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US Extended Nuclear Deterrence and Nuclear Order: An Australian Perspective

CHRISTINE M. LEAH

Abstract: *This article addresses the question of how US extended nuclear deterrence might endure in a shifting Asia-Pacific where the traditional nuclear order underpinning the credibility of US security guarantees is deteriorating. The Australian case study demonstrates how periods of nuclear order and disorder can inform a state's attitudes toward the credibility of extended nuclear deterrence. Australia's interest in a nuclear weapons capability from 1956 to 1972 was symptomatic of a period of nuclear disorder. This interest declined from the early 1970s due to changes in both the global and regional environments where the proliferation and use of nuclear weapons was relatively contained. This emerging, recognizable nuclear order diminished the interest in an indigenous nuclear weapons capability and led Canberra to rely on US extended nuclear deterrence. This order has remained fairly robust for more than 30 years. However, beyond 2012, we may yet witness a breakdown in this order. This will generate a much greater interest by US allies in the operational aspects of US extended nuclear deterrence.*

US allies in Asia are increasingly concerned about the implications of Chinese military modernization for US primacy in the Asia-Pacific. While China's ability to gradually erode US conventional superiority is still a subject of debate, the fundamental challenges facing US extended nuclear deterrence (END) in a shifting Asia-Pacific security order have largely been ignored in academic and policy debate. Historically, there has been less interest in Asia in the operational requirements of END and reassurance; it did not have to be picked apart and made specific so long as the United States retained its primacy in Asia. This article argues that the credibility of END in the Asia-Pacific from the late 1960s onward was to a large extent based on certain geopolitical circumstances that shaped a recognizable nuclear order, where nuclear and conventional threats to Japan, South Korea, and Australia were the same as those facing America. That order was characterized by a relatively stable distribution of power, nuclear polarity and relatively limited nuclear proliferation, and the absence of immediate and direct military threats that would not also involve superpower interests. This order has remained fairly stable and robust for more than 30 years. However, the geopolitical foundations underpinning the credibility of extended deterrence are now eroding. In the near future, Washington will have to work much harder to reassure its allies in Asia; END will need more "teeth" – for example, establishing bilateral nuclear planning groups, increasing US military presence in and around allied territory, and even deploying

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tactical or strategic nuclear capabilities on allied soil. This article presents evidence from the Australian case study to support these arguments, and provides a framework for thinking about the future of extended deterrence in the Asia-Pacific.

The concept of security assurances as they applied to that Cold War European continental setting cannot automatically be transplanted onto the future Asian maritime context. The Cold War was the formative experience for US Asia-Pacific allies in nuclear affairs, and there is still a way to go in understanding how to “manage” nuclear strategy and extended deterrence. The nuclear age is younger than the Cold War. In the future, the United States and its allies may not face the same threats; Canberra and other capitals might not believe that Washington is able or willing to deter adversaries or potential adversaries from threatening allied interests. In that context, extended nuclear and conventional deterrence will have to become much more tailored to Asian allies’ specific needs.

As Paul Bracken notes, “it is easy to forget just how much the cold war was a European affair that spilled over to other regions, and how deeply Eurocentric nearly everything about the first nuclear age really was.”¹ More than 10 years later (with four notable exceptions), there has been little scholarship devoted to analyzing Asia as a nuclear system in its own right.² Moreover, the most recent scholarly work exploring the dynamics of US nuclear strategy and END in the Asia-Pacific has concentrated overwhelmingly on operational aspects, discussing force structure implications.³ But there has been less work on exploring the evolving context of such operational requirements; what remains understudied is the emerging relationship between the political, strategic, and operational levels involved in US END for the region. As Colin Gray writes, “one cannot just extrapolate merrily from the strategic experience of the Cold War the basic rules for promotion of reliable deterrence and expect as a consequence that peace with security assuredly must ensue.”⁴

Thinking about Nuclear Order

William Walker writes about the establishment in the late 1960s of a nuclear order based on managed systems of deterrence and abstinence. The former was a system “whereby a recognized set of states would continue using nuclear weapons to prevent war and maintain stability, but in a manner that was increasingly controlled and rule-bound,”⁵ and in which there was a degree of familiarity in essentially dyadic deterrence relationships. Nuclear abstinence consisted of a system “whereby other states give up sovereign rights to develop, hold and use such weapons in return for economic, security, and other benefits,” concomitantly with the provision of nuclear umbrellas (State A agrees to “protect” State C against State B by using, or threatening to use nuclear weapons) and a stable Nuclear Nonproliferation Treaty (NPT). It is a system whereby not only the *possession*, but also the *use* of nuclear weapons is controlled. According to Walker, the stability and robustness of these two systems would provide the rationale for many states in the international system to abstain from acquiring weapons, and for several key states to rely on US END for their supreme national survival.

There are several elements that characterize this nuclear order underpinning the structural foundations for the credibility of US extended deterrence. First, the number

of nuclear weapon states is relatively small; second, nuclear weapons are no longer considered as merely bigger and better conventional weapons the way they were until the late 1960s; third, there are strong norms against possession and use of nuclear weapons; fourth, there are no direct and immediate military threats to US allies; and, fifth, war between major powers is relatively unlikely.

(Extended) Nuclear Deterrence: Then and Now

Deterrence is a relationship whereby one actor “deters” another from attacking its territory by the threat of use of armed force to inflict unacceptable damage or punishment. As the US Department of Defense defines it: “[Deterrence is] the prevention from action by fear of the consequences. Deterrence is a state of mind brought about by the existence of a credible threat of unacceptable counteraction.”⁶ For deterrence to work, there must be the risk for unacceptable damage. General deterrence rests upon the idea of the “gravitational” use of force. That is, military or nuclear forces do not need to be “used” to have strategic effect. The mere fact that State A possesses nuclear weapons already influences State B’s strategic calculations. “The peaceful use of military power is akin to a gravitational field among large objects in space: it affects all motion that takes place. . . . The use of military power should not be equated simply with its physical use.”⁷ More poetically still: “Force is never more operative than when it is known to exist but is not brandished.”⁸ Indeed, although Australia, for example, has rarely faced direct and immediate military threats, nuclear weapons have remained highly relevant to its sense of security as instruments for shaping global order.⁹

US military capabilities linked to the presence of nuclear weapons can deter military confrontation in three ways. First, their mere presence increases the uncertainties and potential costs to an aggressor. Second, it can be argued that tactical nuclear weapons contribute to a more credible defense posture and can increase the costs an attacker would incur from attempting to occupy foreign territory. For example, in his remarks at the Atlantic Council in November 2008, Polish Foreign Minister Radek Sikorski commented that “everyone agrees . . . that countries that have US soldiers on their territory do not get invaded.”¹⁰ Third, they can deter by threatening unacceptable retaliation against targets on national soil highly valued by the challenger – the “classic” role of strategic nuclear weapons.

The problem of establishing the credibility of *extended* deterrence lies in convincing the challenger that the protégé represents a vital interest to the defender. According to Thomas Schelling and others, deterrence is intrinsically easier to establish than extended deterrence. It is “. . . the difference between threats that are inherently credible, even if unspoken, and threats that have to be made credible.”¹¹ For extended deterrence to work, the message from the assuring state to the adversary should be: “there should be no doubt that my resistance to you will be total should you threaten the state I am protecting.”

The Different ‘Levels’ of Extended Deterrence

The character and shape of US nuclear security assurances differs from ally to ally. A useful exercise is to think of the character of security assurances in terms

FIGURE 1
SPECTRUM OF EXTENDED DETERRENCE POSTURING

of a spectrum between “minimal extended deterrence” and “full-strength extended deterrence.”¹²

Nuclear Disorder and END in the 1950s and 1960s

Since the early 1970s, Australia has been content with a minimal serving of US extended deterrence. That has not always been the case, however. From around 1956 to 1974, strategic circumstances in the Asia-Pacific pushed Australian policymakers to seriously consider acquiring or developing nuclear weapons.¹³ During this period, certain geopolitical circumstances preventing the formation of an identifiable nuclear order meant Canberra was not willing to rely on the so-called US “nuclear umbrella.”

