

The Control of Weapons of Mass Destruction

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✓ Reader's Guide

This chapter charts the shift that took place during the cold war from disarmament to arms control, and the shift in relative importance that has taken place in the post-cold war period from arms control to more forcible means to tackle proliferation. The chapter shows how concerns emerged in the 1980s and 1990s about the continuing utility of arms control as an effective means of dealing with weapons of mass destruction and how new ideas began to take shape, first in the Clinton administration, and then in the Bush administration, about more militarily driven approaches, associated with counterproliferation. The chapter ends with a discussion of counterproliferation and an evaluation of its ability to control weapons of mass destruction today.

Introduction

Establishing controls over weapons or delivery systems is a difficult and painstaking process. Despite this, arms control has a long history, and at least one writer has traced a lineage back to ancient times (Croft 1996). As an academic subject, arms control is a more recent arrival: the post-1945 period saw a new but burgeoning literature that coincided with a configuration of global politics that was doubly anomalous. First, it was bipolar in that it was dominated by two superpowers and therefore reflected a new structure of international power, and, second, the two superpowers were extensively armed with weapons of unprecedented destructive capacity.

A decade or so after the onset of the cold war in 1947, academic analysis and international policy began to converge, as the prospect of using arms control to stabilize the superpower relationship began to find favour. The hair-raising experience of the Cuban Missile Crisis only served to drive home that the relationship could be dangerously unstable and could not be relied upon to run itself. In a wider context, the lesson of the twentieth century seemed to be that warfare would almost always escalate upwards to the most destructive level, and increasingly it was not only the superpowers that possessed the most destructive technology. The spread of weapons of mass destruction (WMD), a term coined and defined by United Nations in 1948, became a key concern.

Consequently, the latter half of the twentieth century saw the establishment of a network of WMD control regimes that survives to this day. This network comprised multilateral, agreements on WMD and a set of bilateral arrangements between the superpowers. The former were *disarmament agreements* while the latter were *arms control agreements*. That is, the multilateral agreements stigmatized weapons entirely, while the superpower arrangements controlled certain *types* of nuclear weapons, especially their associated delivery systems.

As the century drew to a close, the superpower confrontation ended, but the global problem of WMD proliferation remained, and began to grow as so-called 'rogue states' emerged as an important security issue. The increasing salience of this issue was accompanied by an increasing concern that the network of disarmament regimes might be losing their effectiveness. In turn, that concern, accompanied by the slow realization that the end of the cold war offered new possibilities for action as well as new threats, helped produce an interest in how the military force might be used to offset or even eliminate the menace of WMD.

This chapter charts these developments, and aims to help students understand the underlying principles behind superpower arms control and the global WMD regimes, and the criticisms levelled at them. It then examines the major changes that have occurred in the post-cold war era and the new approaches associated with controlling weapons of mass destruction. Particular attention is given to the emergence of strategic responses, in which military force is deployed as a tool against proliferation.

Arms Control during the Cold War

Following the arms races and the slide to war in the late 1930s, disillusionment with disarmament, as a way to achieve peace and security, characterized official attitudes the immediate aftermath of the Second World War. The limited attempts at arms control or disarmament that were made by the two emerging superpowers in the new cold war that developed only helped to reinforce the sceptical judgement of the day. Neither side was prepared to take risks with their own security (as they perceived it), especially when it came to weapons which could be a decisive influence in a future conflict. Far from easing the growing tension between the two superpowers in the late 1940s, the modest international control negotiations that were undertaken only exacerbated mistrust and heightened hostility.

By the mid-1950s, the lack of success in disarmament negotiations and growing awareness of the dangers of nuclear war produced a change in approach to arms control. Efforts to negotiate a comprehensive disarmament treaty were abandoned in favour of what were known as 'partial measures', such as the 1955 'Open Skies' agreement and the test ban negotiations. Arms control was increasingly viewed as dealing with specific problems created by the cold war arms race.

This move towards greater flexibility at the policy level led to what has been described as 'new thinking' within the defence community. Although the ideas that emerged were not as original as the proponents sometimes claimed, a new literature began to appear in the late 1950s developing the theory of arms control. In contrast to the literature on disarmament, the writing on arms control questioned the feasibility of general and comprehensive disarmament and argued that greater international stability could be achieved by managing military competition. Attention was focused on the mutual interest that existed between the superpower adversaries to avoid nuclear conflagration.

These new arms control theorists intended to work within the prevailing system of nuclear deterrence rather than to try to abolish it. Arms control was designed to 'strengthen the operation of the balance of military power against the disruptive effects of the arms dynamic, especially arms competition, arms racing and technological developments that tend to make nuclear and non-nuclear deterrence more difficult' (Buzan and Herring 1998: 212). Its essential aim was to reduce the likelihood and costs of war and to reduce expenditures on both nuclear and conventional arsenals.

The October 1962 Cuban Missile Crisis gave additional impetus to the arms control project. As the superpowers edged back from the nuclear abyss both realized, more than ever before, that they had a mutual interest in effective crisis management. The crises highlighted the dangers of inadvertent escalation and miscalculation during periods of military confrontation and intense political instability. In June 1963, the United States and the Soviet Union signed a 'hot line' agreement to provide a secure, official, and dependable channel of communication between Moscow and Washington.

The Cuban Missile Crisis also highlighted the issue of nuclear testing. Reflecting the less ambitious agenda of the new arms control school, the United States, Britain, and the Soviet Union agreed on a Partial Test Ban Treaty in August 1963. The treaty prohibited all nuclear tests in the atmosphere, but allowed tests to continue underground. There was also an escape clause inserted in the treaty, which allowed testing to be resumed after a period of three

BOX 11.1

Definitions of Arms Control

While the terms 'arms control' and 'disarmament' are sometimes used interchangeably, they reflect very different views about international politics. Hedley Bull, in his book *Control of the Arms Race*, defines disarmament as 'the reduction or abolition of armaments. It may be unilateral or multilateral; general or local; comprehensive or partial; controlled or uncontrolled.' Arms control, on the other hand, according to Bull, involves 'restraint internationally exercised upon armaments policy, whether in respect of the level of armaments, their character, deployment or use'.

John Spanier and Joseph Noguee in their study of *The Politics of Disarmament* provide a similar, although more specific definition of the differences between arms control and disarmament. In their formulation, 'while disarmament refers to the complete abolition or partial reduction of the human and material resources of war, arms control deals with the restraints to be imposed upon the use of nuclear weapons' (Spanier and Noguee 1962: 15).

months' notice. This escape clause was designed to protect signatories who felt threatened by future technological advances or cheating. Significantly, neither French nor Chinese officials (who tested nuclear weapons in 1960 and 1964 respectively) were prepared to accede to the treaty because they believed it benefited more advanced nuclear states.

Limited as the treaty was, it encouraged further arms control initiatives. Between 1963 and 1968, the superpowers focused on their mutual interest in trying to negotiate a wider agreement to prohibit further nuclear proliferation. This culminated in the Non-Proliferation Treaty, which was signed in July 1968. Once again China and France refused to sign, and a number of other states rejected the treaty on the grounds that it froze the nuclear status quo and incorporated only a limited commitment by the nuclear powers to give up their own weapons.

