "Secretary Schlesinger's Discussions in Seoul," National Security Council Memorandum 6439, 29 September 1975.

⁶⁹ "Seoul Officials Say Strong U.S. Pressure Forced Cancellation of Plans to Purchase a French Nuclear Plant," *New York Times*, 1 February 1976, 11; Don Oberdorfer, "S. Korea Cancels A-Plant," *Washington Post*, 30 January 76, A1.

⁷⁰ FBIS Special Memorandum, 8.

⁷¹ Ernest W. Lefever, "Withdrawal from Korea: A Perplexing Decision," *Strategic Review* 6, no. 1 (Winter 1978): 28; James E. Dornan, Jr., "Nuclear Proliferation in Northeast Asia," *Comparative Strategy* 1, nos. 1/2 (1978): 83.

⁷² Strategic Survey 1977 (London: International Institute for Strategic Studies, 1978), 89.

South Korean government officials are reported to have restarted their dormant nuclear weapons program sometime in late 1977.⁷³ The timing suggested by this report coincides with hints made by a top aide to President Park that nuclear weapons might be considered if the United States removed its troops from South Korea.⁷⁴ By late 1978, the secret program to develop an "atomic bomb" was reported to be about 95 percent complete, with full completion to occur sometime in early 1981.⁷⁵

Publicly, South Korean leaders maintained their stance that they had no plans to develop nuclear weapons. This position was espoused by President Park in January 1977, when he told a gathering of defense experts, "We will not go nuclear." It was reiterated by South Korean Foreign ministry officials, who were "quick to point out that Seoul is a signatory to the nuclear nonproliferation treaty."

U.S. officials made an effort to reassure the South Korean government that the troop pullout did not mean the United States was abandoning South Korea. President Carter sent a letter to President Park, saying "I wish to emphasize strongly that our ground-force withdrawal plans signify no change whatsoever in our commitment to the

⁷³ FBIS Special Memorandum, 8.

⁷⁴ Edward Walsh and George C. Wilson, "President Defends His Korea Policy," *Washington Post*, A1.

⁷⁵ FBIS Special Memorandum, 8.

Joobong Kim, "South Korea and Nuclear Proliferation," in *Nuclear Proliferation in Developing Countries*, ed. Jae Kyu Park, IFES Research Series No. 14 (Seoul, Korea: The Institute for Far Eastern Studies, Kyungham University, 1979), 177.

⁷⁷ "Park Takes the Pledge," *Far Eastern Economic Review* 99, no. 1 (6 January 1978): 61.

security of the Republic of Korea."⁷⁸ The South Koreans, however, were not reassured.

A report in mid-1978 noted, "Virtually every South Korean, including those opposed to President Park Chung Hee, fears the consequences of the U.S. pullout."⁷⁹

When reports began to surface in 1978 that the North Korean military was significantly stronger than had been previously thought, the fears of South Korean defense officials seemed to be justified. The new estimates of North Korean military capabilities gave the North a significant edge in tanks, artillery, armored personnel carriers, and manpower—all the areas in which South Korean defense officials had thought they were reaching a rough level of parity with North Korea. In light of the revised estimates, it was clear that the force improvement plan that had been instituted by the South Korean Defense Ministry to compensate for the withdrawal of U.S. forces would be insufficient.⁸⁰ In light of the new revelations, the Carter administration decided to postpone the planned withdrawal of troops. The Reagan administration later scrapped the entire plan.⁸¹

The assassination of President Park in 1979 made an already unclear situation even murkier. The ensuing turmoil over who would control the South Korean

⁷⁸ Strategic Survey 1977, 90.

⁷⁹ Peter Weintraub, "The South: Despite Withdrawal, the U.S. Commitment is Solid," Far Eastern Economic Review 100, no. 21 (26 May 1978): 37.

William M. Carpenter, "The Korean War: A Strategic Perspective Thirty Years Later," *Comparative Strategy* 2, no. 4 (1980): 346.

⁸¹ Edward A. Olsen, "Security in Northeast Asia: A Trilateral Alternative," *Naval War College Review* 38, no. 1 (January-February 1985): 17.

government finally was settled by force in May 1980, when General Chun Du-hwan emerged the victor in an intramilitary coup and was installed as President.⁸² It was at this point that President Chun reportedly traded both the South Korean nuclear weapons program and a program to produce a long-range missile for recognition of the legitimacy of his regime by the U.S. government.⁸³ According to this report, about seventy-seven researchers and technicians from ADD (where the nuclear weapons program research was supposedly being conducted) were forced to retire between August 1980 and April 1981, and an additional 709 staff personnel (representing 27 percent of the ADD staff) were dismissed in a December 1982 "reorganization" of the agency. In this way, President Chun "pushed back ROK defense technology more than ten years." The South Korean nuclear weapons program was once again dormant.

E. THE NUCLEAR OPTION, PHASE THREE?

The period since 1980 has been one of turmoil in the U.S.-South Korean security relationship. Strong U.S. pressure on South Korean leaders to open markets, revalue the

⁸² Ibid., 18.

Memorandum, 8. Comments of seasoned observers of South Korean affairs offer circumstantial evidence supporting Kang's claim. For example, Edward Olsen notes: "Unlike the early Park years, Chun's early years were marked by reasonably amicable relations with Washington. Both South Korean and American critics of U.S. policy toward Korea viewed the Reagan administration as unduly accommodating toward Seoul's new military-backed rulers. (Emphasis added.) "Security Implications of Economic and Political Nationalism in the United States and Korea," Journal of Northeast Asian Studies 7, no. 4 (Winter 1988): 44.

⁸⁴ FBIS Special Memorandum, 8.

currency, and reduced trade restrictions have been perceived in Seoul as an attempt by the United States to push around its smaller partner. ⁸⁵ The rise of a new generation of South Koreans who do not have the collective memory of American sacrifices during the Korean War brings into political office individuals who are not inclined as favorably toward the United States, and are growing increasingly willing to vocalize that sentiment.

U.S. military drawdown proposals at the turn of the decade also have caused anxiety, and the continued threatening posture and bellicose behavior of North Korean leaders feed that fear much as it has in decades past. When indications of North Korean nuclear weapons development began to surface, the anxiety became fear, and a search for alternatives resumed.

