Strategies of arms control

A history and typology

Stuart Croft

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Foreword

Human activity can in theory take two polar forms: pure anarchy and/or randomness, and rule following. The relations of states have traditionally been regarded as operating more at the anarchic end of this spectrum than through conformity to rules of behaviour. Nowhere has the accuracy of these observations been assumed to be more correct than in the military relationships between states. And yet, as Stuart Croft has been at pains to describe and analyse in this study, polities have sought from their inception to make those relationships both more predictable and less prone to stimulating conflict by embarking upon activities that have been variously labelled arms limitation, arms regulation, disarmament or arms control.

The study seeks to both place such activities in a historical perspective, and to demonstrate that the US–USSR activities that were labelled 'nuclear arms control' in the thirty year period from 1960 to 1990 were not unique, nor solely a product of the advent of nuclear weapon technology. Yet it goes beyond this, for it asks an increasingly significant question: how have these arms control activities changed since the end of the cold war? By implication, this also means asking how past activities were conditioned by the structures and behaviours attendant on the East–West conflict. Answers to these questions are provided not by judgements on whether arms control agreements have been 'successful' or not, but by reference to typologies of the objectives sought by those agreements, and by analysing how both the objectives and scope of those agreements have evolved over time and are still evolving.

Central to this study is the argument that in the post-cold war era, arms control has broadened its scope to encompass the disarmament by international organisations, in particular the UN, of warring factions within states. This emphasises a further key issue: that limitations and constraints on armaments and the actions of military organisations are tools for reinforcing political arrangements between and within states, not ends in them-

selves. In the period of the cold war, when the US–USSR dialogue on strategic arms limitations was apparently one of the few channels of communications that were open between the two antagonistic armed blocs, this tended to be obscured by the argument that 'jaw, jaw' was better than 'war, war', which gave arms control the appearance of being an end in itself. In the new era, it is useful to be reminded that arms control is merely a facilitator, not an objective.

Stuart Croft has produced a stimulating analysis which can be used in several different ways. It offers a framework for thinking about how arms might be constrained in the future, as well as a very comprehensive description of how they have been constrained in the past. It illuminates how, in the modern world, those anarchic tendencies that may exist have been overlain by webs of overlapping arms control agreements. These webs increasingly demand conformity by all states to accepted rules of behaviour in the area traditionally seen as the epitome of state sovereignty: security policy and military activities. Above all it is a contribution to a task that is now increasingly urgent: to think through the nature of the post-cold war international system; how it differs from the past; and how a secure future international order might be constructed around it.

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Preface

The origin of this book lies in the mid-1980s. At that time, arms control was the subject of great political and academic debate. With no arms control negotiations between the superpowers from the end of 1983 to 1985, massive peace movements (broadly hostile to arms control) in many countries, and the Reagan administration apparently being convinced that security could be found through a unilateral build up of weapons rather than through arms control, the whole debate over the management of arms was perhaps more vital than it had ever been.

In the midst of this debate, Lawrence Freedman published a short monograph entitled 'Why is Arms Control So Boring?'[1] This came as a great surprise for not only had it not really occurred that arms control could be boring, but also because the animated nature of the public and academic debate seemed to imply the opposite. Freedman's critique was that there was an inevitable tendency to become caught in the detail of arms control and this was, to most people, boring. But he also argued that:

> My own view is that the most effective work may also be the most scholarly. Rather than seeking to second guess policy-makers or provide expert backing for political campaigns, the most important contributions may be those that affect the overall conceptual framework within which these issues are considered and discussed.[2]

This call to reconsider the conceptual framework of arms control has at root motivated the writing of this book. With the end of the cold war, and the publication of various critiques of the whole enterprise of arms control, the need for a re-evaluation seemed, if anything, that much greater. There is a large and growing literature on arms control, reflecting the fact that, particularly since the mid-1980s, there has been a tremendous amount of arms

[1] Lawrence Freedman 'Why is Arms Control So Boring?' *Faraday Discussion Paper* No.9, London: Council for Arms Control, 1987.
[2] *Ibid.*, p. 5.

control activity between states. Drawing on Freedman's call, this book seeks to add to that literature, but to do so in a novel fashion. The mass of arms control agreements that have been negotiated and signed have rarely been categorised. It is this process of developing a typology that forms the central task of this book. Categorisation is important not simply for itself, but in order to broaden our interpretation (and, therefore, to deepen our understanding) of arms control.

Too often, arms control is defined in a very narrow fashion. Both supporters of arms control and opponents have argued that arms control has sought to reduce the likelihood of war, and in the cold war East–West relationship, to do so by underpinning nuclear deterrence. Of course, this is so. This book, however, will broaden the definition of arms control beyond this, and will thereby produce a more cosmopolitan approach to arms control than that derived from the theoretical framework designed by Thomas Schelling, Morton Halperin, Hedley Bull and others in the late 1950s and early 1960s. Arms control in the 1990s, as before, is also about influencing the nature of relations between polities that are between war and peace. There is no scope for arms control during a bloody conflict; neither is there any scope for arms control when states are genuinely at peace, in the sense in which Canada and the United States, for example, have been at peace since before the Second World War. However, many states – and their premodern equivalents – operate in a state of non-war; where cooperation is at least as important as competition, and where recourse to arms control may be not only to make war less likely, but also to enhance the political position of one state over another, or to affect the nature of government within a target state. Thus, the broader definition of arms control must include not only agreements such as START (Strategic Arms Reduction Treaty) and the NPT (Non-Proliferation Treaty) within its parameters, but also the Geneva Conventions, and United Nations disarmament activity in Somalia and Mozambique. Of course, arms control affects strategic issues in very important ways. However, security is essentially a political phenomenon and, consequently, arms control has been a fundamentally political behavioural pattern, one that the political leaders of many different polities have repeatedly utilised over time. It is this political essence, this pattern of political behaviour, that is at the core of this book.

In order to make the case that arms control must be seen in a broader sense, it is important to see arms control in its true historical setting, a context which can be traced back to the years before Christ. It may seem strange that, in a book which largely focuses upon the arms control agreements of the post-cold war era, a whole chapter is devoted to arms control history. However, this history is vital, for it will be argued that arms control was not invented at a particular point in time, be it 1960, or 1920; rather, a behavioural pattern of arms control has evolved. Only by tracing

that evolution can we understand the breadth of arms control in the 1990s and beyond, and only through comprehension of that evolution can the significance of relatively new developments in arms control, such as the greater emphasis in the twentieth century on its depth (defined here as the level of detail, the nature of the verification provisions, and the commitment to regime formation or maintenance) be assessed.