The nuclear explosion by India in 1974, ostensibly for peaceful purposes, highlighted the weaknesses of the treaty. Despite this, the treaty provided some limited, but not unimportant benefits. It became the central plank of the nascent nonproliferation regime, which helped restrain the pace of further nuclear proliferation. It also emphasized the opportunities for cooperation between the super powers, during rocky times in their relationship.

By the mid-1970s, the superpowers also recognized their mutual interest in trying to control the use of pathogens and toxins as weapons of mass destruction. The Biological Weapons Convention (BWC), which entered into force in 1975, banned the development, production, and stockpiling of biological and toxin weapons. It also required states to destroy 'the agents, toxins and weapons equipment and means of delivery in the possession of the parties' to the treaty. The main problem with the convention, however, was that there was no provision for verification of compliance.

Between 1969 and 1972, the superpowers focused for the first time on the difficult task of limiting strategic armaments. In May 1972, the Strategic Arms Limitation Treaty (SALT) I was signed covering a number of different areas, including limitations on ballistic missile defence (the now-defunct Anti-Ballistic Missile Treaty). The aim of SALT I was

BOX 11.2

What are Weapons of Mass Destruction?

In the run-up to the 2002 war in Iraq, the term 'weapons of mass destruction' (WMD) took on a public profile that it had hitherto lacked, and a term that had previously been used largely by specialists (scientists, analysts, government officials, and activists) was now part of political rhetoric. Buzan and Herring (1998) define WMD as 'weapons of which small numbers can destroy life and/or inanimate objects on a vast scale very quickly', but note that this could conceivably be applied to weapons (such as fuel-air explosives) that are normally regarded as 'conventional' weapons.

The term does in fact have an internationally accepted definition, one formulated by the United Nations Commission for Conventional Armaments in 1948. This defined WMD as: 'Atomic explosive weapons, radioactive material weapons, lethal chemical and biological weapons, and any weapons developed in the future which have characteristics comparable in destructive effect to those of the atomic bomb or other weapons mentioned above.'

This definition formed the basis for subsequent international agreements on controlling WMD. Nonetheless, the term should be used with more care than is usually the case in political rhetoric, since by its nature it conflates very different forms of weapon. Today, it can be regarded as a blanket term for nuclear and radiological, chemical, and biological weapons.

Nuclear weapons work by nuclear fission using plutonium or uranium (fission or atom bombs) or by nuclear fusion (thermonuclear or hydrogen bombs). There are seven known nuclear-armed states in the world (Britain, China, France, India, Pakistan, Russia, and the United States). Israel neither acknowledges nor denies it has nuclear weapons but is widely believed to have them. North Korea is believed to possess a small and rudimentary capability, and Iran may be pursuing such a programme.

Radiological weapons are sometimes referred to as 'dirty bombs', and would work by surrounding conventional explosive with radioactive material. They do not involve any nuclear explosion, but rather the large-scale dispersal of radioactive toxic materials, thereby inflicting doses of radiation on nearby victims of the explosion. These weapons are widely associated with terrorists and other non-state actors.

Biological weapons are bacteria, viruses, or biological toxins that are intentionally disseminated in order to infect or poison individuals, such as troops or civilians. Examples of biological substances used in weapons include anthrax, smallpox, and ricin. Similarly, *chemical weapons* use the toxic effects of chemical substances to cause death, permanent harm or incapacity to human beings. Examples include phosgene, mustard gas, and VX.

to 'cap' missile deployments at specific levels to prevent a future unrestricted arms race, which would lead to greater international instability. Despite the unprecedented nature of the agreement, it quickly became the subject of criticism, both within the United States, and in the arms control community itself. According to domestic critics of SALT I, it froze the numerical superiority of the Soviet Union while at the same time it allowed the Soviet Union to compete in those qualitative areas where the United States was in the lead. This failure to address the all-important qualitative issues (including missile accuracy and the placement of multiple warheads on ballistic missiles) was particularly disappointing even for many arms control supporters, who were concerned that the arms race had simply been moved from a quantitative to a qualitative arena.

Given the shortcomings in SALT I, it was not long before new negotiations began in Geneva. Progress, however, proved to be slow. The agreement eventually reached (SALT II) followed closely guidelines reached at Vladivostok five years earlier. The ceiling for strategic delivery vehicles were set at 2,400 (to be reduced to 2,250 by 1981), 1,320 for ballistic missiles armed with Multiple Independently Targetable Re-entry Vehicles (MIRV) and strategic bombers, and 1,200 for MIRVed ballistic missiles alone.

Almost immediately, however, the arms control process was derailed by the Soviet invasion of Afghanistan and in January 1980 President Carter asked the Senate to delay the ratification of the treaty. Although the SALT II remained unratified in 1982 both the United States and the Soviet Union continued to abide by the limits of the treaty. Despite this tacit agreement, however, the following three years were characterized by frequent accusations by the Reagan administration that the Soviet Union was in breach of the agreement.

KEY POINTS

- The late 1940s and early 1950s saw a growing disillusionment with disarmament in dealing with the problems posed by weapons of mass destruction.
- The late 1950s brought 'new thinking' and the development of the theory of arms control.
- The aim of arms control was to make the prevailing system work more effectively.
- The Cuban Missile Crisis ushered in a new 'golden age' of arms control agreements.
- By the late 1970s, however, arms control as an approach to peace and security faced increasing problems.

Arms Control and the 'Long Peace'

The question of whether arms control was a significant contributor to the 'Long Peace'¹ during the cold war is a matter of keen debate. For those who think it was, the fact that the cold war did not turn 'hot' is evidence that the arms control agreements reached, especially after the Cuban missile crisis, helped prevent the outbreak of war between the superpowers. The Hot-line agreement, the Partial Test Ban Treaty, the Non-Proliferation Treaty, and the SALT I and SALT II Treaties all contributed to a recognition that the superpowers had a vital mutual interest in avoiding nuclear war. According to this view, constant technological changes and mutual suspicions inherent in a system of international anarchy helped to encourage arms competition which, in turn, posed dangers to international security. By addressing the instabilities of the military balance of power supporters argue that arms control significantly contributed to the absence of great power conflict during the cold war. Even those negotiations that did not succeed, such as the Mutual Balanced Force Reduction (MBFR) Talks, are often seen as important events that contributed to greater understanding between adversaries. Viewed from this perspective, arms control has been the 'high road to peace'.

BOX 11.3

International Regimes on WMD

The three key categories of WMD (nuclear, biological, chemical), plus the missile delivery systems usually associated with them, each have an international regime devoted to their control. They are in various stages of development (some might add disarray) and they have not advanced or progressed at an even pace.

The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) entered into force on 5 March 1970 and currently has 189 member states. Only India, Israel, North Korea, and Pakistan remain outside it. The NPT's signatory states are divided into two categories: nuclear weapon states (NWS) and non-nuclear weapon states (NNWS). Under the terms of the treaty the latter agree to forego nuclear weapons entirely, while the former (the five states—Britain, China, France, Russia and the United States—that possessed nuclear weapons at the signing of the treaty) are committed to 'pursue negotiations in good faith' on nuclear disarmament. This stipulation, set out in Article 6 of the Treaty, has proved recurrently controversial, since none of the five NWS has ever looked likely to seriously move towards such an end.

The other 'devil's bargain' in the NPT is drawn from Article 4, which notes the 'inalienable right' of the NNWS to develop civil nuclear power with the 'fullest possible exchange' of information with the NWS. This exchange of information is subject to various safeguards and inspections conducted by the International Atomic Energy Agency (IAEA see www.iaea.org).