The experiences of World War II and the Korean War were still vivid in the memories of policymakers in the late 1940s and even early 1960s; it was still the era where major war was a distinct possibility. Both China and Indonesia were threats to regional stability¹⁴; they presented a significant military challenge to British military presence in the region – Australia’s primary defense partner.¹⁵ Australia was threatened primarily because each of the countries was seeking to establish some sort of regional hegemony that would erode Western influence and create a situation whereby Australia’s security was being shaped increasingly by the Asian powers themselves. Gradual British withdrawal from theatres “east of Suez” created dilemmas for policymakers, as Australian defense planning in the 1940s and 1950s continued to be centered around the concept of empire defense. Until the mid-1960s, policymakers believed that Australia should be prepared for the outbreak of limited, if not major, war in Southeast Asia with China or Indonesia.¹⁶ In this context, Prime Minister Robert Menzies was concerned that Australia’s “great and powerful friends” would increasingly be preoccupied with the European theatre of strategic affairs, especially in the event of a major war with the Soviet Union. The government was concerned that in such circumstances, both the United Kingdom and the United States would be unable to provide conventional or nuclear¹⁷ military assistance¹⁸ and that they would be unable to provide END in the

event that they were left devastated by a Soviet nuclear attack. This point was consistently stressed by Arthur Tange, secretary of the Department of External Affairs until 1965. In his view, the absence of a nuclear capability to deter aggression was a “very grave” problem.¹⁹ The fact that neither London nor Washington had made war plans for the Asia-Pacific, let alone plans regarding the use of strategic or tactical nuclear weapons before 1958, lent further strength to the argument for an Australian nuclear capability.²⁰

Before coming to power in 1968, Prime Minister John Gorton himself had already believed in the late 1950s that Southeast Asia might “have a war of the kind we saw in Korea” and that Australia must therefore have troops available at “a moment’s notice.” Because such a war could go “from worse to worse,” Australia would require its own atomic deterrent.²¹ The most strident efforts to acquire nuclear weapons were made by the Air Force, but they were not the only ones interested in this option. “The three Chiefs of Staff all expressed the view that Australia should seek to acquire nuclear weapons (as distinct from developing a nuclear production capacity), either under our own control or by some arrangement whereby we could be assured that nuclear weapons would be available for our defense.”²² The Royal Australian Air Force had also begun planning to incorporate future nuclear-capable platforms such as the *Canberra* bombers. It also argued that whatever replacement of the *Canberras* was acquired, it should have the capability to deliver nuclear weapons and strike Jakarta.

In the preorder vision (i.e., before the establishment of managed systems of deterrence and abstinence), there were two components to abstinence. The first related to the *use* of nuclear weapons. The second related to their *possession*.²³ It is surprising just how long it took for a taboo against the use of nuclear weapons to emerge.²⁴ The use of nuclear weapons on the battlefield seemed a real possibility; indeed, it seemed quite likely.²⁵ The US decision to equip North Atlantic Treaty Organization (NATO) forces with battlefield tactical nuclear weapons and efforts by President Eisenhower to have nuclear weapons included in the same category as conventional ones generated the perception that a nuclear war was possible. The fact that the United Kingdom, Australia’s primary defense partner, was *relying* on these weapons to wage war and ensure its national survival did not reassure policymakers in Canberra.²⁶

In the 1950s²⁷ and early 1960s, there were only very rudimentary forms of arms agreements,²⁸ let alone an actual treaty or norm against nuclear weapons proliferation. In other words, there was no system of accountability and transparency, and abstinence was not institutionalized. There were also speculations about the possible impact of China’s 1964 nuclear detonation and the incentives it might create for other states to go nuclear. Canberra believed nuclear weapons would become a more normal feature of the Asian landscape. Again, the fact that there were as yet no formal disarmament agreements or a legal framework for the nonproliferation of these weapons further encouraged the perception that proliferation would spread.²⁹ This would mean a further decline in the effectiveness of Australia’s conventional forces to both deter aggression and ensure continental defense. An indigenous nuclear capability, in this light, was seen as “vital to the security of Australia”³⁰ and could even be used against the superior conventional forces of Indonesia or Japan³¹ and to counter Chinese or Viet Minh aggression in Southeast Asia.³²

All these elements of nuclear disorder generated a general mistrust of American extended deterrence and military assistance. A couple of interesting records of discussion highlight this. For example, a record of discussions between Australian officials and Dean Rusk cabled from Washington to Canberra noted:

It might . . . be proposed to the United States that there should be joint Australia–United States study made of i) the period for which SEATO (Southeast Asia Treaty Organization) conventional forces could hold a major aggression by China and North Vietnam in Southeast Asia without the use of nuclear weapons, ii) the scale of attack which the conventional forces which SEATO would dispose could contain indefinitely or defeat without the use of nuclear weapons.

An attached document notes: “Although the United States will not invite, and may even resent, probing on this delicate issue, it is in Australia’s broadest interests that the discussions which have been initiated should be continued. . . . It would seem preferable that further discussions should be bilateral and not multilateral.” Washington had not gone very far in establishing guidelines for the use of nuclear weapons in Europe, nor had policymakers in Washington considered situations in Southeast Asia.³³ In the same round of discussions, Robert McNamara would bluntly state that it was highly unlikely the United States would use nuclear weapons in any Southeast Asian conflict.³⁴

In spite of continued efforts by Canberra to know more about US military planning, Washington was consistently evasive. As one cablegram notes:

“The paper goes on in a light vein to the effect that we are wasting our time trying to find out from the Americans their inner secret planning. We have been trying to open a mythical door to the room where this is done. There is a door but no such room. The door leads to the garden path!”³⁵

Prime Minister Menzies was especially interested in the positioning of US forces and integrating Australian forces into NATO global planning, so that Canberra might also have some say within the organization. Again, these efforts were to no avail.³⁶

US officials would insist that China was aware of the threat of retaliatory action in response to aggression in Southeast Asia.

[They] acknowledge that if they are drawn in [into conflict in the offshore islands], the United States forces might be obliged to use nuclear weapons. It would be useful to discover at the ANZUS (Australia New Zealand United States) Council Meeting the point at which the United States envisages these weapons might have to be used. It would be interesting to know how they see such weapons being used from a tactical point of view and to what extent they believe that their use can be narrowly limited. . . . Although ANZUS was strictly confined to a geographical area, consequences of Chinese intervention in Indo-China would quickly spill over into the ANZUS area and, therefore, was a matter in which we were directly interested and on which the U.S. was obliged to consult us.³⁷

The point of having no predetermined contingency planning was strongly stressed by Washington. The logic proposed was that “the purpose of planning must not be primarily to fight a war but to deter a war,” which meant, vaguely, maintaining the capacity of highly mobile sea and air forces to strike at a place of allied choosing. The concept of primary dependence on mobile striking power was deemed difficult to apply to Australian and New Zealand ideas of continental defense. John Foster Dulles would use the analogy of a police force – every house was not guarded, but the existence of a strong police force was a deterrent to crime. The exception was Western Europe, which was in American eyes, a significant prize that an aggressor would be willing to accept considerable damage and punishment to obtain, which was not the case anywhere in Southeast Asia.³⁸

In 1964, Robert McNamara explained to then Defense Minister Paul Hasluck the importance of the communications station at Northwest Cape in Western Australia. He stated the United States had the capacity to destroy both the China and the Union of Soviet Socialist Republics (USSR), that weapons were already targeted at China, and that China was aware of this.³⁹ Hasluck pointed out that nuclear weapons were not enough to deter China’s ability and willingness to wage conventional conflict, to which McNamara merely responded that British and Australian forces would have to contribute to the Western ability to respond to Chinese moves.⁴⁰ All this suggests that Washington was not interested in deterring threats against Australia *per se*. Rather, Australia was considered as part of a larger Asia-Pacific “package.”