This book produces a typology of arms control, one derived from the text of treaties. For many of the post-cold war treaties, texts have been located in a variety of places, as indicated in the present volume. However, sources of pre-1990 arms control texts are rather more limited. In this book there has been a reliance on seven essential sources of these treaty texts: Richard D. Burns (editor) *Encyclopedia of Arms Control and Disarmament* New York: Charles Scribner 1992; Leon Friedman (editor) *The Law of War: A Documentary History* New York: Random House 1972; Trevor Dupuy and Gay Hammerman *A Documentary History of Arms Control and Disarmament* New York and London: R. R. Bowker and Co., 1973; Geoffrey Symcox *War, Diplomacy, and Imperialism, 1618–1763: Selected Documents* London: Macmillan 1974; United States Arms Control and Disarmament Agency *Arms Control and Disarmament Agreements* London: Transaction Books, 1984; Jozef Goldblat *Agreements for Arms Control* London: Taylor and Francis for SIPRI (Stockholm International Peace Research Institute), 1982; and SIPRI *Arms Control: A Survey and Appraisal of Multilateral Agreements* London: Taylor and Francis, 1978. Within this, the US Arms Control and Disarmament Agency, Goldblat and SIPRI concentrate on the period from the very late nineteenth century, and largely on the cold war period. The other four sources reproduce treaties from a much longer historical perspective.

It will be seen in the text, in particular of Chapter One, that Dupuy and Hammerman, Friedman and Symcox have been widely referenced as sources of the texts of treaties. Quotations used are directly from those volumes, with translations (where appropriate) taken directly from those reproduced by the editors. However, of particular use as a source of treaty texts was Richard D. Burns *Encyclopedia of Arms Control and Disarmament*. This is an extraordinary work, contained within three volumes. The third volume is dedicated to some five hundred pages of treaty texts.

However, the typology advanced in this book is not derived from any of the above. Some are limited by time-reference (for example, Goldblat and Symcox), while others by scope (such as Friedman). The closest typology, perhaps, is that provided by Burns, and it is to this work that further acknowledgement is due. Burns divides arms control agreements into six: limitations of weapons and personnel; demilitarisation, denuclearisation and neutralisation; regulating and outlawing weapons and war; controlling arms manufacture and traffic; rules of war; and stabilising the international environment. However, no justification is provided for this division. As will

be seen, in this book greater effort is made to substantiate a categorisation of arms control. Acknowledgement must be made to these sources, without which the arguments of Chapter 1, in particular, would have been much more difficult to support.

Much of the documentary material for this book from Chapters 1 to 6 is drawn from the arms control agreements of the post-cold war era. Dating the emergence of the post-cold war world could be a controversial issue. However, it is not an important one for this book. For the sake of the analysis, it is suggested that the cold war era came to an end in the period between 1988 and 1991 – from the rise of *glasnost* to the fall of the Soviet Union. Agreements reached in this period are examined in this book, for one of the issues is the singular nature of arms control agreements reached at the end of major conflicts. The cold war, as will be seen in the text, is deemed to be a major conflict that ended, uniquely, without violence.

However, the Preface to a work is not the place for a thorough theoretical examination of the nature of the book that is to follow. The themes briefly introduced here will form the core of the argument and structure of the analysis in the book. These themes will be explicitly addressed in the Conclusion.

In a conceptual work of this kind, the author inevitably develops a series of intellectual debts. I would like to take this opportunity to acknowledge mine. In no particular order, I would like to thank: Michael Clarke, David H. Dunn, David Armstrong, Theo Farrell, Michael E. Brown and Colin McInnes for trenchant comments on manuscripts; David Nicholls and Andrew M. Dorman for forcing me to clarify obscure remarks, and to incorporate arguments and material that had originally escaped me; Jane Usherwood, for reading through many drafts, and for patiently improving my grammar; and Shahin Malik and Stephen Hill, for helping me to trace useful material. However, as usual, responsibility for errors and misjudgements rest solely with the author.

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September 1995

Tables

Abbreviations

ABM	Anti-Ballistic Missile
ACV	Armoured Combat Vehicle
AIFV	Armoured Infantry Fighting Vehicle
ALCM	Air-Launched Cruise Missile
APC	Armoured Personnel Carrier
BMD	Ballistic Missile Defence
CBW	Chemical and Biological Weapons/Warfare
CFC	Ceasefire Commission
CFE	Conventional Forces in Europe
CIS	Commonwealth of Independent States
CoCom	Coordinating Committee
CSBM	Confidence- and Security-Building Measures
CSCE	Conference on Security and Cooperation in Europe
CTBT	Comprehensive Test Ban Treaty
CWC	Chemical Weapons Convention
EURATOM	European Atomic Energy Commission
GCD	General and Complete Disarmament
GLCM	Ground-Launched Cruise Missile
HACV	Heavy Armoured Combat Vehicle
IAEA	International Atomic Energy Agency
ICBM	Inter-Continental Ballistic Missile
INF	Intermediate Nuclear Forces
MAD	Mutually Assured Destruction
MD	Military District
MIRV	Multiple Independently-targetable Re-entry Vehicle
MBFR	Mutual and Balanced Force Reductions
MTCR	Missile Technology Control Regime
NAM	Non-Aligned Movement
NATO	North Atlantic Treaty Organisation
NPT	Non-Proliferation Treaty

OPCW	Organisation for the Prohibition of Chemical Weapons
ONOMOZ	United Nations Operation in Mozambique
OAS	Organisation of American States
P5	Permanent Five Members of the UN Security Council
PNE	Peaceful Nuclear Explosions
PTBT	Partial Test Ban Treaty
SALT	Strategic Arms Limitation Treaty
SDI	Strategic Defence Initiative
SIPRI	Stockholm International Peace Research Institute
SLBM	Submarine-Launched Ballistic Missile
SLCM	Submarine-Launched Cruise Missile
SRAM	Short Range Attack Missile
START	Strategic Arms Reduction Treaty
TLE	Treaty Limited Equipment
TTBT	Threshold Test Ban Treaty
UNAMIC	United Nations Advanced Mission in Cambodia
UNOSOM	United Nations Operation in Somalia
UNPROFOR	United Nations Protection Force
UNSCOM	United Nations Special Commission
UNTAC	United Nations Transitional Authority in Cambodia

Introduction

The arms control debate

The subject of arms control became one of the core sub-fields of strategic studies during the last thirty years of the cold war. In this period, arms control theory and practice was developed as a means of regulating and explaining tensions and relations between the superpowers. Brilliant innovative contributions were made on the subject by renowned analysts such as Thomas Schelling, Morton Halperin, Hedley Bull, Donald Brennan and Louis Henkin.[1] For these authors, arms control agreements could be reached in the interests of all antagonistic states, for in the nuclear age, it was in the common interest to avoid war. For the arms control scholars, war was not only caused by deliberate attack. It could be caused as a result of the interaction of powerful forces, described by the term 'security dilemma'. Instabilities, particularly in bilateral relations, could lead one state to calculate that it could best limit damage to itself by attacking first in a situation where war was seen to be inevitable. Thus, by minimising crisis and arms race instability in the interests of all rivals, arms control would develop an adversarial partnership between hostile states, and reduce the likelihood of conflict.