The Chemical Weapons Convention (CWC) is a multilateral treaty banning chemical weapons. It entered into force on 29 April 1997, currently has 164 states parties, and is implemented by the Organisation for the Prohibition of Chemical Weapons (OPCW, see www.opcw.org). The Convention bans development, acquisition, or possession of chemical weapons by signatories; their use or preparation for use; the transfer of chemical weapons or any encouragement of chemical weapons in other states; and the destruction of chemical weapon stockpiles by signatories. The latter is significant: unlike the NPT, the CWC compels states parties possessing the banned weapons to dismantle their stocks, and sets out clear timetables and deadlines for this work. In cases of non-compliance, the OPCW can recommend that the states parties take punitive action, and in extreme cases can refer the case to the UN Security Council.

The Biological Weapons Convention (BWC) entered into force on 26 March 1975 and currently has 150 states parties. It bans development, stockpiling, acquisition, retention, and production of biological agents and toxins, and all weapons designed to use them. Unlike the CWC, it does not ban use of such weapons, which is affirmed in the 1925 Geneva Protocol.

The BWC has yet to become a formal institution like the OPCW, and questions of verification and compliance have dogged the Convention almost since its inception. Efforts to negotiate a legally binding protocol took place between 1991 and 2001, but conflicts and disagreements proved impossible to overcome and the BWC still lacks any formal means of verification.

Supporters argue that arms control not only helped prevent war, but also that the agreements contributed to ending the cold war. According to this view, agreements such as the Stockholm Accords in 1986 and the Intermediate Nuclear Force (INF) Treaty in 1987 played an essential part in building confidence between East and West, creating the kind of trust that was crucial in reducing hostility. Viewed in these terms, arms control was itself

part of the process that broke the circle of mistrust between the United States and the Soviet Union. The agreements reached were not simply a reflection of the improving climate of East–West relations.

This view, however, is not shared by all of those who have studied the impact of arms control agreements during the cold war. For the critics, arms control played little or no part in keeping the peace during the cold war; the mutual fear associated with deterrence was of much greater significance when it came to keeping the peace. They also argue that arms control was insignificant in helping to end the cold war.

According to critics, the arms control agreements reached during the cold war had little, if any, impact on the prevention of war. Testing continued, despite the Partial Test Ban Treaty; proliferation was not prevented by the Non-Proliferation Treaty; quantitative and qualitative improvements in strategic armaments continued in spite of (and because of) SALT I and II; and MBFR wholly failed to achieve conventional arms limitation. Where agreements were reached, the states involved often just agreed not to do those things they did not wish to do anyway. Critics also argue that arms control negotiations were often used as a source of propaganda and, as such, enhanced distrust between the superpowers.

Colin Gray has stated that arms control is possible when it is unnecessary, and impossible when it is needed. This is referred to as the 'arms control paradox' (Gray 1992). In the context of the end of the cold war and the post-war era, arms control agreements simply reflected the thaw in the political antagonisms between East and West. However, this new political relationship made them largely unnecessary. Critics see the agreements of the 1990s as being of little importance to the process of cooperation which developed between East and West.

Both views are rather stark. A case can be made that during the cold war arms control agreements of various kinds helped to play their part in establishing and maintaining certain norms of state behaviour. The 1968 Non-Proliferation Treaty (NPT), the 1987 Missile Technology Control Regime (MTCR), the 1996 Comprehensive Test Ban Treaty, have all been designed to establish regimes to prevent certain kinds of destabilizing developments. In the case of non-proliferation there are many reasons why states do not develop nuclear weapons and the regime is unlikely to be decisive in its impact on states thinking about developing such weapons. The regime, however, puts up barriers and increases the political price of going nuclear. While it is impossible to quantify its benefits, the fact that so many states have signed the NPT seems to indicate that for them (and for different reasons) it performs a useful and important role.

Similarly, arms control contributed to peaceful change in the late 1980s and early 1990s. While the end of the cold war had many causes, arms control played a limited but significant part. The Graduated Reduction in Tension (GRIT)-type initiatives by Gorbachev between 1985 and 1989, the Stockholm Accords, the INF Agreements, the START negotiations, and progress in conventional arms discussions, all contributed to breaking down the barriers of mutual mistrust between Washington and Moscow (Collins 1998). Initially at least, the effects were largely psychological, but no less important for that. For President Bush Senior conventional and nuclear negotiations during this period were 'part of creating a context of progress in East–West relations'. They were an integral part of the process, not independent from it.

This said, there is certainly something in the argument that arms control becomes much easier when the political climate is benign. Arms control tends to reflect the state of political relations of the time. There has to be some *prior* improvement in international relationships before arms control becomes possible. During the cold war, there were periods of detente when arms control appears to have played a part in helping to enhance confidence between the adversaries, especially by providing a forum for discussion of strategic thinking, the purposes behind force deployments, and concerns about the opponent's force structure and operations. This happened in the aftermath of the Cuban Missile Crisis and in the early 1970s. However, these were short-lived periods and more hostile relations followed. The effects of arms control were clearly limited and temporary. There is very little evidence that arms control helped to improve superpower relations during periods of intense hostility. Indeed, the evidence seems to support the view that differences over arms control more often than not exacerbated the problems which existed.

KEY POINTS

- The end of the cold war brought a major debate about whether arms control did or did not contribute significantly to global peace.
- Supporters viewed it as 'the high road to peace'.
- Opponents argued that it played little part in keeping the peace during the cold war.
- A less stark judgement is that arms control played some part in preventing all-out war but it did not significantly improve relations during the times of intense hostility between East and West.

The Residual Role of Arms Control in the Post-Cold War Era

This somewhat ambivalent view of arms control seems to be confirmed by events since 1989. The ending of the cold war brought a flurry of arms control activity. Following a number of years of detailed negotiation in 1991, a Strategic Arms Reduction Treaty (START I) was finally signed. Instead of imposing limits on increases in weapons, START was designed to halt and reverse the arms race. Under the provisions of the treaty the United States and the Soviet Union agreed to reduce their nuclear arsenals to 1,600 strategic delivery vehicles and 6,000 warheads (of which 4,900 would be ballistic missile warheads, with a ceiling of 1,100 Intercontinental Ballistic Missile (ICBM) warheads. This was followed by a Treaty on Conventional Arms Forces in Europe (CFE) in 1991, finally overcoming the impasses which had led to more than fifteen years of largely fruitless negotiations in the MBFR Talks in Vienna.

With the disintegration of the Soviet Union, President Boris Yeltsin of Russia and President William Clinton continued the momentum of the early post-cold war years by signing a START II Treaty in 1993. The treaty involved two main phases. Phase one was designed to run in parallel with the seven-year timetable for START I, with each side limited to between 3,800 and 4,250 warheads at the end of the period. Phase two aimed to limit both sides to between 3,000 and 3,500 warheads by January 2003 (including the elimination of all ICBMs). As a result of a Protocol to the START I Treaty signed in May 1992, it had been agreed, however, that START II would only enter into force once START I had been ratified by the United States and Russia and entered into force. This also meant ratification by the Ukraine, Kazakhstan, and Belarus (UKB). This was eventually achieved in February 1994. The Russians refused to exchange the instruments of ratification for START I and its Protocol until the UKB acceded to the NPT as non-nuclear weapons states. This was subsequently achieved in December 1994 when the Ukraine finally acceded to the NPT (with the Belarus and Kazakhstan having acceded earlier). Following on from the progress made in these negotiations, in May 1995 the United States and Russia agreed a 'Joint Statement on Transparency and Irreversibility'. As the name implies, this was designed to start a process that would make the reductions that had been agreed irreversible.