Although details are scarce, there are indications that South Korean officials once again may be considering the nuclear option. Some parts of the South Korean media recently have issued calls for development of an indigenous reprocessing capability, pointing to the Japanese program to achieve this capability as a role model for their own. There also have been articles advocating the need for South Korea to develop dual-use technology "as a hedge against an 'uncertain' future. This rising wave of advocacy on nuclear issues seems to have begun in the very late 1980s or early 1990, when reports of a North Korean nuclear weapons program first appeared, and reached a

⁸⁵ Ibid.

⁸⁶ FBIS Special Memorandum, 4.

⁸⁷ Ibid., 5.

peak in mid-1993 with the publication of a series of journal articles by senior scientific researchers and members of the defense establishment calling for new policies to "achieve the two national goals of economic development and national security." 88

Since then, media reports have indicated that the South Korean government heeded the call to action. In December 1994 and January 1995, separate reports surfaced of the establishment of special science and technology research institutes at three South Korean universities. In February of the same year, a senior official in the Ministry of National Defense revealed that a total of ten of these special research centers were planned, and alluded to the need for major expansion military research and development activities to "counter the threat from the North." Funding of these new institutes is reportedly provided by ADD, and their research is said to focus on such technologies as automated controls, electro-optics, thermal imaging, free electron lasers, electromagnetic waves, bioengineering and biosensors, and superconducting materials—most of which have strong dual—use potential. 90

Reports also have emerged of directly dual—use applicable equipment developed by other activities in South Korea. This equipment includes a research reactor capable of producing high purity plutonium, a free electron laser (both developed by KAERI), a high-speed (50,000 rpm) centrifuge (funded by a grant from the Ministry of Trade and

⁸⁸ Ibid., 5-6.

⁸⁹ Ibid., 6.

⁹⁰ Ibid., 6-7.

Industry), streak camera technology (Korea Advanced Institute of Science and Technology), ruggedized capacitors (Daewoo), a computer-controlled metal grinding device with surface smoothness capability to four microns and the ability to work especially well in corners and on curved surfaces (Korea Institute of Science and Technology), an advanced continuous brazing furnace (supported by Korea Electric Power Corporation), an electron beam welder and an ion nitriding electric furnace (joint development by Korea Institute of Machinery and Metals and Korea Ion), and an ultrahigh precision (nanometer scale) lathe (Korea Advanced Institute of Science and Technology).

In addition to significant efforts in science and technology, the South Korean government also has made some important political moves to help establish legitimacy and transparency in their civilian nuclear programs. While this may seem antithetical to the successful pursuit of a dual-use technology acquisition strategy, analysts note that by doing so, the South Korean government hopes to position itself for increased access to high-technology dual-use items. Moves in this direction include increased support for and cooperation with the IAEA, agreements between South Korean nuclear agencies and their PRC counterparts, increased cooperation with Israel and France, and membership in the Nuclear Suppliers Group (NSG), the Missile Technology Control Regime (MTCR), and the Zangger Committee. 92

⁹¹ Ibid., 10-11.

⁹² Ibid., 11-12.

F. CONCLUSION

Analysis of the three phases described above reveals a recurring pattern in U.S.-South Korean security relations. The pattern begins with a reduction in the physical component of the commitment. This is followed by an incident where the behavior of U.S. leaders is strikingly inconsistent with South Korean expectations, at which point the South Korean leadership begins to consider the nuclear option. A perceived increase in the threat from North Korea is the fourth step. The final step in the pattern is a heroic U.S. effort to forestall suspected South Korean nuclear weapons development while simultaneously shoring up South Korean perceptions of the U.S. commitment to South Korean security.

The legal component of the security commitment in South Korea has never been directly challenged. However, the South Korean leaders perceived the announcement of the Nixon Doctrine as a unilateral alteration of intent to meet the legal obligations of the Mutual Defense Treaty. They also saw President Carter's announcement of troop withdrawal as not in accordance with the spirit of the treaty, even if it did comply in a technical sense. Finally, the participation of the Clinton administration in negotiations with North Korea over the North Korean nuclear program were also questionable to some South Korean leaders. Once again, no treaty obligations were technically violated, but as in the Carter case, South Korean leaders perceived the action as a violation of the spirit of the agreement.

The physical component of the security commitment has been weakened in all three phases. In the first two phases, South Korean movement toward the development of

nuclear weapons development occurs after a significant change or proposed change in U.S. conventional force strength on the Korean peninsula. Interpreting the events of the third phase is less simple. There has been no U.S. initiative to remove all troops from the peninsula, although the idea was discussed in Washington by lawmakers looking for ways to reduce the budget. However, an acrimonious dispute over trade and other economic issues has extended across the entire third phase, resulting in a perceived decline in the physical component of the commitment.

The critical component of behavior has been involved in all three phases. In the first phase, the Nixon trip to China brought the South Korean government leaders to the realization that U.S. goals in Korea were not the same as their own. In phase two, the normalization of relations with China caused South Korean leaders to feel that the Carter administration would abandon them if circumstances warranted. A similar event in the third phase might be the Clinton deal with North Korea to shut down the North Korean nuclear program, although it is too soon to be sure.

The reliability of the U.S. nuclear guarantee went unquestioned in the first two phases; in fact, it was rarely even mentioned in discussions of the Korean situation. In phase three, U.S. nuclear weapons were removed, but the American strategic arsenal still underwrites U.S. nuclear security guarantees, and I found no evidence to suggest that South Korean leaders dispute its existence or credibility.

The pattern of evidence points to a central conclusion: When the physical manifestations of commitment show signs of decline, South Korean leaders can be expected to begin consideration of the nuclear option. As events occur which cause them

to question the legal and behavioral components of the security commitment, the argument for the nuclear option becomes even more persuasive. When the threat was of a conventional military nature, U.S. reinforcement of the physical component of the commitment was sufficient to persuade South Korean leaders to shelve plans for nuclear weapons development. Now that the threat may be nuclear, the response is much less certain.

V. TAIWAN: SLOW AND STEADY WINS THE RACE

A. INTRODUCTION

Studies of East Asian issues often put Taiwan and South Korea together, pointing to a number of background similarities as justification for such action. This tendency has spilled over to the study of nuclear weapons proliferation. A shared heritage of unrelenting fear for national security, long dependence on U.S. security commitments, and rapid economic growth in the wake of the Second World War are factors making South Korea and Taiwan attractive for purposes of security analysis and comparison. Unfortunately, in so doing, the authors of those studies often fail to account for a significant detail: North Korea (although backed by association with nuclear powers) remained primarily a conventional military threat to South Korea, while Taiwan has faced a nuclear-equipped opponent for much of its existence. An appreciation of the difference this made in Taiwan's approach to nuclear weapons is important in understanding the role of security commitments in preventing nuclear weapons proliferation.