Yet arms control was always controversial, for many critics argued that these notions of arms control were flawed in both theory and practice. Indeed, by the late 1970s it was possible to identify *two* broad schools of thought hostile to arms control. The first school, largely based on the political right in the United States, suggested that totalitarian states such as the USSR would always have an advantage in negotiating arms control agreements, for they would not be subject to public scrutiny and the democratic process, while once agreements had been reached, totalitarian states would not hesitate to covertly breach agreed limits. The second school, largely based on the political left in Western Europe and the northeast of the United States, and in the government statements in much of the developing world, suggested that arms control was a sham, an example of great power con-

dominium designed to legitimise the arms race. These arguments were important not only intellectually, but also in terms of political practice in the 1980s. The conservative arguments provided a major platform for the first Reagan Administration's approach to security matters, while the leftist perspective provided a significant part of the intellectual core of the Western peace movements.

The conservative perspective suggested that arms control is flawed whenever there are negotiations and agreements between democratic countries and totalitarian states. In such arms control arrangements, the totalitarian state always has the advantage. During negotiations, the totalitarian state can propose almost anything without facing domestic problems, while the proposals of the democratic state will be subject to domestic scrutiny by the legislature, the media and, in certain circumstances, public opinion. In addition, the proposals of democratic states tend to be the products of political negotiations within government, between and within foreign and defence ministries and other governmental bodies. Thus, totalitarian states have a major negotiating advantage, which prevents any truly equitable agreements from being reached. Once an agreement is reached, totalitarian countries tend to cheat on the terms and, given the lack of freedom within their societies, tend not to get caught. Cheating, however, is not an option for democracies given the power and freedom of the media. Further, even if the democratic state catches the totalitarian country cheating, little will be done, for arms control has a deadening effect upon democracies, who assume that the strategic problem has been solved by the political agreement. In summary, asymmetric political structures produce advantages for non-democrats.[2] Some scholars would go further and suggest that great benefit would be derived from recognising that arms races as such are not a problem, and that unilateral measures would enhance national security more effectively than any arms control option. Instead of managing weapons stocks through explicit agreements, implicit arrangements through unilateral changes would be the most effective strategy. This concept was, perhaps, most widely applied to arguments in favour of deploying technologies associated with SDI (the Strategic Defence Initiative) in the United States during the 1980s.[3]

The leftist perspective suggested that arms control has, largely, been a sham. It has not affected the arms race in any decisive fashion, and has proved to be a way for the great powers to ignore pressures for disarmament. Arms control has been a tool of the major powers in maintaining dangerous and threatening military postures, and those states have cooperated over arms control rather than face the real problem: the competition in arms which could in itself lead to warfare. Arms control has, therefore, been a conservative tool, fooling the gullible, and preventing a reorientation of national and international security policies. Arms control should be rejected therefore, in favour of the logic of disarmament.[4]

With the end of the cold war, the arguments of the critics of arms control seemed to gain an advantage in the debate over the validity of arms control. However, it has largely been the conservatives who have been to the fore. The major disarmament provisions contained in treaties such as START and the CFE (Conventional Forces in Europe) Treaty may not have been deep enough for some on the left; however, they made it extremely difficult for such analysts to argue that there was a distinction between arms control and disarmament in such a stark manner as they had argued had been the case with the SALT (Strategic Arms Limitation Treaty) treaties. Indeed, arguably from the signing of the INF (Intermediate Nuclear Forces) Treaty in 1987, much of the intellectual force of the leftist argument against arms control in general, as opposed to arguments against particular treaties, lost momentum. In contrast, the conservative critique of arms control continued into the post-cold war period unabated. Not only was arms control flawed, but in addition some analysts have interpreted arms control agreements such as START and CFE as representing an end to arms control as it has been conceived in contemporary intellectual history.[5] Arms control, in this sense, was a cold war creation – and failure – which has even less applicability following the collapse of cold war political structures.

There may be much validity in many of the above arguments. And this approach seemed in accordance with a general view that arms control would be marginalised, given the end of the cold war.[6] However, they are not relevant to the central thesis of this book. This study is not concerned with the success or failure of arms control, in theory or in practice. Despite all the above reservations, arms control practice has continued. Further, records of such practice can be traced back to the ancient world. States and polities in very different political and geopolitical circumstances have, over time, regularly turned to the diplomatic and strategic tool of arms control. If this practice has been so common, should not some attention be paid to understanding its breadth and complexity, to the range of issues that have been subjected to arms control solutions?

A central assumption of this book is that the post-cold war critics of arms control have not developed a damning indictment of arms control. They have not succeeded in invalidating the study of arms control. Essentially, this has been because arms control has been defined in too narrow a fashion. This is not only a fault on the part of the critics of arms control. The emphasis on policy relevance in the strategic studies literature of the cold war has led to a definition of arms control that seems, in historical perspective, to have been something of an aberration. For in order to evaluate the role of arms control in the post-cold war world, it is important to understand the development of arms control from the earliest recorded examples. Although at the end of the twentieth century notions of arms control have been understood very much in terms of the nuclear arms control experi-

ences, arms control was a commonly used tool in relations between states long before the advent of nuclear weapons, and indeed well before the creation of strategic, and later, security, studies.