Given serious misgivings about American security guarantees, there remained a strong interest in seeing Australia equipped with its own nuclear weapons. In 1967 and 1968, policymakers made it clear that Australia would not sign the NPT without formal guarantees of protection against nuclear and conventional attacks on Australian interests. Washington was compelled to send a team specifically to allay fears about all the political and technical implications of the NPT. One member of the team noted, with respect to Prime Minister John Gorton, that:

[He was] like De Gaulle in saying that Australia could not rely upon the United States for nuclear weapons under ANZUS in the event of nuclear blackmail or attack on Australia. . . . One of the things which is getting in the way is objections coming out of the Australian Atomic Energy Commission (AAEC) and Defense Departments on all sorts of picayune problems . . . I am thinking of inhibitions on the development of nuclear energy . . . There would be some advantage in sending someone to Australia rather than try to pull a team together from Australia to come to Washington because there are so many different points of view within the Australian bureaucracy.⁴¹

The AAEC stressed Australia’s ability to manufacture a nuclear weapon and the desire to be in a position to do so on very short notice, especially if Japan and India went nuclear. And officials in Australia generally “could not even contemplate signing the NPT if it were not for an interpretation which would enable the deployment of nuclear weapons belonging to an ally on Australian soil.”⁴²

Kim Edward Beazley, a prominent member of the opposition Australian Labor Party (ALP), was a serious skeptic of US END. In May 1969, for example, he stated:

One assumption . . . is that there is such a thing as a nuclear umbrella. That is to say, they believe that the United States would involve itself in a nuclear war for the sake of Australia. This is an interesting proposition. . . . [F]rankly, I do not believe that any country will expose itself to the possibility of a war of annihilation for the sake of any of its minor partners. . . . I personally do not believe that the United States would subject itself to nuclear annihilation for anybody else. . . . If I believed . . . that this country is teetering on the brink of invasion . . . I would believe that this country should mobilize its scientists to develop its own nuclear weapons.⁴³

As one US official would admit, given the chance again, he would not have recommended offering such assurances if Communist China already had nuclear weapons.⁴⁴

Australian wariness about US END was symptomatic of a period of nuclear disorder. There were strong beliefs about a looming, possibly nuclear, global war; nuclear weapons were considered to be “usable”; there was a generally pessimistic outlook for regional restraint with regards to proliferation; Australia was lacking in available manpower and conventional resources to hedge against expansionist and hegemony-seeking China and Indonesia; and national leaders feared the prospect of strategic isolation because of allied military withdrawal. It was not until shortly after 1968 and the formation of a recognizable nuclear order that it dawned on Canberra that Washington would be unlikely to use nuclear weapons outside the context of threats to US national interests. However, this realization correlated roughly with changes in the strategic environment that made Australia much more secure regardless. It was not until then that policymakers began to feel Australia was part of the global US nuclear umbrella.

Nuclear Order and US END from the Late 1960s to the Present

The pursuit of a national nuclear capability came to a halt when Prime Minister Gough Whitlam ratified the NPT on January 23, 1973. A recognizable nuclear order was beginning to take shape. It would be misleading to believe, however, that consequently policymakers did not consider nuclear weapons and deterrence as integral to Australian security. A careful examination of the language contained in successive Defense White Papers and other strategic guidance documents since the 1970s shows quite the opposite to be true. For example, the Defense White Paper in 2009 stated: “So long as nuclear weapons exist, we are able to rely on the nuclear forces of the United States to deter nuclear attack on Australia. . . . That protection . . . has over the years removed the need for Australia to consider more significant and expensive defense options.”⁴⁵ Indeed, successive governments have stressed the need to maintain and strengthen deterrence and the strategic nuclear balance, while contributing and working toward global nuclear disarmament.⁴⁶ What were the conditions of the nuclear order underpinning the credibility of the US security guarantee?

From the late 1960s onward, Australia enjoyed a relatively benign security environment. Indonesian President Soekarno had been ousted from power, and along

with him went any speculations that Indonesia was thinking seriously about acquiring nuclear weapons.⁴⁷ The prospects for interstate war were also diminishing, and the Joint Intelligence Organization assessed that there were generally good prospects for stability and for defense cooperation with countries in Southeast Asia. There were concerns about the possibility of armed conflict between Malaysia and Singapore, as well as China's ambition to expand its regional influence by encouraging and supporting regional Communist insurgencies, as well as uncertainty regarding Japan's future nuclear status. Overall, however, policymakers assessed that Australia did not face any immediate and direct military threats. And if it did in the future, it would be in a context where the United States could not afford to abandon its allies. Regional defense cooperation in defense and strategic matters would continue and intensify in the 1980s and 1990s. Strategic Basis papers since then continued to evoke the possibility of armed conflict with Indonesia over Papua New Guinea, although this was assessed as unlikely.⁴⁸

A "system" of nuclear abstinence was also beginning to crystallize: more and more countries were deciding that nuclear weapons would not serve their security interests and hence were signing the NPT. That treaty also generated the notion that a nuclear order was not only possible, but in fact "normal" and that the spread of nuclear weapons should be controlled. In other words, nonproliferation became a norm of international society.⁴⁹ The limited scientific capabilities of many countries also lessened worries over proliferation. In the 1980s, the Office of National Assessments – Australia's head intelligence agency – concluded that the rate of proliferation would not exceed that of one or two countries per decade.⁵⁰

Australia was one of the last countries to sign and ratify the NPT. The fact that most other countries had already done so created strong strategic pressures for the government to follow suit. Among those similar threshold states that decided to sign were Japan and West Germany. The decision of two such states, which faced even more acute security dilemmas than Australia, was critical.⁵¹ It signaled that Tokyo and Berlin were content to rely on US END for their security; it was feasible to delegate the task of nuclear deterrence to a superpower ally.

For several decades, nuclear weapons have been considered a very separate class of weapons. In the mid-1960s onward, they were no longer considered as merely a bigger and better conventional weapon, but as an instrument of *last resort*. This would contribute to nuclear abstinence by other states in the international system.⁵²

For all these reasons, US extended deterrence applied in a much more indirect fashion to Australia; the threat of attacks against Japan, South Korea, and Australia were considered in the context of American–Soviet global strategic rivalry. Since the late 1960s, the security of the United States and Australia in relation to nuclear matters was symbiotic⁵³; no other state could credibly threaten Canberra without incurring the risk for retaliation by the United States.⁵⁴ In this sense, Canberra and Washington had an "indivisible nuclear alliance." The unique context of the Cold War from the 1960s onward thus generated a "structural credibility" for extended deterrence. END in this context was operationalized as an interbloc dynamic, and it was easy to identify where a state "belonged."⁵⁵ Deterrence was essentially a bipolar affair, and according to Walker, the fact that nuclear weapons remained essentially the jurisdiction of great

powers established a sense of “sameness” and some degree of familiarity,⁵⁶ although the issue of rationality has already been the subject of great investigation and debate.⁵⁷ Indeed the Soviet Union and United States had very different strategic cultures, which informed their respective attitudes toward the use of force and nuclear weaponry. Prime Minister Menzies believed that nuclear weapons should be wielded only by a limited number of responsible great powers that would be self-deterred. He said that: “There is an advantage for the world in having nuclear and thermo-nuclear weapons in the hands of the United States, the United Kingdom and the Soviet Union, and in no others. These Great Powers . . . are sufficiently informed about the deadly character of these weapons to find themselves reluctant to cause a war in which they are used. The possession of these violent forces is, in the case of these great nations, a deterrent not only to prospective enemies but to themselves.”⁵⁸

Deterrence and extended deterrence dynamics were much less well defined in Asia-Pacific than in Europe. The geographical setting for “operationalizing” deterrence in Europe was arguably much more clear-cut – the combination of a land-based deterrence system and an interbloc rivalry meant spheres of influence and tripwires were more readily identifiable. Part of the purpose and credibility of America’s nuclear posture was to curb territorial expansion by the Soviet Union. That logic did not apply so much in Asia – Australia did not face the threat of invasion from the Soviet Union, and the USSR presented a threat to the extent that Australia was part of the global US nuclear deterrent, hosting important facilities at North West Cape, Pine Gap, and Nurrungar.