After this joint statement, however, progress became more difficult to achieve. While the US Senate approved the ratification of START II in January 1996, the Russian Duma held back. Concern in Moscow centred on three issues: the treaty's costs and strategic effects; the need to resolve a new debate over the ABM treaty before agreeing START II limits; and growing hostility towards North Atlantic Treaty Organization (NATO) expansion plans. Some of these issues were dealt with (at least in part) as a result of subsequent agreements and the decision by NATO in 1997 to limit expansion for the time being to just three former members of the Warsaw Pact. A START II Protocol was agreed in September 1997, which deferred completion of phase one of the reductions from 2001 to 2004 and the second phase of reductions from 2003 to 2007, thereby helping to defer Russian costs of dismantling its weapons. At the same time, the United States agreed to negotiate a START III agreement as soon as START II entered into force. The aim would be to bring the number of warheads down to 2,000–2,500 by 2007. Also in September 1997, 'Demarcation Agreements' were reached which were designed to distinguish between US work on a theatre ballistic missile defence system against 'rogue states' and a strategic system which would alter the balance between Russia and the United States. It was hoped that these missile defence and START-related agreements would persuade the Russian Duma to ratify START II and its Protocol. They failed, however, in the late 1990s to have their desired effects.

The growing difficulty in making progress in arms control negotiations in the late 1990s also was evident in a number of other fields. Despite the indefinite extension of the NPT in 1995, significant disagreements continued between the nuclear and non-nuclear states over the pace of nuclear disarmament (enshrined in Article 6 of the Treaty). At the same time the nuclear tests carried out by India and Pakistan in May 1998 demonstrated the fragility of the whole nonproliferation regime. Similarly, the breakthrough achieved with the Comprehensive Test Ban Treaty (CTBT) in 1996 ground to a halt in late 1999 when the US Senate refused to ratify the treaty.

Attempts to control other weapons of mass destruction also ran into difficulties at about the same time. The Chemical Weapons Convention (CWC), signed in 1993, and which entered into force in April 1997, also suffered from a number of serious weaknesses. The convention was designed to ban the use of chemical weapons, as well as their development, production, transfer, and stockpiling. Stockpiles and production facilities were to be destroyed. Although there was some provision for verification through the Organization for the Prohibition of Chemical Weapons (OPCW) based in the Hague, the widespread industrial and commercial production of chemicals made the convention virtually impossible to police effectively. By 2002, 145 states had ratified both the Biological and Toxins and the Chemical Conventions, but in both cases, there were concerns that a significant number of states were developing weapons covertly.

There also were increasing concerns about the proliferation of nuclear weapons as the new century dawned. Despite the Strategic Offensive Reductions Treaty (SORT) of May 2002, reducing the number of US and Russian warheads to around 2,000 each over the following decade, there appeared to be an increasing incentive for some states and terrorist groups to acquire nuclear weapons and other weapons of mass destruction. With the cold war over and the United States now in the dominant power in the world, those who feared US hegemony or intervention in their internal affairs (like North Korea and possibly Iran) had an interest in developing their own 'ultimate' weapon. Similarly, terrorist groups, like Al-Qaeda, with nothing to lose, have an interest in acquiring such weapons to further their regional and in some cases global ambitions.

What this suggests is that arms control in the post-cold war era has been particularly affected by the changes which have taken place in the international security environment. As A. D. Rotfeld (2001: 5) has argued:

“ Security in the past was based on a balance of power, equilibrium of forces and parity. At the beginning of the 21st Century neither balance nor parity exists in Russian-US relations, and the bilateral relationship is no longer the central point of reference for other states in the international system. Moreover, the world has seen the proliferation of nuclear weapons to additional states, and other states are suspected of harbouring ambitions to develop or otherwise acquire them. ”

As weapons of mass destruction proliferate to weak states and non-state actors, it will be increasingly difficult to bring traditional arms control techniques and principles to bear to address these relatively novel threats.

KEY POINTS

- The post-cold war period saw a flurry of arms control agreements.
- Despite the lessening of hostility between the United States and Russia, however, progress was slow and intermittent.
- Gradually the utility of arms control was perceived to have declined in the changed international environment which emerged, especially after 9/11.

Post-Cold War WMD Proliferation: Strategic Responses

The changed strategic circumstances of the post-cold war (and especially post-9/11) world have led to a search for new ideas about how to control weapons of mass destruction, driven by a perception that arms control has significant flaws and the emergence of so-called 'rogue states'. In particular, the military role in combating and responding to proliferation has taken on an increasing salience: combating proliferation has, in other words, become a strategic issue.

Strategy, according to Liddell Hart, can be defined as 'the art of distributing and applying military means to fulfil the ends of policy'. While the concept of strategy has competing definitions, this essentially Clausewitzian one has clarity and simplicity on its side, and is used for the purposes of this chapter. The acquisition of WMD has always had identifiable strategic motivations, and produces strategic effects on regional security complexes. A strategic *response*, which is to say one that utilises military means, is less easily identified, and in fact the post-cold war period can be viewed as one in which the implications of this lack of clarity became increasingly apparent.

With the cold war over, the possibility of large-scale inter-regional conflict with thermonuclear weapons receded but the chances of *intra*-regional wars remained and perhaps grew. Moreover, there was a heightened possibility that the United States might intervene in such conflicts, now that the prospects of attendant confrontation with the Soviet Union had gone.

The unpleasant surprises of the United Nations and International Atomic Energy Agency inspectors on Iraqi WMD after the 1991 Gulf War, who found that Iraq had made considerably more progress than intelligence assessments had supposed, also suggested that proliferation might be moving more quickly than was apparent. The implications of this were far-reaching. Prior to 1990, US intelligence estimated that twenty states in the world possessed chemical weapons and ten were working on biological ones; it now appeared that either this number might be an underestimate, or that those states might be considerably more advanced than anyone suspected. Concerns about hidden horizontal and vertical proliferation were therefore strengthened by the experience with Iraq, which in turn led to louder calls for more tools to tackle this problem.

Thus it appeared that the end of the cold war had spawned a new set of threats that might be smaller in scale, but more numerous and potentially more acute. In such conflicts, nuclear weapons were regarded as being likely to be deployed to deter, but chemical and biological weapons were potentially more likely to be deployed in order to be *used* (Lavoy *et al.* 2000). The CIA director James Woolsey put this succinctly when he said that 'it was as if we were struggling with a large dragon for 45 years, killed it, and then found ourselves in a jungle full of poisonous snakes'.

The seriousness with which the threat was taken was due to an uncomfortable awareness that WMD might erode the ability of the United States to project military power around the world. Richard Betts alluded to this when he argued that WMD, particularly nuclear weapons, were now 'weapons of the weak—states or groups that are at best second class' (1998: 27). General Sundarji of the Indian Army similarly argued that 'One principal lesson

of the Gulf War is that, if a state intends to fight the United States, it should avoid doing so until and unless it possesses nuclear weapons' (quoted in Joseph and Reichart 1995: 4).