Arms control has a long history, as will be argued in Chapter One. It is highly probable that throughout that long history, arms control has been an extremely controversial activity. Statesmen and women, military leaders and scholars have almost certainly faced a variety of options and differing opinions leading to, at times, heated political argument with many highly critical of the purpose and outcomes of arms control. This book is not concerned with arguing either that arms control theory, by which it is usually meant the 'golden age' of theorising from the late 1950s to the late 1960s, or more generally arms control practice, have been uniformly beneficial or successful. The argument of this book is that arms control has been, and continues to be, a much broader activity than is usually taken to be the case. This Introduction will attempt to locate that argument in the more critical literature on arms control. The purpose is not to refute the arguments put forward in this literature, nor to put forward a glowing endorsement for arms control. Rather, the argument that will be developed in this book is that, in a sense, much of the critical literature on arms control is not relevant to the thesis of this book. Arms control may or may not be a flawed tool of diplomacy and strategy. However, the key point is that it has always been seen to be a part of the diplomatic and strategic language of polities engaged in political–strategic relations with adversaries. If it has been such a central part of the diplomatic and strategic landscape, it is a pattern of behaviour that needs greater understanding.

Yet such an argument is not always universally accepted. The criticisms of arms control have grown with the end of the cold war, as already seen. In many ways, Colin S. Gray's *House of Cards: Why Arms Control Must Fail* represents a culmination of the critique of arms control.[7] As such, it is an extremely important volume, doubly so as it was published as part of the prestigious *Cornell Studies in Security Affairs* series. Gray's argument in *House of Cards* is of great significance for this volume, for Gray presents arms control as a fundamentally flawed twentieth-century policy tool, aimed at preventing war (when it has often made war more likely), and based on fairly simple propositions. No book on arms control can begin its analysis without thoroughly assessing *House of Cards*, for Gray attempts not only to condemn the practice of arms control, but also to invalidate its study in that his condemnation could be seen as the last word on the subject. Thus, rather than examine a school of thought on this subject, a lengthy consideration of *House of Cards* follows. However, the purpose of this critique of Gray is not only to fundamentally disagree with his propositions, but it is also to use this extreme critique of arms control to illustrate three key problems with the literature on arms control in general. Too often, arms control is seen in too

restricted a historical perspective; in too narrow a sense in terms of its purposes; and in too shallow a fashion in terms of its complexity.

The condemnation of arms control

Colin Gray's *House of Cards: Why Arms Control Must Fail* is perhaps the most wide-ranging condemnation of arms control ever produced. For Gray, 'History, logic, and common sense all point to the futility of arms control.'[8] Although the author tries to moderate his argument in places, it is clear throughout the text that arms control is to be completely condemned.[9] Arms control has an appeal which is 'the appeal of a chocolate diet to chocoholics. Like chocolate, arms control is superficially attractive but is really bad for us'.[10] It is also 'a mild virus that has infected the body politic and has proved to be resistant to antimicrobial drugs.'[11] Further, we learn that 'Arms control theory and policy advocacy ... postulates a value – political, strategic, economic – for its ideas that powerful theory, historical evidence, and common sense condemn as unfounded';[12] that 'any grand design for international security which relies critically upon support from an arms control process is doomed to fail';[13] that 'The historical record is so rich that anybody who would claim that the future of arms control will be noticeably different from its past should be weighed down with the requirement of a very large burden of proof';[14] and that 'the time is long overdue for arms control quackery to be exposed'.[15]

The central problem with arms control is that it is riddled with five paradoxes, although in *House of Cards* it is clear that one of these paradoxes is of overwhelming importance. Gray's central arms control paradox is that 'if arms control is needed in a strategic relationship because the states in question might go to war, it will be impractical for that very reason of need, whereas, if arms control should prove to be available, it will be irrelevant'.[16] Thus:

> Arms control regimes worthy of the name are achievable only between states who do not need them ... The motive to cooperate is overridden by the motive to compete. The arms control paradox argues that the reasons why states may require the moderating influence of an arms control regime are the very reasons why such a regime will be unattainable.[17]

Gray's theory of the irrelevance of arms control revolves around four key arguments. First, a view of international relations in which the stakes are relatively clear cut, with an easy identification of states committed to order, and those committed to revisionism. Second, a view of the nature of states in which assessments of political culture are central in affecting strategy and, by extension, their arms control policy. Third a view of the history of arms control which is limited to the twentieth century. Fourth, a view of

arms control that confuses diplomatic activity, theory and definition. Each of these arguments will be taken in turn.

The first assumption in House of Cards is that international relations can best be approximated by a fairly crude, although obviously value-laden, Realist perspective. Most explicitly, Gray claims that 'High policy is not made by an all but autonomous public mood; at least it was not in 1914, 1939, or the early 1980s. Things were different in the direct democracy of ancient Athens and the First French Republic, but such exceptions to the rules should not guide theory and practice today.'[18] The calculation of interests is key; and in this calculation, Gray postulates that the opposite of arms control is defence planning. Unilateral improvements in force posture can be undermined by cooperative arms control agreements which, when put to the test, will fail under intense political pressure. Thus, states risk weakening their military forces by entering into arms control, and those weaknesses may be exposed when the arms control regime collapses under political pressure. There is no sense that arms control regimes can develop any robustness, for it is politics that leads states to war, not weapons. The scope for cooperation between antagonistic states is, thus, all but non-existent.[19]

The second assumption is that, in this world, one can identify revisionist states, and those interested in order. In fact, implicit in the analysis is a further assumption, which is that any combination of antagonistic powers can be defined in this manner. Unsurprisingly, we find that in the inter-war period the powers interested in order were Britain and the United States, and the revisionist powers were Germany and Japan. In the post-war period, those working for order were the United States and the Western powers, and the revisionists were the Soviet Union and its allies. In the post-cold war period, the 'good guys' are the Americans, the West and Israel, the revisionists the Russians, Iraq and Israel's Arab foes. This is clearly where the value-laden nature of the analysis bursts forth. One can argue over whether the Soviet Union should be correctly identified as a revisionist or a status quo power. This categorisation also ignores the security dynamics of the non-aligned world. Equally significantly, Gray overlays the importance of political culture onto this analysis. The problem with American culture is that it devotes scant attention to strategy.[20] However, the problem with Russian culture is much worse. We learn of 'The proclivity of Russians to evade and avoid what Washington believes it has settled';[21] that 'Notwithstanding all of the new thinking that has so shaken the former Soviet system, the scope and scale of Moscow's misbehaviour – both legal, if improper, as well as illegal – toward compliance with the terms of the CFE treaty of 1990, are wholly in the Russian tradition of caveat emptor';[22] and that 'a cultural proclivity to cheat is very much the Russian way in statecraft. Cheating for advantage or simply for convenience is probably inalienably, though certainly far from uniquely, Russian ... Moreover, Moscow will

cheat in matters small as well as great'.[23] Importantly, Gray claims that 'Few people who recognise the practical force of Russian strategic culture expect the successor states of the Soviet Union to behave very much better in the future.'[24]

What is to be made of Gray's first two assumptions? The world is starkly competitive, with the forces of order arrayed against the revisionists, and the latter are (for political and strategic–cultural reasons) liable to cheat and lie. This raises many questions, not only regarding the fit of this picture with the complexity of international relations involving a whole range of actors, and not just states, and a whole range of issues, not just strategic relations. Assuming that the picture painted of political and strategic culture is correct, how does change occur? How did political culture change from the negative picture of Germany and Japan in the 1930s portrayed by Gray, to the more positive picture of the latter half of the century? Without a theory of political change, the order-revisionist picture of strategic military relations seem to be two-dimensional, unable to explain transformation.