This chapter focuses on Taiwan's approach to achieving nuclear weapons capabilities and the way in which U.S. nuclear and conventional security commitments influenced Taiwanese decisions about nuclear weapons. Section A introduces the chapter and outlines the general structure. Section B provides a summary history of U.S.

⁹³ See, for example, Ernest W. Lefever, *Nuclear Arms in the Third World: U.S. Policy Dilemma* (Washington, D.C.: The Brookings Institution, 1979), chapter 5; Jae Kyu Park, ed., *Nuclear Proliferation in Developing Countries*, IFES Research Series No. 14 (Seoul, Korea: Institute for Far Eastern Studies, Kyungnam University, 1979), chapter 10; and William H. Overholt, ed., *Asia's Nuclear Future*, (Boulder, Colo.: Westview Press, 1977), chapter 4.

involvement with Taiwan to give the reader a situational perspective for consideration. Section C discusses the impact of President Dwight Eisenhower's use of nuclear threats to make the People's Republic of China (PRC) back down in the Quemoy crisis of 1958, and examines the beginning of the Taiwanese nuclear weapons program. Section D considers the effects of President Richard Nixon's visit to the mainland in 1972, and examines the evidence of a growing nuclear program and attempts by the United States to contain that program in the mid-1970s. Section E looks at President Jimmy Carter's decision to derecognize Taiwan in 1979, Congressional reaction to this decision, and President Ronald Reagan's use of arms sales and technology transfers to ensure Taiwanese security. It also examines the 1988 disclosure of an active nuclear weapons program, and the reaction of the United States. Finally, section F presents a short analysis of the evidence presented, and concludes that the removal of the physical and legal components of the security commitment by the United States was a significant factor in the decision by Taiwanese leaders to pursue the development of nuclear weapons capability.

B. INITIAL AMERICAN INVOLVEMENT WITH TAIWAN

Taiwan was officially established as the Republic of China in December 1949, following the retreat of General Chiang Kai-Shek and his beleaguered Nationalist forces to the island of Formosa in October of the same year. The Truman administration, which had been observing the deterioration of the Nationalist situation in China, decided to cut its losses and take no further action to help the Chinese Nationalists hold Formosa.⁹⁴ The

⁹⁴ Cheng-yi Lin, "The Legacy of the Korean War: Impact on U.S.-Taiwan Relations," *Journal of Northeast Asian Studies* 9, no. 4 (Winter 1992): 41.

outbreak of the Korean War in 1950 caused policy makers in the Truman administration to reconsider their stance. Even though Truman and his advisors decided to lend some aid to Taiwan, their aid policy was still governed by the "three nos"—no U.S. fighters based on the island, no U.S. troops stationed ashore on the island, and no defense commitments to the offshore islands. The entry of the PRC into the conflict on the Korean Peninsula caused yet another policy re-evaluation, this time with more favorable results for the Chinese Nationalists on Taiwan. After extensive internal debate and "pressure from the U.S. Senate," the Truman administration proclaimed that "the United States would not allow Formosa to fall into Communist hands." To support this stance, a Mutual Defense Assistance Agreement was signed between the United States and the Republic of China (ROC) in January 1951, and a Military Assistance Advisory Group (MAAG) was then formed in March to handle incoming military aid shipments and advise the ROC Government on training and organizational issues.

The election of Dwight Eisenhower to the U.S. presidency in 1952 brought the U.S.-Taiwan relationship to the next step. In his January 1953 State of the Union address to Congress, Eisenhower announced that he was giving instructions "that the Seventh Fleet no longer be employed to shield Communist China." Following this

⁹⁵ Ibid., 42.

⁹⁶ Ibid., 43.

⁹⁷ Ibid.

⁹⁸ U.S. Department of State, *Foreign Relations of the United States, 1952-1954*, Vol. 14, *China and Japan* (Washington, D.C.: Government Printing Office, 1985), 140, quoted in ibid., 44.

proclamation, U.S. support for Chinese Nationalist operations against the PRC incrementally increased to include CIA training for commando forces and transfers of modern jet aircraft and naval combatants to the ROC military. Finally, after several months of quiet negotiations, the deepening relationship between the United States and Taiwan was formalized in the Mutual Defense Treaty in 1954.

C. EISENHOWER, QUEMOY, AND A NEW NUCLEAR PROGRAM

The Treaty had not even been ratified by the U.S. Congress before it faced its first test. In January 1955, PRC military units launched an attack on a number of the offshore islands held by Taiwan. After Congress authorized Eisenhower to take action under the terms of the Formosa Resolution, the NSC concurred with Secretary of State John Foster Dulles in recommending to Eisenhower that PRC leaders should be threatened with the use of atomic weapons if they did not back away from their military activities around Quemoy and Matsu. The nuclear threat was made, the PRC backed down, and the crisis subsided.¹⁰⁰

In 1958 PRC military units once again threatened Quemoy. The United States responded with substantial force, including five aircraft carriers, three cruisers, thirty-six destroyers, five destroyer escorts, and seven submarines. This force, designated Task Force Seventy-two (TF 72), was deployed to operate in the waters of the Taiwan Strait in

⁹⁹ Ibid., 44-5.

¹⁰⁰ Ibid., 47; Ambrose, Rise to Globalism, 148-150.

August 1958, and remained on station until December, when the crisis finally ended.

Nuclear forces played a role in this crisis as well, although not as overtly as in 1955.¹⁰¹

The lessons of the Quemoy-Matsu crises were not lost on ROC leaders. While records are not publicly available to confirm such actions by Taiwanese officials, there must have been serious discussion of the advantages to be gained by a small country such as the ROC if it had nuclear weapons to back its diplomacy. In 1958 the leaders of Taiwan started a program to develop nuclear weapons.¹⁰²

The readiness of the U.S. force to use nuclear weapons is discussed in a detailed after-action report, which noted that "heavy delivery aircraft were retained preloaded for GEOP targets while light delivery aircraft were configured for delivery of conventional weapons." With the crisis subsiding, alert status was downgraded on 2 December 1958, and "all carrier aircraft were again configured for nuclear delivery." Interestingly, one of the major deficiencies the report noted was that "too much dependence is placed on the employment of nuclear weapons" in plans for emergency action. Commander in Chief U.S. Pacific Fleet, "Taiwan-Quemoy Operation; report of," letter to Commander in Chief Pacific, ser. 34/000322, dtd. 20 December 1958, 1-2.