All these elements made up a certain nuclear order. But that framework is coming under increasing stress, and it would be complacent to take Australia’s reliance on the US nuclear umbrella for granted. In the last couple of decades, geopolitical power has been shifting toward and within Asia, with a number of implications for sustaining US primacy. Significant changes in the nuclear order in the Asia-Pacific will probably mean that END will have to become much more “visible,” where US allies shift closer to the full-strength end of the extended deterrence spectrum. That might include deploying tactical or strategic nuclear weapons, “tripwire” US troops/facilities on protected and allied territory, and conducting joint planning and defense coordination regarding regional nuclear options.

Conceiving the Future: Patterns, Trends, and Their Implications for END

In Asia today, great powers still engage in power balancing and hedging. Nationalism is still a potent force in foreign-policy decision-making. There is an evident arms race, and the distribution of power is still in flux.⁵⁹ It is a place in the world where the use of armed force to resolve disputes is still considered acceptable.⁶⁰ There are three major hotspots that have the potential to spark intense great power competition – the Taiwan Straits, Kashmir, and the Korean Peninsula. Including the United States and Russian Federation, four out of the nine nuclear weapons states are located in Asia. In addition (unprecedented in history), the three major nations – Japan, China, and India – are rising *in tandem*. We can see signs of Australian attempts to accommodate these changes. The ALP’s decision to allow uranium sales to India is a glaring example. “International practice has changed,” Mr. Ferguson, the mining minister, told ABC (Australian Broadcasting Company) Radio. He said it was hypocritical for Australia to

sell uranium to China and Russia but not to the largest democracy in the world. He said that “India is an emerging economy; it’s one of the ten largest economies in the world with huge purchasing power . . . India is not a rogue state.”⁶¹

The technology wielded by the new Asian powers – ballistic and cruise missile capabilities and their associated types of warheads, for example – have contracted military time and space. In contrast to slow-moving mass armies that might take days to reach a battlefield, the continuous expansion and improvement in air, naval, and missile capabilities contracts the strategic geography between Asian states.⁶² These elements will also present a challenge to the so-called taboos against the possession and indeed use of nuclear weapons. In the 20th century, the world saw nuclear doctrines being tailored and operationalized by and among essentially Western states with similar strategic cultures. Although deterrence (at least in as much as it has prevented the use of nuclear weapons) in Asia has up until now worked between China, India, and Pakistan, the combination of the elements discussed above, further nuclear weapons proliferation, and Asian strategic cultures wielding smaller nuclear arsenals will pose a significant challenge to nuclear restraint.⁶³

As Andrew O’Neill has demonstrated, END remains highly relevant in East Asia today.⁶⁴ Despite officially welcoming President Obama’s new initiatives to reduce the perceived military role of nuclear weapons in US foreign policy, key allies in the Asia-Pacific nevertheless remain worried about the prospect of a further reduced role of nuclear forces in US grand strategy in the region. Nuclear reductions and disarmament are portrayed as something of a moral imperative for Asia-Pacific allies,⁶⁵ but in the end, these are a means to a much broader end, and such measures must always be tied to *strategy*. The current US government does not concur with the view of Barry Blechman, who recently concluded that END was “a concept that served a vital purpose during the Cold War, but whose time has come – and gone.”⁶⁶

During the Cold War, and indeed today in Europe, the “technical” requirements have been the “visible” US nuclear weapons in Europe. Some European officials argued, for example, that land-based weapons were a stronger political commitment than sea-based weapons systems. As a Christian Democratic Union member of the Bundestag said, nuclear weapons “exercise a stronger deterrent impact, because they are clearly visible in a country whose protection the deterrent is intended to serve” and “[this presence] demonstrates the indivisibility of the territory covered by the Alliance of Western security.”⁶⁷ US nuclear weapons remain a “coupling mechanism” – a means of connecting US security interests and commitments in Europe to US intercontinental nuclear forces. That means of reassurance remains essential for many European officials, especially those from further in the East. The B-61 gravity bombs are an example of this – their roles include serving as a hedge against the revival of Russian belligerence,⁶⁸ deterring regional powers armed with weapons of mass destruction,⁶⁹ and providing an alternative to reliance on French and British nuclear weapons.

Historically, there has been less interest in Asia in the operational requirements of extended deterrence and reassurance. Maritime END did not have to be dissected and made specific so long as the United States retained a comfortable margin of conventional and nuclear superiority in East Asia. According to a Japanese official: “When it comes to the nuclear umbrella, it is like a talisman from the United States. Japan is

not sure how it works, but they put their faith in it and believe it will protect them.”⁷⁰ Japanese interest in recent years in ballistic missile defense (BMD) and the establishment of a nuclear planning group with the United States are indications of shifting geopolitical dynamics where nuclear weapons have become much more central features of Australia’s strategic environment.

For more than five decades, it has been a vital Australian interest to see the United States maintain military and strategic primacy in the region, because of its stabilizing power in the Asia-Pacific.⁷¹ US security guarantees toward both Japan and South Korea have been instrumental in precluding any rationale for these states to establish their own nuclear weapons programs. In 1998, the Japanese prime minister stated: “It is in the interest of the United States, so long as it does not wish to see Japan withdraw from the NPT and develop its own nuclear deterrent, to maintain its alliance with Japan and continue to provide a nuclear umbrella.”⁷² Dramatic changes in the Northeast Asian distribution of power might create pressures for nuclear proliferation closer to Australia, including in Taiwan, Malaysia, and Indonesia.⁷³

The rise of a China with the means to establish and maintain regional military preponderance would be cause for significant concern among Asia-Pacific states, especially if it had demonstrated the willingness to use force and achieved significant military gains, for example in the Taiwan Straits. Such an upset in the strategic stability of the region would generate a strong degree of competition – with the possibility of further armed conflict – between and/or including Japan, China, India, Russia, and the two Koreas.

A state’s commitment to the NPT is a function of three interrelated conditions: norms, national security calculations, and the number of other countries adhering to the treaty. Invariably, this consideration will also include *which* states are adherents. If key states such as Japan decide to withdraw, it is likely that the credibility and legitimacy of the NPT would be seriously undermined. Certainly, the decision by other potential proliferators such as Syria, Egypt, Saudi Arabia, Turkey, and even Germany would have implications for the continued existence of the NPT and the norm of nonproliferation. However, it is key US allies – Japan, South Korea, and Taiwan – that would have the greatest influence on Australian attitudes toward US END. Those countries going nuclear would also certainly have implications for how Southeast Asian countries viewed the role of nuclear weapons.⁷⁴

During the Cold War when there was a relatively small number of nuclear powers, the credibility of US END was measured in relation to only two other states – the People’s Republic of China and the Soviet Union. Such a guarantee becomes harder to make against smaller and more numerous nuclear actors where US interests are not necessarily as strongly engaged. An increase in the number of nuclear weapons states would make nuclear stability much more difficult to achieve. Simple mathematics shows that maintaining such a guarantee becomes more problematic as the number of nuclear actors within a deterrence matrix grows.⁷⁵ That matrix becomes more complex not only with the number, but the *type* of state proliferating. As Scott Sagan astutely notes, new nuclear states may come in hostile pairs and share a common border. States with unstable or radical political regimes may be more tempted to run higher risks and also use nuclear weapons to pursue revolutionary agendas

abroad. Civilian control of the military may be shaky. And then there are all the associated dangers of new nuclear weapons states that come in antagonistic pairs, including conventional arms races.⁷⁶ As proliferation of ballistic missile and nuclear technology continues,⁷⁷ Australia's conventional edge is likely to be further eroded, which will in turn make it more reliant on the United States for nuclear protection – a dependency Canberra may be less likely to accept in the future. All this goes to the heart of what we think we “know” about how deterrence works, given the youth of the nuclear age and the limited number of nuclear actors to date. That is another topic of discussion, but suffice to state here that an increased number of nuclear states, coupled with the absence of an overarching strategic context that “categorizes” states, will make it more difficult to identify who is on whose side, complicate deterrence relationships, and diminish the ability of the United States to sustain its allies' faith in its security guarantees.