Most centrally, these assumptions lead Gray to criticise and reject what he calls the 'fallacy of political engineering' through arms control.[25] Behaviour cannot be changed by arms control: revisionist states remain revisionist, cheats remain cheats. As Gray states, 'arms control cannot be useful as an intended means to change policy'.[26] If behaviour cannot be changed, then the argument that post-Soviet Russia had to be locked in to a series of agreements by the United States in order to limit the scope of action of a future leadership in Moscow more hostile to the West has to be rejected. If future Russian, or other governments, want to threaten the United States, they will do so regardless of agreements:

> The urge to compete for national advantage does not preclude arms control as a tool of grand strategy. Italy, Japan and Germany in the 1920s and 1930s, and the Soviet Union since 1945 have all illustrated the point that predatory regimes, bent upon the radical revision of their national security circumstances, can find value in, among other things, the cover of respectability provided by a formal arms control framework.[27]

This may be true. However, it is not applicable for most of the time. Between absolute war and absolute peace, states seek to influence one another over the present and the future. The provisions of START II cannot be externally imposed on the signatories and if a future Russian leadership seeks to exceed those limits, they can do so. However, they would have to explain an act that arms control had made illegal. This would not necessarily prevent action; but normative constraints, at the very least, complicate decision making, particularly if they are complemented by sanctions.

Arms control has various purposes that can be served in relations between war and peace. The Lisbon Protocol attached to START would lead

to the removal of nuclear forces from the territory of three states. Each might develop nuclear weapons, but the agreement moved any possible nuclear status into the future. START II legitimised American help for the destruction of large numbers of Russian nuclear weapons in circumstances where there was great concern about the security of the storage of such weapons inside Russia. Gray argues that the development of the Iraqi nuclear programme, despite being a signatory of the NPT, is much more significant than any notions of a taboo that the NPT might have helped create regarding non-proliferation.[28] However, without the NPT could the United Nations' Security Council have legitimised the destruction of the Iraqi programme after the war over Kuwait? Without the NPT, what could even be said about the North Korean nuclear programme? Thus, arms control provides a legal as well as a moral framework for action.

The third assumption in *House of Cards* is that any examination of the historical record of arms control in the twentieth century would reveal its failure:

> The historical basis for the argument presented here comprises the better part of a century of frequently renewed arms control negotiations. The enduring character of the states' system and the nature of state behaviour toward security ensure the persistence of the conditions which guarantee that arms control must fail.[29]

To demonstrate this argument, Gray examined two sets of arms control activity: firstly 'the Washington–London naval arms control' regime of the inter-war period; and then that which Gray identifies as 'the mystery tour from SALT to START'. However, there are grave problems with Gray's use of this material, as will be examined by looking at Gray's 'mystery tour'.[30] Gray's argument that SALT and START add up to a mystery tour is based on his assertion that arguments focusing on strategic stability have no merit. Without that, there has been no strategic purpose to SALT and START: they have licensed an increase in strategic arsenals; they have not eliminated 'destabilising' weapons (with the one exception of strategic defences); and they do not provide predictability, for arms control agreements only reflect the state of the world when they are signed.[31] There are two fundamental problems with this analysis.

Firstly, Gray asserts that one of the problems with SALT and START is that they have not led to reductions. Yet despite arguing that arms control is political, Gray ignores the politics. It is extremely difficult to compare the SALT agreements with START I, or with START II. The contexts are different, and the latter two agreements have included significant reductions.[12] Gray retorts that reductions in START II reflect the new circumstances, in which 'if the superpowers are politically at peace, it will not matter where the level of Russian treaty-accountable warheads eventually settles.'[13] However, this does not accord with his earlier condemnation of Russian politi-

cal culture, and his inability to explain cultural change. More importantly, it confuses end points with process. If Russian–American relations become similar to American–Canadian relations, the number of weapons that the two states have will not be a direct issue for those countries. But how do states move from cold war hostility to political friendship? Surely through a process of agreements over a variety of issues. Further, in a utopian Russian–American world, the number of Russian nuclear weapons may matter if Russia and China are still rivals. Finally, the additional utility of the START agreements has been to disarm the new post-Soviet states, an argument ignored in *House of Cards*.[34]

The second problem with Gray's analysis is his discomfort with restrictions on strategic defences. However, this argument seems contradictory and ill at ease with the thrust of the book. The United States, of course, has not deployed strategic defences as Gray would want, preferring instead to remain bound by the narrow interpretation of the ABM (Anti-Ballistic Missile) Treaty. Is this the example of successful arms control, even though unwanted? Gray argues in favour of amendment of the ABM Treaty (should this not be abolition?) in favour of defences against proliferators.[35] However, the reader is also told that 'Even in the absence of the ABM treaty the United States would not have deployed BMD (ballistic missile defence) in the 1970s or 1980s.'[36] Again, there is a strange separation of arms control and politics: why would the United States not have deployed ballistic missile defences? Surely because the view that deterrence would be better served by preventing ballistic missile defence (BMD) predominated, and the best way for achieving that end was through arms control.[37] This conventional wisdom came under great attack during the first Reagan administration, during which the ABM Treaty was threatened, but not broken, by the American government.[38] In advocating movement to strategic defences, Gray argues that SALT and START have served the purpose of preventing the deployment of strategic missile defences 'magnificently well'.[39] But how can this be the case, given that arms control is bound to fail? Is it really true, as Gray argues, that limits over missile defences in the 1980s were more a control of national budgets and lack of political will than arms control restraint?[40] Given the bitter debates over SDI within the United States, between the Reagan administration and its West European allies, and in Soviet–American relations, many of which revolved explicitly around the ABM Treaty, one may not be convinced.[41]

The final assumption in *House of Cards* is that the purposes of arms control should be defined in a very narrow way.[42] Gray's critique of arms control is based on his claim that 'Above all else, arms control is about helping to prevent the outbreak of war.'[43] The argument that will be advanced in this book, however, is that the practice of arms control has shown that it has been viewed as a tool designed to achieve many different purposes. It

has been used to try to prevent the outbreak of war. But it has also been used to try to create post-war stability in relations between states; to create and strengthen norms of behaviour about the uses and targets of weapons; to legitimise the possession and non-possession of certain forms of weaponry, partly to prevent war, but partly also to create political advantage; and it has also been used by international organisations to impose the interests of 'the international community' upon others. Arms control is thus broader than Gray allows.