William H. Overholt, "Nuclear Proliferation in Eastern Asia," Nuclear Proliferation in Developing Countries, 10. Overholt's date for program start-up is supported by the fact that the ROC started operating a General Electric 1000 kW(t) openpool research reactor at National Tsing-Hua University, Hsinchu, Taiwan in 1961. See Congress, Senate, Committee on Government Operations, Facts on Nuclear Proliferation: A Handbook, compiled by Winifred Griffin Smith with guidance by Warren H. Donnelly, 94th Cong., 1st sess., December 1975, Committee Print, p. 159. Also, Assistant Secretary for East Asian and Pacific Affairs Arthur W. Hummel revealed in a 22 September 1976 Senate hearing before the Committee on Foreign Relations' Subcommittee on Arms Control, International Organizations, and Security Agreements that "the Republic of China has been conducting a modest program in nuclear research since the late 1950s. This program began at Tsinghua University, which has a small reactor supplied by the United States." Department of State, "Department Discusses Policies in the Nuclear Field With Respect to the Republic of China," Department of State Bulletin 75, no. 1946 (11 October 1976): 454. Others have given later starting dates; for example, in a recent article Xia Liping uses 1966 as the starting point. No basis is given for Liping's statement. See "Maintaining Stability in the Presence of Nuclear Proliferation in the Asia-Pacific Region," Comparative Strategy 14 (1995): 279.

Few details of the early years of the ROC program are publicly available, although glimpses of interest in such activities can be seen in conversations between government officials over the next decade. The first detonation of a nuclear device by the PRC in 1964 was especially troublesome to Taiwanese leaders for two major reasons. First, it presented a counter to the U.S. nuclear capability that had been the deciding factor in two previous encounters. Second, it meant that the PRC no longer had to invade the island of Taiwan to defeat it. The initial ROC estimate of how PRC nuclear capability affected the U.S.-ROC alliance was summarized by ROC Secretary- General Chang Chun:

[P]revailing reaction in [the] press, among legislators and elsewhere, was that ChiCom explosion of [a] nuclear device had very little effect upon [the] military situation. However, it would have an important political and psychological effect within the GRC [government, Republic of China] and throughout southeast Asia. . . . Superior U.S. nuclear power would effectively deter ChiComs from actually using nuclear weapons on Taiwan. However, they [the PRC] would use their nuclear power as a political weapon. 103

Already, the Taiwanese leadership could see a future where a PRC threat to introduce nuclear weapons into the equation during a crisis might force the United States to act in a more subdued manner.

As they had time to analyze the situation more thoroughly, Taiwanese officials also could see the important military ramification of the new-found capability of communist China. A year after Chang made his comments, Madame Chiang Kai-shek

¹⁰³ U.S. Ambassador Jerauld Wright, Report of conversation at 5 November 1964 conversational lunch with ROC Secretary General Chang Shun, State Department Telegram 5719, 7 November 1964, 3:00 p.m., Sec. 1, pp. 1-2.

told U.S. Secretary of State Dean Rusk that the communist Chinese nuclear explosion "had a decidedly powerful influence not only on adjacent Asian states but on the entire world" and that the "Chinese Communists' prestige and influence throughout the entire world had been vastly increased." She then stated that "this development was a matter of considerable concern to . . . her own people in the Republic of China." Madame Chiang was not mollified by Rusk's subsequent attempt to reassure her that "no rational men would employ nuclear weapons against the certainty of their own obliteration by the retaliatory power of the United States." She replied to Rusk, "[T]he Chinese Communists are not rational men. They are insane with power and will resort to any means to accomplish their objectives."

¹⁰⁴ U.S. Ambassador Jerauld Wright, Memorandum of Conversation held at Secretary of State dinner for Madame Chiang Kai-shek, Department of State, 20 September 1965. Following this exchange of remarks, Madame Chiang told Rusk that in the "present situation . . . the only course of action for the United States under the increasing Chicom nuclear capability was for the United States to provide the means to take out the Chicom nuclear installations now by the employment of conventional forces, to destroy now their nuclear capability before it reaches dangerous proportions." Rusk replied that in his opinion, "the Chicom reaction would be violent" and would result in Chicom use of "their principal weapon, their enormous manpower, in offensive retaliatory operations." Were this the case, Rusk thought that "we [the United States] could not employ U.S. manpower to resist such action and would have to resort to nuclear weapons," and that if the United States were to resort to such an action, it would be "condemned by all the nations of the world . . . for starting a nuclear war." When Madame Chiang observed that "nuclear weapons would not have to be used," Rusk told her, "The United States has only 190 million people whereas China has over 600 million," and said that he "hoped Madame Chiang appreciated the impossibility of employment of U.S. manpower in Asia against such odds." Madame Chiang replied that she "hoped that it was thoroughly understood that the Republic of China did not propose the use of any American troops against the Chicoms."

President Chiang Kai-shek offered a similarly pessimistic assessment at the end of 1966. In the middle of a discussion with Secretary Rusk about the situation in Vietnam, Chiang told Rusk he believed that "the Chicoms were thinking of solving the Vietnam War problem by an attack on Taiwan." In Chiang's view, such an action would allow the PRC to link the ensuing war in Taiwan with the war in Vietnam, and thus link peace talks over Vietnam with a settlement of Taiwan question. Chiang postulated that if the PRC used "10 or 20 missiles the government and the armed forces on Taiwan could easily be knocked out." In such an event, "the U.S. could do little about this even if there were an American nuclear response against the mainland," and that "even if the Chicoms didn't occupy it, Taiwan would be of no use to the U.S." When Rusk tried to reassure him of the value of U.S. deterrence by comparing the Taiwan situation with that on Berlin, Chiang responded by saying that "events in modern warfare move so swiftly that within a matter of hours Taiwan could be destroyed. To send help afterwards would be too late . . . which might cause the United States to wonder what good it would do to start World War III after Taiwan has been destroyed."105

The United States was heavily involved with Taiwan in ways other than just nuclear weapons. After the MDAA was concluded in 1951, the United States began to supply economic aid, slowly at first but then in steadily growing quantity. Combined with the hard work of the Taiwanese people and the efficient development strategies of

Nam and a Chicom Nuclear Threat to Taiwan," State Department Memorandum of Conversation between Secretary of State Dean Rusk and ROC President Chiang Kai-shek during the Secretary's visit to Taipei, 8 December 1966, Part IV of IV, pp. 4-6.