Tailoring END to Allied Needs

Since 1952, European allies have been assured of the credibility of US END by the physical presence of US substrategic nuclear weapons on European soil. In the Asia-Pacific, neither a multilateral defense alliance nor bilateral nuclear-sharing arrangement exists. In Asia, “assurance” as a critical component of the credibility of US END has not been tied to a visible presence of US nuclear weapons. America's Northeast Asian allies have started to look deeply into the potential lessons to be learned from NATO's experience. Japanese and South Korean policymakers increasingly refer to “extended deterrence” rather than the more vague idea of a “nuclear umbrella.”⁷⁸ Both the US–Republic of Korea Extended Deterrence Policy Committee (EDPC) and the US–Japan Extended Deterrence Dialogue were established after the 2010 Nuclear Posture Review (NPR). The broad purpose of these bodies is to provide transparency and reassurance that US extended deterrence is credible and enduring. It is interesting that nothing like this exists for Australia, probably because it does not have a belligerent neighbor like North Korea. However, Australia's important strategic role in the Asia-Pacific region is unquestioned by US officials, and it is also concerned with deterring similar regional actors. In 2010, the United States did consult with allies during the drafting of the NPR at an unprecedented level, including with Australia. In the past, Australia has always had the “luxury” of being lumped together with the general Northeast Asian context of END. But will using nuclear weapons to “defend” Australia always be a remote possibility? According to Hugh White, former deputy secretary of strategy in the Department of Defense, “the position of the United States is that they would threaten nuclear retaliation against a country that attacked Australia with nuclear missiles.”⁷⁹

The overall tone of the 2009 white paper is one of uncertainty and hedging, and it describes an environment not unlike the one Australia faced in the 1960s – a more multipolar setting in Asia, characterized by rising powers, expanding regional military capabilities, and increasing “breakout” potential as a growing number of states become capable of producing weapons of mass destruction.⁸⁰ It stated:

Over time, there may be developments that, individually do not alter the balance of risks we face, but cumulatively change our strategic outlook for the worse.

For example, major powers with different interests from ours might steadily increase their access to facilities and operating opportunities in our approaches. . . . Developments in our wider region are critical to our security. There are likely to be tensions between the major powers of the region. . . . As other powers rise, and the primacy of the United States is increasingly tested, power relations will inevitably change. . . . Barring major setbacks, China by 2030 will become a major driver of economic activity both in the region and globally, and will have strategic influence beyond East Asia.⁸¹

One can hear echoes of voices in the 1950s and 1960s arguing that an increasingly isolated Australia must come to depend upon itself in an Asia of significant power fluctuations.

In the context of a deteriorating order, it would not be surprising to see Washington make much more explicit declarations to potential adversaries (either publicly or privately) regarding the conditions in which the United States would use nuclear weapons to defend its allies. Some South Koreans have expressed interest in the option of deploying tactical nuclear weapons on South Korean soil, arguing that it would prevent the North from “miscalculating” the benefits of future missile testing. For example, Jeon Seong-hoon has argued: “As North Korea’s nuclear capability increases, the effectiveness of the US nuclear umbrella could decrease. In that context, I believe, the redeployment of United States Forces Korea’s tactical nuclear weapons, at least on a temporary basis, could be the best option.”⁸² A South Korean military official responded: “Redeployment of air-launched tactical nuclear weapons does not violate the 1991 agreement. . . . If there were 10 tactical nuclear weapons in the South, North Korea’s nuclear threat could easily be neutralized.”⁸³ But US policymakers have dismissed that option. For example, a US State Department official has stated: “We have no plan, we have no intention to deploy US tactical or other nuclear weapons in South Korea. Moreover, we don’t believe there is any military need to do so.”⁸⁴ However, the White House coordinator for arms control and weapons of mass destruction, Gary Samore, has stated that the US government would comply if Seoul made a formal request for such reassurance. He emphasized that it was natural for the United States to accept a request made by a key ally.⁸⁵

But some within the American defense establishment express reservations about a more physical nuclear presence in East Asia. Speaking about the deployment of tactical nuclear weapons in South Korea, an Army commanding general stated: “Realistically, it’s impossible and not feasible. Politically, such a move would face severe opposition from China.”⁸⁶ A poll in March 2011 found that 68.6 percent of South Koreans would favor their country developing its own nuclear weapons capability.⁸⁷ A number of prominent public figures are also reported to be in favor of this option, including the spokeswoman and chair of the National Defense Committee and experts from research institutes and universities.⁸⁸ One of the backdrops to this is the fact that North Korea made serious military provocations toward the South in 2010, including the sinking of the South Korean Navy ship, the *Cheonan*, and North Korean artillery units bombarding Yeonpyeong Island. These developments prompted Seoul to adopt a “proactive deterrence” posture. The United States for its part has sought to make its

END commitment more credible by establishing the EDPC and US–Japan Extended Deterrence Dialogue. South Korea and the United States have even begun conducting joint exercises to shape deterrence strategies vis-à-vis North Korea and other regional actors.⁸⁹

For Australia, Japan, and South Korea, one of the essential pillars of any credible American guarantee is maintaining nuclear “superiority” (the definition of which is still under debate). Some South Koreans have expressed additional concern over the increasing “conventionalization” of America’s military presence, as the foundation of its primacy in the region. Some analysts argue that greater reliance on conventional missiles and missile defense would weaken US deterrence, and consequently, US extended deterrence.⁹⁰ For example, a study in 2008 noted: “The worst-case scenario . . . is that increase in Chinese capabilities and decrease in US capabilities may lead the United States to conclude a bilateral arms control agreement with Beijing that endorses protection of a Chinese limited nuclear strike capability against the United States, with a decoupling effect that would be devastating for Japan.”⁹¹ But conventional superiority goes hand in hand with that nuclear edge. As a former Japanese Ministry of Foreign Affairs official has argued, “the conventional superiority advantage is critical, because it obviates the whole debate about whether or not Washington would ‘sacrifice Los Angeles to save Tokyo’ in a nuclear exchange.”⁹²

A US Congressional Commission has also voiced opinions on this issue, stating for example that “the United States (and Russia) should also retain a large enough force of nuclear weapons that China is not tempted to try to reach a posture of strategic equivalency with the United States or of strategic supremacy in the Asian theatre.”⁹³ That superiority is not limited to the nuclear field either. This implies that allies will be highly reluctant to accept an extended deterrence package that minimizes the role of most aspects of the US nuclear arsenal. As a report in 2009 stated, “should the strategic situation in East Asia further deteriorate, Japan and the United States might be forced to consider additional measures to assure the reliability of the US extended deterrents.”⁹⁴ This might entail introducing nuclear weapons onto Japanese soil. Some analysts suggest that Japan could host 100 to 200 nuclear-armed cruise missiles controlled by the United States.⁹⁵

Australia has not been as interested in the operational aspects of US END. That being said, research analysts are once again looking more seriously into the issue.⁹⁶ There have been few public statements from government officials in Australia, but a number of leading analysts raise the issue from time to time. Hugh White has questioned American willingness to sacrifice US assets for the protection of one of its allies. He has said: “This is the core question for the future of END: what is so important to Americans today that they are willing to suffer nuclear attack to defend it? . . . Against any power capable of delivering nuclear weapons onto American soil, END is an anachronism. Neither America nor its allies yet accept this. The sooner they do the better for everyone.”⁹⁷ Others are slightly more sympathetic, arguing that END is already there once you are aligned with a nuclear superpower.⁹⁸ That argument, however, is partly based on the assumption that US and allied interests will always be the same.