Betts and Sundarji were both suggesting that, if Iraq had possessed a nuclear capability in 1991, Operation Desert Storm might never have been possible: the United States and its allies might have been deterred from intervening in Kuwait. Washington's confidence in its ability to resist the deterrent strategies of small hostile states might therefore be significantly eroded once these small states possess nuclear weapons. This also may be true for other NATO members who participated in the coalition, such as Britain, or for important regional allies such as Turkey.

Moreover, this problem was exacerbated by a perception (not one universally shared) that some states, or at least their leaders, are simply not deterrable. This is often raised in the context of the so-called 'rogue states'. Officials and analysts in the United States often claim that these states are not susceptible to deterrent-based strategies because their leaders are either fanatical (i.e. too wedded to ideological or religious fervour), morally bankrupt (i.e. unlikely to recoil from mass casualties on their own soil), or simply crazy or irrational.

These concerns, centring around the possibility that WMD proliferation might either make it difficult for the United States to win a Gulf War-type conflict at an acceptable cost, or deter it from acting at all, are at the heart of the Clinton administration's decision, announced in the Bottom Up Review of 1993, that WMD represented the most direct threat to US security. In December of the same year, US Secretary of Defence Les Aspin unveiled the Defence Counterproliferation Initiative (CPI) in a speech to the National Academy of Sciences.²

Aspin noted that the United States and NATO had used nuclear weapons as 'the equalizer' to compensate for Soviet conventional superiority. 'Today,' he continued, 'it is the United States that has unmatched conventional military power, and it is our potential adversaries who may attain nuclear weapons. We're the ones who could wind up being the equalizee.' In Aspin's view, potential US opponents were all at least capable of producing biological and chemical agents and that US commanders now had to assume that US forces were threatened by potential battlefield use of WMD.

The goals of the CPI were subsequently defined as:

1. to deter the acquisition of WMD;
2. to 'reverse WMD programs diplomatically where proliferation has occurred';
3. to ensure that the US had 'the equipment, intelligence capability and strategy to deter the threat or use of WMD'; and
4. to defeat an enemy armed with WMD (Davis 1994: 9).

The goals of 'counterproliferation', however, were considerably better defined than the concept itself, and indeed the term ought to be used carefully, since it means different things to different people. Harald Müller and Mitchell Reiss noted in 1995 that there were at least four different definitions of exactly what constituted counterproliferation. See the Box 11.4 'What's in a Name?' for an explanation of the term and its usage.

Across the Atlantic, a debate also was getting under way in NATO. This was prompted partly by the United States, as is usual with debates in the Alliance, but also by the experience of the Gulf War. Several NATO members, notably Britain and France, had participated in the conflict and were closely involved with the WMD inspections regime, with its sobering implications for covert proliferation. Moreover, NATO was beginning to consider the

prospects for an out-of-area role, probably in Eastern Europe but also, perhaps, in other regions where it might come into contact with WMD-armed adversaries.

The increasing salience of the WMD threat across the Alliance should have produced a consensus among NATO allies and a common effort to counteract the effects of WMD proliferation on their power projection capabilities. However, in the Alliance as in Washington, the CPI failed to make significant headway during the late 1990s. Budgetary factors may have slowed the response to the proliferation threat, as well as the fact that most European members prefer to give a stronger priority to an economic or diplomatic response to proliferation (Larsen 1997: 10).

Nonetheless, the Alliance did begin to investigate the threats to its borders and forces, and possible military responses. In June 1994, the North Atlantic Council (NAC) established three committees on proliferation issues, including the Senior Defence Group on Proliferation (DGP), which was set up to 'address the military capabilities needed to discourage WMD proliferation, to deter threats and use of such weapons, and to protect NATO populations, territory and forces.'³ Jeffrey Larsen notes that 'the DGP effort was

BOX 11.4

What's in a Name? The Emergence of Counterproliferation

Counterproliferation is defined by Butcher as 'the military component of non-proliferation, in the same way that military strategy is a component of foreign policy' (2003: 17). This sounds relatively straightforward, but the term is in fact rather slippery and caution should be exercised when using it.

The term was popularized by Les Aspin's Counterproliferation Initiative. A couple of months after his 1993 speech, a National Security Council memo set out a possible definition of counterproliferation: 'the activities of the Department of Defence across the full range of US efforts to combat proliferation, including diplomacy, arms control, export controls and intelligence collection and analysis, with particular responsibility for assuring US forces and interests can be protected should they confront an adversary armed with WMD or missiles' (Davis 1994: 8). This was a less than satisfactory definition, being a bureaucratic division of labour more than a clear statement of policy, and did little more than define counterproliferation as anything involving the Pentagon.

The Bush administration set out its WMD strategy in a companion document published in December 2002 (White House 2002). The term counterproliferation was given a rather clearer definition than it had hitherto possessed, and for the first time it appeared to be privileged over non-proliferation, of which it had hitherto been viewed as a subset. Counterproliferation was defined as having three key elements: interdiction of WMD transfers to 'hostile states and terrorist organisations'; deterrence of use; and defence. Significantly, the document explicitly states that 'US military forces and appropriate civilian agencies must have the capacity to defend against WMD-armed adversaries, including in appropriate cases through pre-emptive measures.' The following year, the US Joint Chiefs of Staff published a statement of its doctrine on countering WMD (Joint Chiefs of Staff 2004). This defined non-proliferation as actions to 'prevent the proliferation of WMD by dissuading or impeding access to, or distribution of, sensitive technologies', and specifically cited arms control and international treaties (especially the regimes and treaties on WMD) in the range of relevant activities. Counterproliferation was defined as military activities taken to defeat the threat or use of WMD, with its objective being to deter, interdict, attack, and defend against the range of WMD acquisition, development, and employment situations. The inclusion of acquisition and development as counterproliferation (that is, military) targets is significant.

essentially the work of five key nations: the United States, France, United Kingdom, Germany and the Netherlands' (1997: 35). This is intriguing, because all of those states would only come into contact with WMD-armed adversaries as a consequence of power projection far from home; the states on NATO's south-eastern flank, which face far more direct threats, do not appear to have become heavily involved.

Despite two high-profile operations in 1998—the cruise missile attacks on a facility wrongly supposed to be producing chemical weapons precursors in Sudan, and the Desert Fox operation in Iraq—the military aspect of combating proliferation in the 1990s failed almost entirely to acquire doctrinal or strategic clarity beyond the protection of forces through theatre missile defence and passive defences. Aspin's initiative failed to resonate with the US military. Despite a 1994 estimate that an extra \$400 million *per year* was needed in the defence budget, the military decided that only \$80 million was necessary, and the Clinton administration itself settled for a budgetary request of only \$165 million. Thomas Mahnken complained in 2001 that 'despite the Counter-proliferation Initiative's efforts to accelerate the acquisition of systems to protect US forces, the US armed services are poorly configured to fight an adversary with nuclear, chemical and biological weapons' (Mahnken 2001: 79).

The decline in interest in counterproliferation is evinced by the Clinton administration's last National Security Strategy document, which had an extensive section given to arms control and nonproliferation but only a single paragraph referring to the CPI (White House 2000). The publication of the Bush administration's National Security Strategy in 2002 appeared to herald a genuine change in this policy. As the administration was attempting to make a case for a pre-emptive/preventive attack on Iraq, its National Security Strategy appeared to generalize from this to make such attacks a part of a wider strategy against proliferation.