the Nationalist government, the ROC was able to convert some \$1.4 billion in U.S. economic aid and \$2.5 billion in military aid between 1951-1965 into an East Asian economic miracle.¹⁰⁶ When the ROC was "graduated" from the U.S. aid program in 1965, it had reached a standard of living previously projected for achievement in 1985.¹⁰⁷

The United States also maintained a conventional military presence. The Taiwan Squadron of destroyers patrolled the Taiwan Strait until 1969, when it was shifted south to Vietnam. Troops stationed ashore peaked at a high of about 10,000 in 1968. [Most of these were involved in support and logistics functions in support of the war in Vietnam.] Five squadrons of C-130 cargo planes were based out of Taiwan, as were at least two squadrons of F-4 Phantoms. [109] Nuclear weapons, however, were not kept on the island. These were maintained either in stockpiles on Okinawa, or on Navy ships at sea. There were plans to redeploy weapons from Okinawa to Taiwan, but those plans were canceled in late 1971. [110]

D. BETRAYAL AND EXPOSURE

When President Richard Nixon traveled to Peking in 1972, the result for the U.S.-ROC relationship was the destruction of the environment of trust and friendship carefully

¹⁰⁶ Lin, "Legacy of the Korean War," 52.

¹⁰⁷ Ibid., 53.

¹⁰⁸ Bernard Gwertzman, "U.S. Has Removed Combat Aircraft Based on Taiwan," New York Times, 8 June 1975, 1.

¹⁰⁹ Ibid.

¹¹⁰ George H. Quester, "Taiwan and Nuclear Proliferation," *ORBIS* 18, no. 1 (Spring 1974): 147.

built over the previous twenty years. To the leaders of the Republic of China, Nixon's actions amounted to consorting with the enemy. His visit and rapprochement with communist China left many Taiwanese feeling betrayed and deeply insecure about their future.

The rationale behind Nixon's approach to the PRC was sound from the U.S. perspective. The Nixon administration, alarmed by visible signs that Soviet military power was rising while American strength was draining away in the jungles of Vietnam, saw an opportunity to capitalize on the growing rift between the PRC and the Soviet Union by enlisting the PRC on the side of the United States in the U.S.-Soviet conflict. In doing this, Nixon believed the PRC would be able to shift some of its forces away from traditional U.S.-PRC areas of confrontation (South Korea, Vietnam, and Taiwan) and focus them on the Sino-Soviet border. For the United States, this would have the advantage of tying down significant numbers of Soviet troops well away from any potential U.S.-Soviet front lines. Nixon and Kissinger also believed that it would drive the Soviets to reach an agreement on arms control and detente in Europe, two things which had very high priority on their foreign policy agenda.¹¹¹

The Taiwanese people saw things much differently. Their perception was that while Nixon and Kissinger were plotting on a global scale, the Chinese Nationalists were being sold down the river in the United Nations. After the Nixon administration failed to "exercise its customary diplomatic pressure to prevent the United Nations from expelling

¹¹¹ William R. Keylor, *The Twentieth Century World: An International History*, 3d ed. (New York: Oxford University Press, 1996), 377-381.

the Chinese Nationalist government on Taiwan and transferring its seat on the Security Council to the Communist regime on the mainland,"¹¹² the Republic of China was forced to leave the United Nations. When that happened, many nations around the world broke off diplomatic relations with the ROC and established diplomatic ties with the PRC.¹¹³

Even worse than the loss of international recognition, however, was the clause in the 1972 Shanghai Communique affirming "the ultimate objective of the withdrawal of all U.S. forces and military installations from Taiwan." While this was to occur in a progressive fashion as "the tension in the area diminishes," the reality was that the process of U.S. force reductions already had started. 116

Over the next five years, U.S. force reductions steadily continued. When the Joint Communique was issued in 1972, there were about 9,000 troops stationed on the island. By June 1975, the number had been reduced to around 4,000, and would go to 2,800 in July. All U.S. aircraft stationed on the island had been removed, starting with the five transport squadrons in 1973, and ending with the last F-4 squadron in May 1975.¹¹⁷

¹¹² Ibid., 378.

¹¹³ Gregor and Chang, The Iron Triangle, 78.

Department of State, "Text of Joint Communique, Issued at Shanghai, February 27," *Department of State Bulletin* 66, no. 1708 (20 March 1972): 438.

¹¹⁵ Ibid.

¹¹⁶ Quester, "Taiwan and Nuclear Proliferation," 147.

¹¹⁷ Gwertzman, "U.S. Has Removed Combat Aircraft," 1, 4.

The departure of American troops by itself was not militarily significant to Taiwan. The ROC army and air force had long been recognized as high-quality fighting organizations, and most military estimates of the day maintained that the reason that PRC leaders had not launched an attack on Taiwan long before was because they knew that the cost would be far greater than the reward. What the presence of U.S. forces *did* add to the equation was the honor and military might of the United States. U.S. leaders had already let the PRC government know in unmistakable terms on at least two occasions that they were prepared to use nuclear weapons to defend U.S. interests. Without U.S. forces on the ground in Taiwan, Chinese Nationalist leaders perceived that the probability that the United States would be willing to go to nuclear war over Taiwan was much lower.

Against this political-military background, the ROC nuclear program continued to move forward at a steady pace. Officials of the ROC nuclear program tried to purchase a reprocessing facility from the United States in 1969, but had their request turned down by the Nixon administration. The same year, the ROC Institute for Nuclear Energy Research (INER) spent \$35 million to purchase a 40-megawatt NRX research reactor from Canada. This reactor was similar to the unit used by the Indians in their nuclear explosive program, and experts estimated it to be capable of producing up to 22 pounds of plutonium per year. In 1973 Taiwan constructed its own fuel fabrication plant to

¹¹⁸ Edward Schumacher, "Taiwan Seen Reprocessing Nuclear Fuel," *Washington Post*, 29 August 1976, A8.

¹¹⁹ Thomas O'Toole, "Canada Building Bomb-Capable Nuclear Reactor on Taiwan," *Washington Post*, 20 July 1972, A23.

make fuel rod assemblies for the Canadian reactor. The officially listed capacity of the plant was 25-30 tons of uranium yearly—"twice the normal fuel rate for the Canadian reactor." Rumors began to surface in 1974 of Taiwanese efforts in Europe to get assistance in the construction of a reprocessing facility. This move concerned experts who were observing the progress of the ROC nuclear program, because the program was still so limited that reprocessing facilities had no real value—unless one were trying to make weapons. During the early 1970s, INER also quietly constructed a small—scale hot cell reprocessing facility, apparently with parts obtained from around the world. However, what concerned officials in the United States in 1976 was that this facility was non-operational, yet fuel was still being reprocessed somewhere in Taiwan.