In the not-so-distant future, the United States, Japan, South Korea, and Australia might not face the same conventional and nuclear threats. The transformations in Asia are likely to challenge the dictum in Defense White Papers that any nuclear attack against Australia would probably not occur outside the context of an armed attack against America. END has never really been tested for Australia, but there are indications to show that policymakers want extended deterrence more generally to be strengthened. Australia seems to be moving from a complexly minimal recipient of extended deterrence (implicit declaratory assurances of END) to the middle of the spectrum, where the United States deploys conventional forces on the recipient's territory. In November 2011, US President Barack Obama announced the deployment of up to 2,500 Marines in Darwin from 2012 to 2017. This includes increased access by the US Air Force to Australian bombing ranges and training facilities in the Northern Territory. He said: "As President, I have therefore made a deliberate and strategic decision. As a pacific nation, the United States will play a larger and long-term role in shaping this region and its future, by upholding core principles and in close partnership with our allies and friends."⁹⁹ He also said: "We are two Pacific nations and with my visit to the region I am making it clear that the United States is stepping up its commitment to the entire Asia-Pacific."¹⁰⁰ Part of Washington's efforts to demonstrate its commitment to allied defense includes BMD cooperation. Japan already has a layered missile defense system that includes *Aegis* BMD ships with SM-3 interceptors and land-based PAC-3 fire units, and US and Japanese forces regularly train together. Australia participates in the Trilateral Missile Defense Forum with Japan and partakes in "Nimble Titan" missile defense exercises. Canberra is also acquiring ships that would be compatible with the US *Aegis* BMD systems. The United States maintains heavy bombers and fighter bombers with nuclear capability that could be forward deployed, in addition to regularly deploying B-2 and B-52 strategic bombers to Guam.

It would make sense for Australia also to engage in a formalized bilateral or multilateral nuclear policy dialogue, if not a nuclear planning group, with Washington. To the extent that China develops further antiaccess/area denial capabilities such as antiship cruise missiles or antiship ballistic missiles that deny US forces access to allies and blunt the operations of forces that do deploy forward, the US nuclear arsenal may become even more important in reassuring allies. As a result of its increasing military prowess (which does not necessarily imply the oft-banded idea that the United States is in decline), China may become more adventurous vis-à-vis taking Taiwan by force. US credibility would be severely damaged if it did not respond militarily to such a provocation. In that context, the use of nuclear weapons becomes increasingly conceivable.¹⁰¹ Given that Australia would probably be asked to provide military assistance in any number of contingencies, it would be highly desirable for Canberra to know in advance the circumstances in which US nuclear forces would be used against any number of Chinese targets, in addition to general US contingency planning. This would allow policymakers to plan military forces, crisis management, and civil defense programs accordingly. Washington was less than forthcoming on Australian requests for information on nuclear war planning in the 1960s, but this time, the prospect of major power war, involving *several* great powers (more than two of which are nuclear armed), is much closer to home.

An Asia-Pacific with more nuclear actors is not the most ideal world. There are several major dangers inherent in a more multipolar nuclear world. As Scott Sagan notes,¹⁰² command, control, and communications infrastructure (C3I) may be especially poor in newly emerging nuclear weapon states. A robust C3I system is an essential component of any credible deterrent posture. It is far from clear how developed or how strong these systems are in Pakistan or North Korea, to say nothing of other candidates for nuclear proliferation in the future who will probably have an antagonistic relationship with their neighbors. This will probably make them more prone to nationalistic posturing, which would increase the likelihood of a crisis developing. This in turn would heighten the dangers of misperceptions and miscalculations both in “peacetime” and during a crisis, which would lead to a much faster crisis escalation that would be difficult to control. A contracted strategic geography would also lower the threshold for the use of both tactical and strategic nuclear weapons. Furthermore, these states with different historical experiences of war, technology, and norms would have a different appreciation of the sheer magnitude of the destructive power that nuclear weapons offer. Indeed, they might have different norms regarding the use of force and, indeed, nuclear bombs. A more highly proliferated world, therefore, is not necessarily desirable. However, just because it is not the preferred outcome does not mean we should not be seriously thinking about how to manage this new environment.¹⁰³

Policymakers in Canberra have always been careful with statements about nuclear weapons policy, reflecting the awkward tango in promoting both END and arms control and disarmament goals.¹⁰⁴ However, it seems we are entering a new period of nuclear disorder where the conditions underpinning the strength of the NPT and nonproliferation regime are increasingly being eroded. In that context, Canberra may also have to dramatically rethink its “traditional” approach to alliance management, and indeed all the other threads of what is a glaring absence of grand strategy. Australia does not *currently* face any direct or immediate conventional or nuclear threats, but that situation could change. If the United States is serious about preventing nuclear proliferation in the Asia-Pacific, it would not be unrealistic to think about Australia becoming a more maximalist consumer of END, or indeed seriously reconsidering the possibility of wielding its own nuclear deterrent.

NOTES

1. Paul Bracken, *Fire in the East: The Rise of Asian Military Power and the Second Nuclear Age* (New York: Harper Collins, 1999), p. 96.
2. Bracken, *Fire in the East*; Muthiah Alagappa, ed., *The Long Shadow: Nuclear Weapons and Security in 21st Century Asia* (Stanford, CA: Stanford University Press, 2008); Brad Roberts, *East Asia's Nuclear Future: A Long-Term View of Threat Reduction* (Washington, DC: Institute for Defense Analyses, 2001); Brad Roberts, *Asia's Major Powers and the Emerging Challenges to Nuclear Stability among Them* (Washington, DC: Institute for Defense Analyses, 2009).
3. For an example, see David Yost, “US Extended Deterrence in NATO and North-East Asia,” *Perspectives on Extended Deterrence* No. 3 (2010), pp. 15–48.
4. Colin S. Gray, *The Second Nuclear Age* (Boulder, CO: Lynne Rienner Publishers Inc., 1999), p. 127.
5. William Walker, “Nuclear Order and Disorder,” *International Affairs* Vol. 76, No. 4 (2000), p. 706.
6. US Department of Defense, *Deterrence*, available at <http://www.dtic.mil/doctrine/jel/doddict/data/d/3763.html>
7. Robert J. Art, “The Fungibility of Force,” in Robert J. Art and Kenneth N. Waltz, eds., *The Use of Force: Military Power and International Politics*, 5th ed. (Boulder, CO: Rowman and Littleman, 1999).