Within a very short space of time after publication of the National Security Strategy, the United States had embarked upon the most far-reaching anti-WMD operation ever undertaken. This came with the war against Saddam Hussein's Iraq, undertaken in the face of widespread global suspicion and opposition. The possibilities of a repeat performance in the foreseeable future look remote, to say the least, but pre-emptive and preventive counterproliferation operations do not necessarily mean regime change and pre-emption and preventive war benefits from the element of surprise.

KEY POINTS

- Strategic responses against WMD proliferation are those involving military means. This is sometimes referred to as 'counterproliferation'.
- Post-cold war interest in such responses is driven by a combination of the emergence of smaller but potentially more immediate threats, and a sense that arms control may be of limited use.
- Concern about proliferation of WMD, particularly nuclear weapons, is significantly driven by a concern that they may be used to deter US-led intervention.
- The 1993 Counter-proliferation Initiative was an attempt to develop a coherent strategy to allay those concerns.
- Little progress was made towards achieving the capabilities called for by the CPI.

Strategic Response in Operation

Clausewitz argued that military force has a grammar of its own, but that it is politics that provides the necessary logic, without which grammar is meaningless. The grammar of military responses to proliferation has remained partially developed, principally because they did not always seem to be a definable, separable element of military strategy: rather, they were largely thought of as a set of military operations within a wider plan, such as the attacks on Iraqi chemical weapons facilities during Operation Desert Storm. The surrounding political logic of the concept, therefore, has also remained underdefined.

In the following case-studies, two categories of response are identified: those which are pre-emptive and those which are preventive. The terms pre-emption and prevention are often used interchangeably, but they are in fact quite separate and distinct concepts. However, the two do share a founding assumption, which is that, in Lawrence Freedman's words, 'given the opportunity, an adversary will use force and therefore cannot be afforded the option in the first place'. He contrasts prevention and pre-emption with 'coercive strategies', such as deterrence, which assume that an adversary's decisions *can* be altered or changed (Freedman 2003: 106).

Several recent cases in which the military instrument was deployed against efforts to acquire or stockpile WMD can be identified. In this section we give an overview of each case. The following section uses these case-studies to categorize the different forms of strategic response to WMD proliferation.

Case 1: Osirak, 1981

On 7 June 1981, Israel launched an air attack on the Iraqi nuclear facility at Osirak. The Israeli government had judged that the nuclear reactor, acquired from France, was intended for the production of fissile material. This was a well-founded suspicion, since Iraq had rejected the chance of a more efficient reactor that would *not* produce fissile material, and consequently the decision was taken to bomb the facility before it became operational.

It was therefore a *preventive* operation, designed to snuff out a nascent capability well before it came to fruition. At the time of the attack, and since, Israel stated explicitly that prevention was an intrinsic part of Israeli strategy. The Defence Minister, Ariel Sharon, said: 'The third element in our defence policy for the 1980s is to prevent confrontation states from gaining access to nuclear weapons. Israel cannot afford the introduction of the nuclear weapon . . . We shall therefore have to prevent such a threat at its inception' (Feldman 1982: 122). This national doctrine of preventive action forms the 'political logic' for the Osirak bombing. Iraq was a member of the NPT, and any attempt to circumvent safeguards would have been illegal, but Israel elected not to wait for this to take place.

The attack drew strong condemnation, at least in public, from the United States: 'The United States government condemns the reported Israeli air strike on the Iraqi nuclear facility, the unprecedented character of which cannot but seriously add to the already tense situation in the area', said President Reagan, and the UN Security Council also issued a strongly worded condemnation, describing the attack as a threat to the NPT safeguards regime. As Shai Feldman points out, the raid itself was 'at the very least a vote of no-confidence in IAEA

safeguards', although that was, borne out by the subsequent covert progress made by Iraq that was not uncovered by the IAEA for another decade.

Case 2: the Gulf War, 1991

Iraq was widely believed to possess chemical and biological weapons prior to the Gulf War, and in fact the US officials repeatedly promised heavy retaliation if these weapons were used. The Iraqis appear to have taken this to mean a nuclear response, although it is far from clear that this was in fact what was meant (White House 1993). The possibility of an attack on troop formations or logistical points using WMD, in particular chemical weapons, was regarded as very real, and the coalition air forces conducted about 970 strikes on Iraqi WMD targets, mostly chemical weapon capabilities.

The attacks proved subsequently to have been limited in effectiveness. Around 150,000 chemical munitions, untouched by the bombings, were found by UNSCOM after the war, and the official survey of the air campaign found that Iraq's nuclear and biological weapons facilities were similarly unaffected. The attacks on known nuclear facilities, as Harald Müller noted, broke new ground that the Osirak operation had not: 'for the first time, nuclear facilities containing irradiated material were purposefully attacked. Previous attacks on nuclear facilities took place when no fuel had been introduced into the reactors' (Müller *et al.* 1994: 131). Iraq's capabilities, which included a workable bomb design but not yet materiel to produce it, were more extensive than had been thought: the air campaign targeted the two known facilities but a further twenty existed unknown to US planners (White House 1993).

WMD are of course useless without a delivery system, and attacks on Iraq's missile capabilities (the famous 'Scud Chase') totalled some 1,500 strikes, but again with limited success. The post-conflict survey found that many targets thought to have been destroyed had in fact been decoys, vehicles, or other objects that generated Scud-like radar signatures. The inspectors subsequently found that Iraq had had the capability to launch chemical and possibly biological weapons on its 950 km-range al-Hussein missile, the system used to attack Israel and Saudi Arabia. This, and the existence of such huge stocks of chemical munitions, strongly indicates that the attacks did little to degrade Iraq's capabilities, and that Saddam was capable of launching attacks throughout the conflict but was, it would seem, deterred from doing so.

This campaign can be viewed as a *mixed case of pre-emption and prevention*. The attacks on chemical weapons and Scuds are clearly pre-emptive, since they were aimed at degrading or destroying an existing capability before it could be used on coalition forces. The surrounding 'political logic' for the operations was, therefore, the same as that of the war itself, grounded in the UN mandate to remove Iraqi forces from Kuwait. The attacks on the nuclear facilities are better described as preventive, like the Israeli attacks on Osirak a decade before. The Iraqi nuclear weapons programme was known to be still in its developmental stages, although intelligence sharply underestimated at which stage of development, and the opportunity to snuff it out in the early stages, à la Osirak, was taken. The 'political logic' surrounding this campaign, therefore, can be found in a longer term strategy of curtailing the emergence of new nuclear powers in the Middle East.

Case 3: Desert Fox, 1998

In the text of Security Council Resolution 687, aptly known as 'the mother of all resolutions', the UN 'decides' (note: not 'insists' or 'demands') that Iraq was to accept unconditionally the destruction of its nuclear, biological, and chemical weapons by UN and IAEA inspectors. This turned out to be rather more extensive than anticipated, however, as the inspectors discovered how much covert progress had been made, and how little the air campaign had degraded the existing capabilities.

A series of recurrent confrontations, accusations, and crises culminated with the US/UK joint air operation Desert Fox, which began in December 1998 and continued for several months afterwards. The mission of Desert Fox was given by the Pentagon as 'to strike military and security targets in Iraq that contribute to Iraq's ability to produce, store, maintain and deliver weapons of mass destruction', and its wider goals as 'to degrade Saddam Hussein's ability to make and to use weapons of mass destruction. To diminish Saddam Hussein's ability to wage war against his neighbours. To demonstrate to Saddam Hussein the consequences of violating international obligations.'