A year earlier, reports had emerged that Taiwan was secretly developing nuclear weapons. These reports were categorically denied by ROC official spokesmen, who maintained that all nuclear work going on in the country was peaceful in nature. ¹²⁴ In the interim, U.S. officials had successfully maneuvered their way through the South Korean attempt to purchase reprocessing facilities. One of the fallouts from that crisis was strong Congressional pressure for strengthened sanctions against nations involved in covert

¹²⁰ Schumacher, "Taiwan Seen Reprocessing," A8.

¹²¹ Quester, "Taiwan and Nuclear Proliferation," 146.

¹²² Schumacher, "Taiwan Seen Reprocessing," A8.

¹²³ Ibid., A1, A8.

¹²⁴ "Taipei Denies work on Atomic Weapons," New York Times, 8 July 1975, 8.

production of nuclear weapons materials.¹²⁵ Thus, when the media began publishing accounts of clandestine plutonium production by Taiwan, the Ford administration was faced with a difficult decision: either impose strong sanctions against Taiwan, including termination of export licenses for nuclear power plants, or take no action. The first option was unpalatable because it was an election year and such a move could bring "serious repercussions in Taiwan and among Republican conservatives in the United States." The second option was no better, as it posed a significant chance of "major difficulties with mainland China" and possible acceleration of "a worldwide drift toward nuclear proliferation." ¹²⁶

While the Ford administration tried to figure a way out of the situation without having to pay large political costs, the Taiwanese were denying the reports. Victor Cheng, Taiwan Atomic Energy Council Secretary General, claimed that the facility the United States was pointing at as the culprit was not even operational. Prime Minister Chiang Ching-kuo said it would be "unthinkable for his Government to use such a weapon against its Communist enemy." And other government officials noted that Taiwan "still considered itself bound by the nonproliferation treaty."

¹²⁵ Editorial Board, "Atomic Alarms in Taiwan," *Christian Science Monitor*, 30 August 1976, E1.

¹²⁶ Schumacher, "Taiwan Seen Reprocessing," A1; Harry B. Ellis, "Halting 2 Nuclear Hopefuls," *Christian Science Monitor*, 30 August 1976, 1.

¹²⁷ "Taiwan Denies Move," New York Times, 30 August 1976, 4.

¹²⁸ Ibid.

¹²⁹ Ibid.

As the crisis lingered, claims and counterclaims regarding the reprocessing plant were made. Finally, a month after the crisis broke into the open, Taiwan agreed to shut down its hot-cell reprocessing facility and permanently forego "activities related to reprocessing." Around the same time, a group of U.S. officials including nuclear scientists visited Taiwan to examine their research reactor and reprocessing laboratory. The reprocessing laboratory had been dismantled before their visit "as a token of good faith." The research reactor was shut down when they left, and was not restarted for over a year. "When restarted, it reportedly was subject to restrictions imposed by the United States." The team's findings were never made public; but figures released by the Department of Energy in 1996 included a one-kilogram shipment of pure plutonium oxide ("generally only used in weapons manufacture and reactor research") shipped from

^{1976.} For details of the back-and-forth exchanges, see David Binder, "U.S. Finds Taiwan Develops A-Fuel," *New York Times*, 30 August 1976, 1; David Binder, "U.S. Fears Spread of Atomic Arms in Asia," *New York Times*, 31 August 1976, 6; Fox Butterfield, "Taiwan Denying Atomic Operation," *New York Times*, 5 September 1976, 5; Editorial Board, "Taiwan's A-Bomb," *New York Times*, 7 September 1976, 32; I-cheng Loh, letter to the editor, "Taiwan and the Atom," *New York Times*, 13 September 1976, 26; "U.S. To Watch Atom Use By Taiwan, Congress Told," *New York Times*, 23 September 1976, 5; George Delcoigne, letter to the editor, "Taiwan, A-Bombs, and the I.A.E.A.," *New York Times*, 27 September 1976, 30; Melinda Liu, "Taipei Treads Lightly," *Far Eastern Economic Review* 99, no. 1 (6 January 1977): 64.

¹³¹ Joseph A. Yager, "Taiwan," *Nonproliferation and U.S. Foreign Policy*, ed. Joseph A. Yager (Washington, D.C.: Brookings Institution, 1980), 80.

¹³² Michael Knapik, "U.S. Said to Push Taiwan to Close Research Reactor," *Nucleonics Week* 29, no. 14 (7 April 1988): 10.

Taiwan to the United States in 1978.¹³³ By all appearances, the "nonexistent" ROC nuclear weapons program finally was shut down.

E. DERECOGNITION AND RE-EXPOSURE

From the time the Shanghai Communique was made public, there existed in foreign policy circles an understanding of where the policy would inevitably lead. Nixon understood that rapprochement with the PRC eventually must lead to normalization of relations. However, he also understood that unless he was extremely careful during the process, he could seriously compromise the security commitment the United States had made to the ROC. It was the sort of delicate foreign relations game at which Nixon (and Kissinger) excelled; unfortunately, the intrusion of other crises (1973 crisis in the Middle East, then Watergate) prevented him from moving to finish the job he had started.

President Gerald Ford also understood the nature of the task, and had plans for dealing with the PRC normalization issue immediately after the 1976 presidential election. Unfortunately, he would not have the opportunity either as his administration occupied itself with healing the domestic wounds caused by Watergate and Vietnam.¹³⁴

¹³³ Vincent Kiernan, "Uncle Sam's Roaring Trade in Plutonium," *New Scientist* (17 February 1996): 6. In a private conversation I had with a U.S. official who had direct knowledge of this case, it was confirmed that the 1-kg shipment discussed in the above article did in fact come from the 1977 TRR visit.

¹³⁴ Michael S. Frost, *Taiwan's Security and United States Policy: Executive and Congressional Strategies in 1978-1979*, Occasional Papers/Reprints Series in Contemporary Asian Studies (OPRSCAS) 49, no. 4 (Baltimore, Maryland: OPRSCAS, School of Law, University of Maryland, 1982), 4.