8. Admiral A. T. Mahan, quoted in Bernard Brodie, *Strategy in the Missile Age*, 1st ed. (Princeton, NJ: Princeton University Press, 1959), p. 398.
9. See, for example, the statement made by the Department of Defense in 1994: "... the use of nuclear weapons remains possible. ... Although it is hard to envisage the circumstances in which Australia could be threatened by nuclear weapons, we cannot rule out that possibility. We will continue to rely on the extended deterrence of the US nuclear capability to deter any nuclear threat or attack on Australia." Department of Defense, *Defending Australia: Defense White Paper 1994* (Canberra: Australian Government Publishing Service, 1994), p. 96.
10. Walter Pincus, "Poland Won't Lobby Obama on Missile Defense," *Washington Post*, November 20, 2008.
11. Thomas C. Schelling, *Arms and Influence* (New Haven, CT: Yale University Press, 1966), p. 36.
12. For more discussion on this concept, see Ron Huiskens, *North East Asia: A Nuclear Gordian Knot?*, paper commissioned by the International Commission on Nuclear Nonproliferation and Disarmament, Annexe, 2009).
13. For a more updated history of Australian thinking about nuclear weapons strategy, see Christine Leah and Rod Lyon, "Three Visions of the Bomb: Australian Thinking about Nuclear Weapons and Strategy," *Australian Journal of International Affairs* Vol. 64, No. 4 (August 2010), pp. 449–477. For a comprehensive review of the history of efforts, assessments, bureaucratic processes, and debates on the nuclear option in Australia, see Jim Walsh, "Surprise Down Under: The Secret History of Australia's Nuclear Ambitions," *The Nonproliferation Review* (Fall 1997); Richard Broinowski, *Fact or Fission?: The Truth About Australia's Nuclear Ambitions* (Melbourne: Scribe Publications, 2003); Wayne Reynolds, *Australia's Bid for the Atomic Bomb* (Melbourne: Melbourne University Press, 2000); Wayne Reynolds, "Rethinking the Joint Project: Australia's Bid for Nuclear Weapons, 1945–1960," *The Historical Journal* Vol. 41, No. 3 (1998), pp. 853–873.
14. Fears about British military withdrawal in this context were buttressed, as then Secretary of Defense Sir Arthur Tange expressed, by a lack of faith in allied security guarantees. See Reynolds, *Australia's Bid for the Atomic Bomb*, p. 178. No specifications were made regarding the use of British nuclear weapons to deter aggression against Australia (1956 Strategic Basis), and no plans were made for Southeast Asia in the event of global nuclear war.
15. 1962 Strategic Basis. Strategic Basis papers were guidance documents prepared by the defense establishment and endorsed by the defense chiefs of staff or defense committees. They would outline the environment, challenges, and opportunities informing Australian defense policy and provide recommendations to the government of the day.
16. 1953 Strategic Basis; 1956 Strategic Basis; 1962 Strategic Basis; 1963 Strategic Basis; and 1964 Strategic Basis. In 1953, Minister for External Affairs Richard Casey identified "communist imperialism based on the mainland of China" as the primary threat to regional peace and stability. Cited in Neville Meaney, *Australia and the World: A Documentary History from the 1870s to the 1970s* (Melbourne: Longman Cheshire, 1985), p. 593. For an overview of Australia's fears of China, see, for example, Alan Watt, *The Evolution of Australian Foreign Policy, 1938–1965* (Cambridge: Cambridge University Press, 1967), pp. 247–248; Alan Dupont, *Australia's Threat Perceptions: A Search for Security* (Canberra, Australia: Strategic and Defense Studies Center, Australian National University, 1991), pp. 58–59.
17. British and Australian officials agreed that Australia should have tactical nuclear weapons as a possible deterrent against a potentially hostile China, especially if Beijing made moves into Malaya. Report, *UK Defense Policy in SEA, Prime Minister's London Discussions* (1957), National Australian Archives (NAA), CA 1401, Series A1209/23, CS 57/5380. The British would stress to Canberra that instead of relying on British military power, Australia should instead rely on the United States to deter Chinese aggression.
18. Joint Intelligence Committee report, NAA, CA 46, Series A816/31, CS 14/301/713. 1962 Strategic Basis.
19. Cablegram from Tange to Australian Embassy in Washington, DC, June 16, 1955, NAA, CA 2950, Series A4968/2, CS 25/16/18.
20. Letter from McBride to Menzies, January 7, 1955, NAA, CA 1401, Series A1209/23, CS 57/5729. Many believed that "Australia could be best defended by nuclear weapons and that conventional forces could be cut." See also Memorandum of discussion with Mark Oliphant, June 27, 1955, NAA, CA 18, Series A1838/1, CS 720/3. Ernest Titterton, professor of nuclear physics at the Australian National University, was another strong advocate of Australia getting the bomb. See Ernest Titterton, *Facing the Atomic Future* (Melbourne: F. W. Cheshire, 1956), p. 135.
21. John Gorton, *Commonwealth of Australia Parliamentary Debates* (Senate), Vol. 10 (May 8, 1967), pp. 608–609.
22. Memo from H. D. Anderson, defense liaison branch to Mr. Heydon, external affairs, "Australian Development of Nuclear Weapons and Australian Access to Information on Nuclear Weapons," July 8, 1959, NAA, CA 5987, Series A1838/269, TS680-10-1.
23. The need for this distinction arises out of the differences in strategic and military use of nuclear weapons. As such, the norm against the *possession* of nuclear weapons as tools of coercion is distinguishable from the norm against the *use* of these weapons as conventional war-fighting tools.
24. This does not mean that senior officials in the United States did not (and do not) seriously contemplate the use of nuclear weapons. Declassified documents show the opposite to be true. See, for example, Desmond