Arms control is also defined by Gray in a narrow way in another sense, in that the increasing detail of arms control agreements is seen to be a problem:

> The SALT II Treaty and accompanying documentation betrayed a virulent case of growing legalism, while the START treaty and its protective packaging is of a length and specificity of detail which will gladden the hearts of the legal-minded. Perhaps American consumers have come to expect the provision of excruciating detail on the packages that they buy.[44]

In contrast, the argument in this book is that increasing complexity, which will be referred to as depth, has been deliberately designed in order to strengthen those agreements, to ensure robustness. Thus Gray's view of arms control is, in the context of the argument of this book, both too narrow and too shallow.

Given the limitations placed upon Gray's argument demonstrated by the problems with his four underlying assumptions, it is clear that Gray's arms control paradox is not as stark as he would suggest. The argument was that arms control cannot work when it is needed – when states are on the verge of war – only when it is not needed, when conflict is inconceivable.[45] However, this postulates two extremes which are rarely commensurate with political reality. Governments are more usually concerned with relations with states with which they are neither on the brink of war, nor with whom they are at total peace.

The dimensions of arms control

This lengthy examination of the arguments put forward in *House of Cards* is not designed simply to refute the arguments put forward by Colin Gray. The purpose is to demonstrate the range of issues covered by the term 'arms control', and how easy it is to ignore many of the more important issues. The critique of *House of Cards* presented here is not intended to lead to the conclusion that arms control must be inherently and inevitably a national and international good. This is clearly not the case. Arms control can lead to a worsening of relations politically, and a destabilisation of relations strategically. In political terms, arms control can provide a focus for weakening

relations and a source of domestic dissent (such as over the SALT process in the 1970s). In strategic terms, an arms control agreement may not achieve its goals (some examples are examined in the next chapter), may be damaging (some argued this was the case for NATO (North Atlantic Treaty Organization) with regard to the INF Treaty), may lull a state into a false sense of security (as critics argued was the case for the United States over SALT I), while an agreement may simply become irrelevant. But the success or failure, or indeed relevance, of arms control is not the focus of this book which will, rather, seek to develop a typology.

Rather than eulogise arms control, the critique of Gray enables the analysis to move forward in two senses. First, it re-establishes that arms control is a subject worthy of investigation. This book does not suggest that arms control is always successful in the strategic sense defined by Gray. Rather, it represents a pattern of behaviour. As will be examined in the next chapter, for many centuries, polities have used the diplomatic tool of arms control in order to advance various interests. The key element taken here for this book is not to examine how arms control might 'work', but rather to examine the range of different patterns of behaviour which have been subject to arms control. This leads to the second sense in which the examination of *House of Cards* takes the analysis forward. Arms control has not, in historical terms, been an independent factor in international politics as is implied by Gray in his critique of American arms control theory and practice. One is given the impression in *House of Cards* that legions of arms controllers have put their fallacies and careers ahead of the national interests of their countries: for example, 'an arms control process takes on a life of its own, and its supervising officials naturally assume a solicitous concern for the welfare of that process which exceeds strategic considerations of national security'.[46] However, the reality of the phenomena that Gray describes is the politics that he argues should be seen to be central. National interests, and international security, are always subject to political debate, not objective mathematical formulae. Arms control has been about furthering political interests. The key question becomes, therefore, whose interests are furthered and legitimised by different forms of arms control? This does not mean that arms control agreements and negotiations inevitably contribute to a thickening web of arms control welcomed and recognised by all. Rather there are different interests within and between polities which are significant in terms of whether an arms control agreement can be produced at all and, if it is, what it looks like.

Arms control will be defined in a very broad sense in this book. This broader approach to arms control may seem a little uncomfortable initially, in that it combines conventional and unfamiliar notions of arms control. There are at least three elements in this.

First, distinctions will not be made between agreements over arms con-

trol and those over disarmament although such a distinction is usually seen to be axiomatic. For Hedley Bull, 'Disarmament and arms control intersect with one another. They are not the same, for there can be disarmament which is not controlled, and control which does not involve a reduction of armaments. On the other hand, they are not exclusive of one another.'[47] Unilateral disarmament lies outside of the definition of arms control provided by Bull, for it is not about the cooperation of antagonistic states.[48] However, internationally agreed measures of disarmament most definitely lie within the definition and, indeed, such agreements have been something of the hallmark of the end of the cold war.

Second, arms control is not presented as an institution that ensures equality for all participants, for in negotiations parties will have different levels of influence, and differing abilities to conclude a satisfactory agreement. Equal outcomes have been sought in many arms control negotiations, but not always, and the historical record illustrates many examples of this (as will be demonstrated in Chapter 1). And as will be seen, in particular in the analysis of arms control at the conclusion of conflicts, sometimes equal outcomes are most certainly not sought.

Third, arms control is not simply about START and CFE and, at a push, the NPT; it will also be defined to include such agreements and issues as the Geneva Convention, and UN disarmament activities in Mozambique.[49] Arms control will be defined to include restrictions on the use and possession of arms. In this sense, the laws of war, which seek to set normative restrictions on the use of violence, must be seen to be arms control. The laws of war set limits on who may be targeted (that is, who can be classed as non-combatants), with what weapons (the outlawing of inhumane weapons), and have sometimes forbidden violence at certain times (such as on the Sabbath) and in certain places. Arms control defined broadly must therefore include norms that have sought to limit the use of arms. But it must also be defined to include restraints on the possession of arms. This obviously includes restrictions on vertical and horizontal proliferation. But it must also include efforts to disarm warring parties and, in this sense, the United Nations' efforts to disarm groups and states in countries such as Mozambique, Cambodia, Somalia and Iraq are arms control.