This language is rather circumspect, and with good reason. The main attack included cruise missile and bomber attacks on 100 targets, but none of them were actual weapons facilities. Rather, they were missile production sites and command and control facilities: hence the Pentagon's stated aim of targets that 'contribute to Iraq's ability to produce, store, maintain and deliver' WMD (emphasis added). The US Defense Secretary, William Cohen, stated that the attack on missile and command and control facilities rather than WMD was due to the risk of contamination affecting civilians (Litwak 2003: 77).

The 'political logic' surrounding Desert Fox is murky and often controversial and, like Desert Storm's counterproliferation operations, it can be viewed as a case of *mixed pre-emption and prevention*. Politically it was presented as both an attack on current capabilities and a preventive attack on future development (Weller 2000: 81). The 'political logic' surrounding Desert Fox was linked by US and UK officials to UN Resolutions, but the actual authorization was circuitous, to say the least.

The founding claim was that Iraq was in breach of Resolution 687, and this was never seriously disputed: in early November, as the pre-Desert Fox crisis gathered momentum, the UN Security Council adopted Resolution 1205 condemning Iraq's 'flagrant violation of Resolution 687'. The controversial part was the subsequent US-UK use of force in response to these violations: neither Resolution 1205 nor 687 contained the trigger phrase mandating war, 'all necessary means'. That authorization was, however, contained in the Resolution that mandated the Gulf War in 1990, and the claim was that the 1998 violations constituted 'the authorization to use force given by the Security Council in 1990 may be revived if the Council decides that there has been a sufficiently serious breach of the conditions laid down by the Council for the ceasefire [i.e. Res 687]' (Weller 2000: 86).

This rather roundabout route brings us back to the war in Kuwait as the formal political logic, but with the disarmament obligations of Resolution 687 as the base. The attacks on extant facilities seem to suggest that this was a *pre-emptive* operation, but both US and UK officials stressed that Desert Fox was also a *preventive* operation to curtail Iraqi efforts to reconstitute its WMD programme. If this was the case, General Zinni of the US Central Command acknowledged that any effects would be temporary (Sokolski 2001: 96).

Strategic response withheld? North Korea and Iran

These two states currently represent the foremost nuclear proliferation issues. North Korea was an NPT member state that withdrew membership, suspended withdrawal, and subsequently followed through with formal withdrawal. Despite years of multilateral negotiations with the United States, Russia, China, South Korea and Japan designed to prevent North Korea from acquiring nuclear weapons, the regime conducted its first atomic test in October 2006. Iran remains an NPT member, but the ongoing crisis over its plans for its nuclear power programme shows little sign of resolution. Recent US intelligence estimates, however, suggest that Tehran remains a good ten to fifteen years away from a nuclear capability.

In the case of North Korea, an Osirak-style operation on the Yongbyon facility was, apparently, seriously considered by the Clinton administration (Sokolski 2001: 96). The plans were not taken up, although one member of the Clinton administration wrote in 2003 that 'Washington still has the option' of attacking Yongbyon, and that 'even if US forces struck after the plant goes hot, radioactive contamination would likely remain local' (Samore 2003: 18). No such plans are reported in the Iranian case, but the Bush administration has stated that this option is emphatically 'not ruled out'.

In these cases, the 'red line', noted by Müller, against attacking facilities that contain nuclear fuel, combined with the political consequences of Osirak-style operations, appears to have kept military action off the agenda. Samore goes on to point out that, although the United States could launch a unilateral attack on North Korean nuclear facilities in theory, 'the reaction in Seoul and Tokyo could splinter the alliance' (Samore 2003: 19).

Presumably, similar reasoning can be applied to the Iranian case, and it is noticeable that Washington has maintained its commitment to the six-party talks in north-east Asia, and the EU3 dialogue with Iran, as the preferred way to deal with these proliferation threats. Multilateralism and institutions (the IAEA and the UN) are currently the tools of choice for tackling the Iranian issue, although Washington has repeatedly suggested that this will not continue indefinitely. For example, the American envoy to Iran declared in September 2003 that diplomatic solutions were always possible but would require Tehran to 'change its course and cooperate fully with the IAEA'. The most likely consequence of a breakdown in the EU3 dialogue and the Iran-IAEA relationship, however, would be to refer the issue to the UN Security Council, rather than a unilateral decision to launch an Osirak-style attack.

KEY POINTS

- Preventive strategies are directed at the process of proliferation, and aim to snuff out development or acquisition of WMD.
- Pre-emptive strategies are directed at the deployed weapons and/or facilities, and aim to prevent their use in war.
- Preventive and pre-emptive strategies have been used separately, or combined as in the 1991 Gulf War.

Analysis and Assessment

The case-studies show that there are two ways in which the proliferation of WMD can be met with a strategically driven response. The first of these is *pre-emption*, which is the military response to the *consequences* of proliferation: the weapons themselves and their delivery systems. If non-proliferation efforts fail, then it becomes necessary to find some way to neutralize weapons or delivery systems. This is not as simple as it might sound, given the destructive power of WMD.

Military responses to WMD are, at the minimum, protection for individuals (chemical weapon suits, for example) or collectives (missile defence), but more far-reaching options are available. The latter involve degrading or destroying WMD capabilities. Freedman calls this 'anticipatory self-defence', and most writers concur that it takes place in the existence of an imminent threat (Freedman 2003: 108; Litwak 2003: 54). This may be in the context of an ongoing war, such as attacks on Iraqi missile facilities during the Gulf War, or outside of it, should it be judged that an attack with WMD may be the opening shot in an imminent war.

As a consequence of this, pre-emptive operations have tended to be given their 'political logic' *outside* the context of the WMD regimes. For example, the attacks on Iraqi WMD and missile facilities during Desert Storm were part of the UN-mandated war to eject Iraqi forces from Kuwait; and the attacks on the Sudanese chemical facility was justified as a counter-terrorist response to attacks on American embassies in Dar-es-Salaam and Nairobi.

The second point at which proliferation can be met with a strategically driven response is *prevention*, the response to proliferation *processes*. This refers to the use of military force to interdict, hamper or destroy the process of WMD acquisition. Military tools here may be a range of things from interception of shipping to attack on WMD facilities. Such operations find their 'political logic' in international WMD nonproliferation norms, but not necessarily in the regimes themselves. The most dramatic example of military interdiction of (supposed) WMD proliferation was of course the invasion of Iraq in 2003, but other examples include the Israeli attack on Iraq's Osirak nuclear reactor in 1981, Iraq's own attacks on the Iranian nuclear plant at Bushehr between 1985 and 1988, and the recent Proliferation Security Initiative (PSI).

The PSI is an international interdiction initiative established by the United States in 2003. Its remit is to establish partnerships and agreements that can intercept illegal WMD shipments by plane or cargo ship. It has a set of operating principles which, tellingly, do not refer to the NPT, CWC or the Biological and Toxin Weapons Convention (BTWC). These principles identify 'states and non-state actors of proliferation concern' in the following terms: 'those countries or entities that the PSI participants involved establish should be subject to interdiction activities because they are engaged in proliferation through: (1) efforts to develop or acquire chemical, biological, or nuclear weapons and associated delivery systems; or (2) transfers (either selling, receiving, or facilitating) of WMD, their delivery systems, or related materials'.⁴

There are several problems and dilemmas associated with military responses to proliferation. The foremost problem is one of definition: the term 'counterproliferation' can refer to everything from protective clothing for troops to air strikes on nuclear facilities or even regime change. In the latter cases, it requires the surrounding 'political logic' to be

more fully developed than is currently the case. Recent documents issued from Washington may suggest an increasing clarity of definitions (see Box 11.4).