The accession of President Carter to the White House brought a new push to resolve the long-standing issue of normalization of relations with the PRC. The initial approach of the Carter administration to the issue was cautious, and did not depart much from the stance of previous administrations. Carter had three prerequisites for normalization: Peking had to guarantee non-use of force in settling the Taiwan issue; the United States would be allowed to maintain relations with the ROC at the liaison level; and the United States had to be allowed to pledge commitment to the security of Taiwan. By the time negotiations were completed, Carter had backed away from all three principles and accepted the conditions of the PRC. However, two important concessions were won from the PRC, if only grudgingly. First, the PRC agreed to allow the United States to maintain "unofficial relations" with the people of Taiwan. Second, U.S. sales of defensive weapons to Taiwan would be tolerated under protest (the United States reserving the right to determine what was meant by defensive, of course.)

When President Carter announced the impending normalization to Congress and the world on 15 December 1978, it sent a wave of unease around the world. If America was prepared to back out on one of its longest and most staunchly anti-communist allies, what did that portend for other U.S. commitments? Although the Carter administration

¹³⁵ Ibid.

¹³⁶ These were: 1) sever all diplomatic ties with Taiwan; 2) withdraw all troops from Taiwan; and 3) terminate the 1954 Mutual Defense Treaty. Ibid.

¹³⁷ A. Doak Barnett, *The FX Decision: "Another Crucial Moment" in U.S.-China-Taiwan Relations*, Studies in Defense Policies (Washington, D.C.: Brookings Institution, 1981), 5.

went on as if this question did not pose a problem, derecognition was a crushing blow for the people of Taiwan. Under all the rhetoric, the undisguised facts were that the PRC still claimed Taiwan as part of its rightful territory, the PRC still had the biggest military in the region, and the PRC still had nuclear weapons. In the view of the Taiwanese, only one thing had changed: now, they were completely without friends in the world.

One of the largest problems the situation presented for the Taiwanese was that almost all of Taiwan's military equipment was manufactured by the United States. When the Carter administration decided to sever relations, Taiwan's military leaders began to worry about how they would get spares and maintenance necessities for their armed forces. Members of the U.S. Congress realized this problem as well, and when they put together what would become the Taiwan Relations Act (TRA), they ensured that it contained necessary language to allow the continued sale of arms and supplies to the Taiwanese military.

The major test of U.S. intent toward Taiwan came quickly. The Taiwanese military for some time had been seeking to upgrade its air defense capability by purchasing a new fighter aircraft to replace the F-5E/F. Proposals for aircraft to fill this role included the F-5G and the F-16/79. The effort, collectively dubbed the "FX," quickly ran into resistance from communist Chinese leaders, who argued that the Taiwanese really were seeking an air superiority aircraft, not an air defense fighter, and that the sale was a breach of the terms of normalization. The debate continued through the end of President Carter's term in office and was turned over to the Reagan administration for resolution in 1981. After prolonged and acrimonious debate, the

Reagan administration finally opted against the sale, announcing its decision in January 1982. To add insult to perceived injury, the Reagan Administration then announced in a 17 August Joint Communique with the PRC that U.S. arms sales would "not exceed, in qualitative or quantitative terms" those of the previous several years. Furthermore, the Communique also proclaimed the U.S. intention to "reduce gradually its sales of arms to Taiwan, leading over a period of time to a final resolution." ¹³⁸

The Taiwanese leadership took this as yet another betrayal at the hands of the United States, and in an effort to avoid such contretemps in the future, "decided to accelerate their research and development for a Taiwan-produced plane known as the indigenous fighter (IDF)."¹³⁹ The Reagan administration continued to work the arms sales issue as well, and discovered that it could get around the exact terms of the 1982 Communique by using technology transfers as a replacement for actual arms sales. Over the next several years, technological assistance was provided to Taiwan in a number of projects, including the IDF, a modernized main battle tank, a variety of missiles, and a frigate design. Through cooperation on these and other projects, Taiwanese faith in the intentions of the United States has been slowly gaining strength. However, Taiwan's

¹³⁸ Paragraph 6 of U.S.-China Joint Communique of 17 August 1982, in Martin L. Lasater, "Thunder and Lightning Over Taiwan," *Naval War College Review* 36, no. 4 (July-August 1983): 82.

¹³⁹ Stephen P. Gibert, "Safeguarding Taiwan's Security," Comparative Strategy 8 (1989): 435.

¹⁴⁰ Robert Karniol, "New Arms for Old: Taiwan's Billion-Dollar Defence Program," *Far Eastern Economic Review* 137, no.31 (30 July 1987): 15.

leaders still remain wary of falling back into dependency on the United States for their military needs, preferring instead to focus on indigenous programs to supply their military requirements.

During this period, Taiwan's nuclear program apparently moved forward as well. In December 1987 Chang Hsien-yi, a deputy director of research at INER, defected to the United States and alleged brought with him closely-held information about highly secret research in nuclear weapons and nuclear-capable missile development. While few details are available, shortly after his defection authorities on Taiwan announced that they were shutting down the reactor at the center of the controversy, apparently because of heavy pressure from the United States. ACC government officials also issued the standard denial of intent to build nuclear weapons, although they noted that they did "have the capability to do so."

F. CONCLUSION

Research into a ROC nuclear option began early in the U.S.-ROC relationship, and apparently has continued in unbroken fashion up to the present day. ROC officials have always been careful to emphasize that they have no intention of manufacturing

¹⁴¹ Stephen Engelberg with Michael R. Gordon, "Taipei Halts Work on Secret Plant to Make Nuclear Bomb Ingredient," *New York Times*, 23 March 1988, A1.

^{142 &}quot;Commentary: A Nuclear Suspense Thriller," Central News Agency Release, Taipei, 13 March 1988. The commentary explains the reasoning behind this stance: "The enemy is the Chinese Communist regime on the mainland, and the free Chinese on Taiwan will never use nuclear weapons against their innocent brethren on the mainland. That should be simple to understand, given that the free Chinese refuse to be the first idiots on earth to use nuclear weapons on their own national territory."

nuclear weapons, however, they just as consistently maintain that they possess the capability to do so if they desire.

The early exposure to the powerful possibilities brought by possession of nuclear weapons was a formative experience for leaders of Taiwan. After observing their archenemy being "defeated" more than once by a nuclear-equipped United States, interest in the nuclear option became visible in Taiwan. However, interest in obtaining the capability to construct nuclear weapons was not overwhelming so long as the United States was fully committed to the security of Taiwan.