Arms control will be defined in this book, therefore, to include treaties on disarmament (the INF Treaty, for example); unequal treaties (such as the Treaty of Zama between Rome and Carthage); the laws of war (like the Geneva Conventions); restraints on proliferation (such as the NPT); and United Nations' disarmament efforts. This should not be seen, however, to take the definition of arms control too far away from that developed by analysts such as Schelling, Halperin and Bull. For example, for Thomas Schelling and Morton Halperin the importance of arms control lay 'essentially on the recognition that our military relation with potential enemies is

not one of pure conflict and opposition, but involves strong elements of mutual interest in the avoidance of a war that neither side wants'.[50] Certainly, all the activities outlined in the broader approach to arms control outlined above fit with this definition. Indeed, Hedley Bull, in *The Control of the Arms Race*, argued that 'Arms control in its broadest sense comprises all those acts of military policy in which antagonistic states cooperate in the pursuit of common purposes even while they are struggling in the pursuit of conflicting ones.'[51] In the period since the publication of that definition, there has been a temptation to focus on superpower relations, negotiations and agreements in the analysis of arms control. The result has been for arms control to be interpreted in narrow terms, not with the broad approach advocated by Bull. This book seeks to re-broaden the concept.

Arms control will be examined in a very wide sense. There will not, however, be an investigation into the motivations of arms control. For Bull, the primary motivation is to make war less likely and, should it nevertheless still break out, to make it less destructive. A secondary motive is to reduce the economic costs, and a tertiary motive to combat the militarisation of society.[52] This may or may not be persuasive; however, as the investigation into which arms control agreements are successful, and which are not, lies outside the scope of this article, so does a direct examination of motivations. Instead, the book will set out a typology of arms control in the spirit of Bull's definition of the phenomenon.

As will be examined in Chapter 1, arms control has been used throughout history in relations between, for example, Egyptians and Hittites, Romans and Carthaginians, the Christian and Saracen worlds, France and Britain in the eighteenth century, Britain and the United States in the nineteenth century, and the United States and the Soviet Union in the twentieth. Throughout recorded history, arms control has been used to set limitations on the scale of violence in warfare whether through prescribing the space in which hostilities could take place, or through proscribing the use of certain forms of warfare, such as poison and gas. All of these various arms control arrangements, and others like them, had three main characteristics. These related to the participants, the focus of arms control and the implications of arms control agreements. Each of these aspects will be briefly examined.

First, in relation to the participants, arms control agreements were reached between states, or their pre-modern equivalents, based on the assumption that it would be both possible and desirable to develop some form of cooperation in the military field in order to avoid war, manage crises and, should war nevertheless occur, to limit the ensuing damage. However, although most analyses of arms control tend to focus upon treaties, it is important to note that it has not been necessary for an agreement to be formalised in terms of a treaty since tacit agreements (or indeed unilateral reciprocal measures) may also produce a new form of stability after

implementation.[53] The key issue is not that there may be negotiations and a treaty, although this is often the case, but rather that there is agreement between states on the nature of a new post-agreement balance of military forces. This book will, therefore, examine not only arms control treaties, but also political agreements and some reciprocal unilateral measures.

Second, in relation to the focus, arms control agreements have been concerned with the control of the use of certain forms of weaponry, the possession of different forms of weaponry, and/or the means of production of weaponry. However, this has allowed for a tremendous variety in arms control agreements not only between quantitative and qualitative arrangements, but also between those prohibiting use and those outlawing possession, between agreements designed to have an impact in a region and those global in scope, between agreements aimed at preventing war and those regulating the conduct of war should it break out, and between those arms control agreements designed to be narrowly in the interests of one state and those with pretensions to benefit the whole of the international society of states. Generalising about such a range of behaviour in international relations only becomes possible with the aid of a wider historical vision than that limited to the cold war period.

Third, in relation to the implications of arms control arrangements, many agreements were based on a hope, whether implicit or explicit, that they would lead to an improvement in political relations between the participants. This was due not only to the expectation that the agreement would represent the minimisation of a security concern between the participants, but also that an agreement might serve as the basis for further confidence-building measures. Yet if they did not, even an expectation of future political cooperation might have been sufficient to weaken reliance on worst-case analysis which might in turn have lessened the powerful pressure of the security dilemma.[54] Thus, arms control has always been about creating and/or supporting norms of behaviour in international politics.

This book takes a broad approach to arms control and seeks to use it to develop a framework of understanding which can be applied to the arms control agreements of the post-cold war period. It will include in its definition of arms control not only traditional arms control agreements between states over the relative size of their military arsenals, but also agreements over the forcible disarmament of groups and states by international bodies (the United Nations' disarmament of Iraq after the Gulf War, for example) and agreements concerning the behaviour of states (the 1949 Geneva Conventions, for example). Thus, a working definition of arms control for this book would be as follows: a search for collaborative arrangements between political entities that seeks to set restraints on the possession and use of certain forms of arms, whether in complete form or in component parts. The definition uses 'political entities' to include sub-state groups, supra-state

institutions, and pre-modern states; 'possession' refers to types of weapons, and who may deploy, build, store and operate them, in what numbers, and in what conditions; and 'use' refers to questions related to legitimate targets and geographical areas. Arms control is collaborative, but may include unilateral measures, but only when they are designed primarily to induce reciprocal measures or to enhance international security. It is about setting political limits on military policy.

Chapter One develops the central arguments of the book developed from this definition, arguments which are contained within two theses. The first thesis is that over time, the nature of arms control has *widened* in scope from very limited functions to the broader definition of arms control utilised in this book. The second thesis is that particular arms control agreements can be assessed on the basis of a concept of the *depth* of that agreement.

Widening refers to the different types of arms control activity practised over several thousand years. In early arms control practice, polities reached agreements about the size, strength and disposition of their forces at the end of conflicts in order to formally create a new balance between them, and to create or perpetuate strategic stability at other times. During the Middle Ages, agreements were reached over norms of behaviour limiting the scope, means and timing of violence between polities. During the following centuries, as technology became increasingly sophisticated, growing attention was placed on the problems associated with the proliferation of weaponry. Finally, during the twentieth century, a new form of arms control developed, one that was managed by global international organisations.

Thus, new types of arms control developed as arms control practice widened over time. As a result of this process, conceptually five types of arms control may be said to exist at the beginning of the post-cold war period: (1) arms control at the conclusion of conflicts; (2) arms control to further strategic stability; (3) arms control to create norms of behaviour; (4) arms control to manage the proliferation of weapons; and (5) arms control by international organisation. Chapters Two to Six of this book are divided into these conceptual categories in order to examine over twenty arms control arrangements reached in the post-cold war world.