One possible place to develop this logic is the international regimes on WMD and the UN. The great unanswered question of these global WMD regimes has always been: what happens in cases of non-compliance? Counterproliferation can be seen as a response to this question that grew from the initial response of 'defend yourself from WMD attack' to more robust ways to use military force. In specific cases (Osirak, etc.) it has proven controversial, and has yet to make the transition in 'political logic' from its origins in national military strategy to an accepted international context. In general cases, such as the PSI, it is undeveloped but potentially more consensual.

Another, more difficult problem is the issue of operations in the face of an 'imminent threat'. This would perhaps get around the difficulties of generating institutional agreement in the UN for military operations, but still faces the prospect of assessing exactly what constitutes an 'imminent' threat (officials on both sides of the Atlantic have, since the invasion of Iraq, gone to extraordinary lengths to deny that they ever presented Iraq as an imminent threat).⁵ As the authors of a recent report noted, the United States (and any state, for that matter) has 'the inherent right and a moral obligation' to take pre-emptive action military action in the face of imminent threats, but needs clarification of the standards for 'imminence' (Perkovich *et al.* 2005: 38).

This need to ground counterproliferation operations in a wider political framework is not simply driven by political niceties, but by practical considerations. The United States might again undertake such operations as part of regional interventions, and that inevitably means the operations will be allied ones. Interventions against WMD are likely to be more about negating the impact of such capabilities on regional security complexes, rather than direct threats to the US territory, and as such the operations will need to possess tacit or explicit support from regional allies.

KEY POINTS

- Finding a 'political' logic into which preventive or pre-emptive action can be fitted has not always been easy.
- Pre-emptive operations tend to find their rationale and legitimacy in the context of an ongoing war, such as the 1991 Gulf War operations.
- Preventive operations can find their logic in the international norms surrounding WMD, such as the Proliferation Security Initiative, or in an existing strategic doctrine such as Israel's attack on Osirak.

Conclusions

Cold war lessons suggest that arms control agreements have had a role to play in contributing to international security. The cold war experience also suggests that arms control is rarely of decisive importance and it is not wise to see it as a way of fundamentally resolving

the world's problems. Arms control, however, has rarely been seen as decisively important or a solution in its own right. On the contrary, it is a fundamentally conservative policy, aimed solely at introducing some measure of predictability into an adversarial relationship. It cannot *by itself* create stability, much less peace, and to hope otherwise is to saddle it with unreasonable expectations that are bound to go unfulfilled.

Viewed in that more sober and cautious light, arms control as a means to control weapons of mass destruction should be viewed as a means to an end, never as an end in itself, and relies on the assumption that two or more states which are hostile to one another can also see a mutual interest in avoiding outright conflict. The decline in interest in arms control after the cold war was a function of the fact that the confrontation was over, and the role of arms control was no longer to inject some stability or predictability into the conflict itself, but to assist in eliminating what was now surplus military capability. By 2001, it had become clear that consolidation of ageing cold war arsenals no longer required formal, verified treaties. In the context of US–Russian arms control, the informal character of the SORT agreement seems to indicate that formalized, verified treaties are unlikely to be seen again.

Elsewhere, in the context of the global regimes, the BTWC appeared to be in stasis, the OPCW in good shape, and the NPT facing serious challenges: by the time of the next review in 2010, there could be ten nuclear powers (the United States, the United Kingdom, France, Russia, and the People's Republic of China, plus India, Iran, Israel, North Korea, Pakistan) with only the initial five nuclear powers being inside the NPT. This does not imply that the NPT necessarily is in terminal decline. The two outstanding nuclear proliferation issues, the weapons programmes in Iran and North Korea, are both (for the time being at least) being dealt with by diplomatic means.

Militarily driven responses to proliferation took on a renewed prominence partially in response to the growing concerns about the declining efficacy of deterrence and of nonproliferation efforts. The latter appeared to have been fully confirmed by the post-Gulf War inspections regime, but it should be noted that 'counterproliferation' is in fact much older in practice than in name, as the attack on Osirak demonstrates. Aspin's counterproliferation initiative identified a problem that has now evolved to include non-state terrorist syndicates, proliferation entrepreneurs, and super-empowered individuals who might wish to traffic in or employ WMD.

The evolution of strategic responses since the initial counterproliferation initiative has been haphazard and incomplete. This has been due to bureaucratic politics in Washington and the fact that preventive war and pre-emption is now a counterproliferation option. This more activist posture requires some international political legitimacy if it is to succeed. The key requirement here is evidence: it must be possible to point to hard evidence that WMD are a reality or an imminent threat if international support is to be garnered. And the failure to uncover a significant WMD programme in Iraq after the Second Gulf War has greatly called into question the logic of counterproliferation.

Providing evidence *ex ante* of WMD programmes, which tend to be covert and hidden, is difficult. The record of intelligence on uncovering such developments is not encouraging: the pre-1991 assessments of Iraq's capabilities fell short of the reality, the assessment of the Sudanese alleged chemical weapons facility proved mistaken, and the pre-2002 assessments of Iraq's programme also appears to have been comprehensively wrong. The problem is that strategic responses require reliable and credible intelligence not only to

identify targets, but also to justify operations in the first place. Moreover, militarily driven responses have not yet been fully integrated into diplomatic initiatives to produce a coherent strategy. Rather, they remain a set of options when other responses (arms control, sanctions, etc.) have failed. Overcoming this problem, and finding a sound international 'political logic' within which to base the 'grammar' of operations, will be the central challenges for the future of counterproliferation.

QUESTIONS

1. What are the differences between disarmament and arms control?
2. What role did arms control play in the cold war in preserving strategic stability?
3. What were the key criticisms of arms control by the end of the cold war?
4. How useful has arms control been in helping to preserve peace and security in the post-cold war period?
5. Is arms control compatible with counterproliferation?
6. What is the difference between pre-emptive and preventive military operations against proliferation?
7. Account for the growing interest in strategic military responses to proliferation.
8. What are the advantages and disadvantages of these approaches?
9. Compare and contrast TWO of the following: the Israeli attacks on Osirak, Operation Desert Fox, and the anti-WMD operations in Desert Storm.
10. Why do you think diplomatic methods were preferred when responding to the Iranian and North Korean nuclear challenges?

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- The White House www.whitehouse.gov
- US Department of Defense www.defenselink.mil
- State Department www.state.gov
- British Foreign and Commonwealth Office www.fco.gov.uk
- International Atomic Energy Agency www.iaea.org
- Defense Threat Reduction Agency www.dtra.mil
- Organisation for the Prohibition of Chemical Weapons www.opcw.nl
- Federation of American Scientists www.fas.org
- Carnegie Endowment's Nonproliferation Program www.carnegieendowment.org/npp/
- Arms Control Association www.armscontrol.org
- Center for Strategic and International Studies www.csis.org
- Center for Nonproliferation Studies, Monterey <http://cns.miis.edu/>
- Mountbatten Centre for International Studies, Southampton www.mcis.soton.ac.uk
- Nuclear Threat Initiative www.nti.org



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