The changing situation in the late 1960s and early 1970s altered this complacent stance. The repositioning of the naval units from the Taiwan Squadron significantly reduced the visible evidence of U.S. commitment. U.S. troop levels on Taiwan peaked in 1968 and declined every year thereafter—another strong indication of waning physical commitment. The Nixon trip to Peking in 1972 undermined the strength of the legal component when it resulted in a promise to reduce troop levels to zero over a period of years. While the Nixon agreement was not technically in violation of the Mutual Defense Treaty, the Taiwanese perception was that it violated the spirit of the agreement. The Nixon administration weakened the behavioral component of the commitment by failing to block ROC expulsion from the United Nations and then by being willing to deal with the enemy. The result was a visible surge of Taiwanese activities in the early and mid-1970s in areas which could be linked to nuclear weapons development. This surge occurred without regard for the undisputed existence of a U.S. nuclear umbrella over Taiwan.

The second exposure of ROC nuclear efforts gives evidence that the program never stopped. The derecognition of Taiwan and abrogation of the Mutual Defense Treaty wrecked what little legal component was left in the security commitment. The TRA attempted to replace this block, but was wholly inadequate in the perception of ROC leaders because they saw that U.S administration officials could not be made to live up to the intent of the Act. The Reagan decision not to permit FX sales seriously reduced the value of the physical component. Finally, Reagan administration actions in the debate over the meaning of the 1982 Joint Communique led to a widely–held view among Taiwanese officials that this administration was really no different than any others.

Ironically, this is the one period where the value of a U.S. nuclear guarantee was very questionable because the United States had no formal commitment to the security of Taiwan other than an Act requiring provison of defensive arms and material.

The main lesson of this case is that while nuclear security guarantees may be important, visible and strong coventional proof of the commitment was required to keep Taiwanese interest in nuclear weapons at a low level. Once it became apparent that the commitment of the United States was declining, the government of Taiwan took the action it saw as necessary to protect its citizens. Because the United States never could restore the physical signs of security commitment to Taiwan without seriously damaging or destroying the budding relationship with China, it no longer was in a position to do much more than slow Taiwanese progress toward nuclear weapons capability. The nuclear umbrella had become irrelevant.

VI. FINDINGS AND CONCLUSIONS

A. FINDINGS

This thesis has three major findings. First, a nuclear security guarantee alone is not sufficient to prevent nuclear proliferation. In the case studies of South Korea and Taiwan, the United States gave an implicit nuclear security guarantee. In South Korea, tactical weapons were stationed on South Korean soil, and plans existed for their use in time of war. In the case of Taiwan, the United States demonstrated twice that it was willing to use nuclear weapons to assure the security of Taiwan. Yet the leaders of both South Korea and Taiwan chose to pursue the development of nuclear weapons despite heavy pressure from U.S. officials not to do so. The claim that "U.S. nuclear weapons discourage proliferation by allies" is false in these two cases.

Second, a strong conventional commitment made credible by visible presence of forces is sufficient to prevent proliferation when the direct security threat is conventional. A "direct threat" is a threat that is visible and immediate, as opposed to a more general threat that cannot be seen every day. South Korean leaders contend with the direct threat of a North Korean invasion as part of daily life and have done so for over forty years. Failure to meet the threat could mean failure to survive as a nation. While they also may view communist China as threatening, it is not the same palpable and visible threat to survival that comes from North Korean military forces, and therefore it lacks the same impact. To feel secure despite such a threat, South Koreans must see visible evidence of U.S. commitment to their security, and that evidence must convince them that the

resources devoted to South Korean security are a match for the forces arrayed against them.

Third, when the security threat being faced is believed to include nuclear weapons, the prevention of nuclear proliferation requires both a nuclear security guarantee and a physically evident conventional guarantee. In both case studies, the state posing the major threat to security developed a nuclear weapons capability. The response in both cases was to counter that threat with an indigenous nuclear weapons development program. U.S. efforts to slow or halt those programs were ineffective because the conventional security commitment being offered had little credibility. The loss of credibility directly resulted from poor policy decision making and execution that failed to understand or account for how the action would be perceived by security partners. Inconsistency from one administration to the next played a major role in creating this problem.

One point that remained ambiguous in both cases studies was the role of tactical versus strategic nuclear weapons in the security guarantee. No evidence emerged that either country made any real distinction between the two. A nuclear guarantee was a nuclear guarantee regardless of whether the weapon was located on the soil of the country, in a ship off the coast, or in a silo in Kansas. Closer study of this point is warranted.

B. MODEL STRENGTHS AND WEAKNESSES

The security commitment model used in this thesis had both strengths and weaknesses when applied in the two case studies. The strongest point of the model is that

it can predict how a state will react to changes in security commitment. However, in order to use the predictive capability of the model, the user must understand how a proposed action will affect the legal, physical, and behavioral components of the model. More importantly, and also more difficultly, the user must understand how such proposed actions will be perceived by the recipient.

The major drawback of the model is that it "black-boxes" the decision-making processes of the recipient of the security commitment. For example, South Korean leaders not only had to deal with hostility from North Korea and fickle behavior on part of U.S. officials, but they also had a series of internal crises that had great impact on their decision-making process. Unfortunately, this model does not account for such extraneous forces, and that limits its usefulness.

C. POLICY IMPLICATIONS

The findings of this thesis suggest two important implications for U.S. policy. First, while nuclear security guarantees are not nearly as important as they often are portrayed, the proponents of the complete elimination of nuclear weapons fail to understand the important role of nuclear security guarantees in efforts to discourage the proliferation of weapons of mass destruction. Nuclear guarantees are necessary to dissuade countries from seeking to acquire nuclear weapons when those countries face their own nuclear threat. To fulfil that need, maintenance of the U.S. nuclear arsenal is necessary until there is a fundamental change in the global security environment.

Whether nuclear weapons would play the same role in discouraging proliferation of chemical or biological weapons is not clear from the results of this study. The answer

to this question depends largely on how potential recipients of the nuclear guarantee view the utility of chemical or biological weapons. If in their view chemical or biological weapons are held as equivalent to nuclear weapons, then one could expect nuclear guarantees to play the same role as in nuclear nonproliferation efforts. If, on the other hand, the potential recipient views chemical or biological weapons as a completely new and different type of threat, nuclear guarantees could be expected to play a much different role, or perhaps even no beneficial role at all. Further research is needed in this highly important area of U.S. policy.

The second implication for U.S. policy is that discouraging nuclear weapons proliferation requires strong conventional forces deployed in forward positions. When U.S. defense planners consider overseas conventional military force posture issues, the role of those forces in preventing the international spread of nuclear weapons must be understood. Failure to prevent further instances of nuclear proliferation is practically assured if the credibility and strength of conventional force presence of the United States is not maintained.

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