- Ball, "US Strategic Forces: How Would They Be Used?" *International Security* Vol. 7, No. 3 (1982–83), pp. 31–61; Anthony Brown, ed., *Operation: World War III: The Secret American Plan 'Dropshot' for War with the Soviet Union, 1957* (London: Arms and Armour Press, 1979).
25. A number of elements contributed to this perception. One important factor was US testing of its own nuclear devices. David Holloway, *Stalin and the Bomb: The Soviet Union and Atomic Energy, 1939–1956* (New Haven, CT: Yale University Press, 1994), p. 162. Another was the nature of NATO war planning in the 1950s, which inspired the Australian defense establishment to plan in the same manner. Note to James Plimsoll from Defense Liaison Branch, January 12, 1955, NAA, CA 5987, Series A1838/269, CS TS691/1. It was noted that "nuclear weapons . . . are being increasingly introduced into the armament of the great powers for employment in all aspects of offensive and defensive warfare . . ."; Memorandum by Defense Committee, "Nuclear Weapons for the Australian Forces," February 6, 1958, NAA, CA 1401, Series A1209/80 CS 58/5155, p. 3. The belief that nuclear weapons were usable was reflected in the 1956 Strategic Basis, which stipulated that the defense of Southeast Asia was actually *based* on the possibility of using nuclear weapons.
 26. 1956 Strategic Basis. See, for example, paragraphs 25–41; 1957 Strategic basis, paragraph 4.
 27. As early as 1955, the Defense Committee estimated that China might soon acquire nuclear weapons. Defense Committee minute, January 13, 1955, NAA, CA46, Series A2031, CS 8/1955.
 28. Moreover, even as late as the second half of the 1960s, the government was expressing serious reservations about the effectiveness of any future regional agreement for the limitation of the spread of nuclear weapons. See Anthony Ross and Peter King, *Australia and Nuclear Weapons: The Case for a Non-Nuclear Region in South East Asia* (Sydney: Sydney University Press, 1966), p. 93.
 29. This was also a factor driving the perception that nuclear weapons might spread in the region. Memorandum by the Defense Committee, "Nuclear Weapons for the Australian Forces," February 6, 1958, NAA, CA1401, Series A1209/80 58/5155, p. 3.
 30. "Nuclear Weapons for the Australian Forces," p. 3.
 31. Note by Malcolm Booker, "Thermonuclear Isolation," August 6, 1956, NAA, CA 5987, Series A1838/269, CS TS852/10/4/2.
 32. 1956 Strategic Basis.
 33. Comments, Attachment to Joint Planning Committee Agendum no. 88/63, "SEATO Military Planning – Use of Nuclear Weapons – Study of Circumstances under which Nuclear Weapons Might be Used in Pursuit of SEATO Plans," NAA, Series A1945, CS 249/7/50. In this same file, an outward from the Australian mission to the United Nations to the Australian Embassy in Washington, DC, noted remarks by Dean Rusk that although the United States wanted to avoid nuclear war, the credibility of the deterrent "required that the enemy accept the possibility that the US would use such weapons." The cablegram also noted, as an example of a threshold for use of nuclear weapons, that China should not be allowed to destroy Saigon and Bangkok. Sentiments about SEATO needing a nuclear component to remain credible are also expressed in the 1962 Strategic Basis. "The present military strength of SEATO nations, including their nuclear capability, would be adequate to defend non-communist South East Asia from any scale of attack, but only provided that a prompt political decision would enable nuclear weapons to be used with timeliness and effect. The conventional military strength immediately available in South East Asia to the SEATO member nations would be insufficient to meet more than a limited scale of communist attack, and even then prompt re-enforcement of that conventional military strength would be essential. The weakness of the allied military position in South East Asia would therefore lie in the degree of dependence placed on nuclear capability rather than on conventional forces." 1962 Strategic Basis, p. 11.
 34. Comments, Attachment to Joint Planning Committee Agendum no. 88/63, "SEATO Military Planning – Use of Nuclear Weapons – Study of Circumstances under which Nuclear Weapons Might be Used in Pursuit of SEATO Plans," NAA, Series A1945, CS 249/7/50.
 35. Review of ANZAM planning by US Joint Chiefs of Staff. File No. 4 from Mr. Casey's discussions in Washington at ANZUS Council meeting, NAA, CA 320, Series A5954, CS1465/1 (1955).
 36. This was also the subject of discussion between Menzies and Acheson. Report, *Linking of ANZAM (Australia New Zealand and Malaya) Planning with United States Planning, The Relation of the Military Machinery to Other Established Regional Machinery, ANZUS Council: Background Information on NATO*, July 29, 1952; *ANZUS Council, 1st Meeting, Honolulu, August 1952 – Brief for Australian Delegation*, NAA, CA 18, Series A10576, CS 2.
 37. *ANZUS – Council Papers for the Minister (South East Asia, Indonesia, West New Guinea, Disarmament, Nuclear Weapons)*, NAA, CA 18, Series A10299, CS A16.
 38. Review of ANZAM planning by US Joint Chiefs of Staff, File No. 4 from Mr. Casey's discussions in Washington at ANZUS Council meeting, 1955, NAA, CA46, Series A5954, CS1465/1.
 39. Earlier on, the 1962 Strategic Basis would express similar sentiments.
 40. Ad Hoc Working Party submission, Part III, 1962 Strategic Basis.
 41. The National Security Archive, "'The Impulse towards a Safer World': 40th Anniversary of the Nuclear Nonproliferation Treaty," cable from the Secretary to the Acting Secretary, American Embassy in Canberra to Washington, April 6, 1968. Available at <http://www.gwu.edu/~nsarchiv/nukevault/ebb253/index.htm>

42. The National Security Archive, "Consultations with Australians on NPT and Status of Interpretations on Articles I and II," memorandum of Conversation, US Arms Control and Disarmament Agency, April 24, 1968. Available at <http://www.gwu.edu/~nsarchiv/nukevault/ebb253/index.htm>
43. Kim Christian Beazley, *Commonwealth of Australia Parliamentary Debates* (House of Representatives) Vol. 63, No. 2180 (May 22, 1969).
44. Inward Cablegram from Australian delegation to the United Nations, New York, "Discussions with Fisher – Deputy Director, Arms Control Agency," November 30, 1967, NAA, CA 5987, Series A1838, CS TS919/10/5. Part 1.
45. Australian Department of Defense, *Defending Australia in the Asia Pacific Century: Force 2030* (Canberra: Australian Government Publishing Service, 2009), p. 50.
46. Note, for example, the statement made by Prime Minister Bob Hawke: "The risk of nuclear war [is] remote and improbable, provided effective deterrence is maintained. Australians cannot claim the full protection of that deterrence without being willing to make some contribution to its effectiveness." R. J. Hawke, *Ministerial Statement: Arms Control and Disarmament, Commonwealth of Australia Parliamentary Debates* (House of Representatives; June 6, 1984), p. 2987.
47. See, for example, Robert Mozley and Robert Cornejo, "Why Sukarno Sought the Bomb: Indonesian Nuclear Aspirations in the Mid-1960s," *The Nonproliferation Review* (Summer 2000).
48. The 1971 Strategic Basis, for example, concluded that Indonesia had limited offensive capabilities adequate for overtly threatening Australia, and was unlikely to develop the capability or indeed the intention to launch a "serious and sustained" offensive against Australia.
49. Norms here are referred to as collective understandings about the proper behavior of actors within a system. See Jeffrey Lego, "Which Norms Matter? Revisiting the 'Failure' of Internationalism," *International Organization* Vol. 51, No. 1 (1997), p. 33; Abram Chayes and Antonia Chayes, *The New Sovereignty: Compliance with International Regulatory Agreements* (Cambridge, MA: Harvard University Press, 1995), p. 113.
50. Brian Toohey and Marian Wilkinson, *The Book of Leaks: Exposes in Defense of the Public's Right to Know* (Sydney: Angus & Robertson, 1987), p. 248.
51. A cablegram from the Department of External Affairs states, "At the time of our signature, we did not consider that the treaty had attracted sufficient signatures and ratifications to make it 'effective.' However, we did believe that the then recent signatures of Western Germany and Japan made the treaty more effective, and hoped that our own signature would also contribute in this direction." Foreign Affairs file no. 919/10/5, 1972, NAA, CA 5987, Series A1838, CS 919/10/5, Part 25.
52. Herman Kahn, for instance, argued that the inhibition revolving around the use of tactical nuclear weapons was a factor in explaining nuclear nonproliferation. See notes taken from speech given by Herman Kahn, Office of the High Commissioner for Australia, "The Strategic Nuclear Balance, Nuclear Weapons Development and Use – General," August 4, 1967, Memorandum no. 892, NAA, CA5987, Series A1838 (A1838/269), CS TS681/6 Part 6.
53. This conclusion was even explicitly acknowledged by a 1981 Joint Committee on Foreign Affairs and Defense. See *Threats to Australia's Security: Their Nature and Probability* (Canberra: Australian Government Publishing Service, 1981), pp. 18, 74, 133.
54. A statement by Malcolm Fraser in 1969 (who later became prime minister in 1975) neatly encapsulated the government's response to the question of the limits of US END and the security of Australia: "I think there may be another assumption underlying your question namely that the US would maintain its own security ultimately, and that it wouldn't ultimately affect the United Security if the security, independence of other free world countries were threatened." He also argued against defining the parameters of END because establishing such boundaries would ultimately weaken the guarantee in the first place. Transcript of interview between Tony Charlton and the Hon. Malcolm Fraser, M.P., minister for defense, GTV9, December 2, 1969, NAA, CA5987, Series A1838 (A1838/2), CS 919/10/5, Part 30.
55. Erich Weede, "Some (Western) Dilemmas in Managing Extended Deterrence," *Journal of Peace Research* Vol. 22, No. 4 (1985), pp. 223–238.
56. Walker, "Nuclear Order and Disorder," pp. 708–709.
57. See, for example, Keith Payne, *Deterrence in the Second Nuclear Age* (Lexington, KY: University Press of Kentucky, 1996); John Lewis Gaddis, *We Now Know: Rethinking Cold War History* (Oxford, UK: Clarendon Press, 1997); Richard Ned Lebow and Janice Gross Stein, "Rational Deterrence Theory: I Think, Therefore I Deter," *World Politics* Vol. 41, No. 2 (January 1989), pp. 208–224; Rose McDermott, "The Feeling of Rationality: The Meaning of Neuroscientific Advances for Political Science," *Perspectives on Politics* Vol. 2, No. 4 (2004), pp. 253–264.
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