The second thesis introduced in Chapter One is that arms control can be assessed on the basis of *deepening*. This concept of deepening refers to a process over time whereby the depth of arms control agreements may be said to have increased. By depth, three factors can be identified as significant. The first factor refers to the detail provided in the terms of the agreement. Does the drafting of the agreement cover the scope intended by the states involved? Are definitions clarified? Are mutual understandings spelt out? The second factor relates to provisions for verification. Without adequate provisions for verification within the terms of the agreement the effectiveness of the treaty may be seriously compromised. The final factor refers

to regime formation/continuation.[55] Often this is related to the depth of verification, for a detailed verification regime implies at least a medium-term commitment to implementing the agreement. Regime formation/continuation also refers to the degree to which follow-on agreements are expected to be reached within the broad framework of the agreement, and the mechanisms for ensuring progress towards such an end. During Chapters Two to Six, while categorising the arms control agreements of the post-cold war world into the five categories of arms control, each agreement will also be assessed in terms of its depth.

Through the concepts of widening and deepening, this book sets out a framework for understanding and analysing the arms control agreements reached at the beginning of the post-cold war period.

Notes

1 See, for example, Thomas Schelling and Morton Halperin *Strategy and Arms Control* New York: Twentieth Century Fund, 1961; Hedley Bull *The Control of the Arms Race* London: Weidenfeld and Nicolson for the Institute for Strategic Studies, 1961; Louis Henkin (editor) *Arms Control* New York: Ballantine Books, 1960; and Donald G. Brennan (editor) 'Arms Control, Disarmament and National Security' a special issue of *Daedalus* Vol. 89, No. 4, 1960.

2 Examples of these arguments may be found in the following: Malcolm Wallop and Angelo Codevilla *The Arms Control Delusion* San Francisco: Institute for Contemporary Studies, 1987; Joseph Douglass, Jr, *Why the Soviets Violate Arms Control Treaties* Washington DC: Pergamon–Brassey's, 1988; and Robin Ranger 'Learning from the Naval Arms Control Experience' *Washington Quarterly* Vol. 10, Summer, 1987, pp. 47–58.

3 See, for example, Kenneth Adelman 'Arms Control with and without Agreements' *Foreign Affairs* Vol. 63, Winter, 1984–5; Colin Gray 'Arms Control Does not Control Arms' *Orbis* Vol. 37, No. 3, 1993; and Patrick Glynn *Closing Pandora's Box: Arms Races, Arms Control and the History of the Cold War* New York: Basic Books, 1992.

4 For these arguments see, for example, E. P. Thompson *Zero Option* London: The Merlin Press, 1982; Ken Booth 'Unilateralism: A Clausewitzian Reform?' in Nigel Blake and Kay Pole (editors) *Dangers of Deterrence: Philosophers on Nuclear Strategy* London: Routledge and Kegan Paul, 1983; The Alternative Defence Commission *The Politics of Alternative Defence* London: Paladin, 1987; Jonathan Schell *The Abolition* London: Pan, 1984; Regina Cowen Karp (editor) *Security without Nuclear Weapons* Oxford: Oxford University Press for SIPRI, 1992; Stephen King-Hall *Defence in the Nuclear Age* London: Gollancz, 1958; Marek Thee, 'Arms Control: The Retreat from Disarmament, the Record to Date and the Search for Alternatives' *Journal of Peace Research* Vol. 14, No. 2, 1977; Paul M. Cole and William J. Taylor *The Nuclear Freeze Debate: Arms Control Issues for the 1980s* Boulder CO: Westview, 1983; and Edward Kennedy and Mark Hatfield *Freeze* New York: Bantam Books, 1983.

5 See, for example, Christopher Coker *A Farewell to Arms Control: The Irrelevance of CFE* London: Institute for European Defence and Strategic Studies, 1991.

6 See, for example, R. Smith 'The Marginalization of Superpower Arms Control' *Security Studies* Vol. 1, No. 1, 1991, pp. 37–53.

7 Colin Gray *House of Cards: Why Arms Control Must Fail* Ithaca: Cornell University Press for the Cornell Studies in Security Affairs, 1992.

8 *Ibid.*, p. 5.

9 For example, on page 219 he says 'I do not argue that arms control is always of absolutely no, or even negative, value for peace and security.'

10 *Ibid.*, p. 221.

11 *Ibid.*, p. 234.

12 *Ibid.*, p. 225.

13 *Ibid.*, p. 227.

14 *Ibid.*, p. 16.

15 *Ibid.*, p. 73.

16 *Ibid.*, p. 17.

17 *Ibid.*, p. 27.

18 *Ibid.*, p. 194. Further, 'Statesmen compete in arms, foment crises, and wage wars for their vision of security, no matter how pernicious or sensible that vision may seem in retrospect to others.' *Ibid.*, p. 54.

19 Gray's contempt for more liberal perspectives becomes, on rare occasion, extreme. Charles Kupchan and Clifford Kupchan's thought-provoking and challenging article on collective security is condemned in the most extreme terms. According to Gray, the authors 'inadvertently do their best to demonstrate why political scientists should not be entrusted with the serious business of national security ... Not to mince matters, this constitutes a stew of liberal fallacies.' *Ibid.*, pp. 156–7, note 47. The original article is Charles A. Kupchan and Clifford A. Kupchan 'Concerts, Collective Security, and the Future of Europe' *International Security* Vol. 16, Summer, 1991.

20 See Gray *House of Cards*, pp. 228–9.

21 *Ibid.*, p. 137.

22 *Ibid.*, p. 156.

23 *Ibid.*, p. 169.

24 *Ibid.*, pp. 174–5.

25 *Ibid.*, p. 155. Later, he argues that 'arms control process bear witness to the illusion that security can be engineered' *ibid.*, p. 229.

26 *Ibid.*, p. 41.

27 *Ibid.*, p. 55.

28 *Ibid.*, p. 199. Gray argues that 'The apparent fact that Iraq, a signatory to the NPT, covertly could come plausibly within eighteen to twenty-four months of acquiring nuclear weapons, is vastly more impressive datum than is the general opinion that the NPT helped forge a useful taboo. Again, arms control could not handle the really tough challenge.'

29 *Ibid.*, p. 2.

30 For a critique of the first period as analysed by Gray, see S. Croft 'In Defence of Arms Control' *Political Studies* forthcoming 1996. Also see Emily O. Goldman *Sunken Treaties* Pennsylvania: Penn State Press, 1994; C. Hall *Britain,*

America and Arms Control, 1921–37 New York: St Martin's Press, 1987; and E. Goldstein 'The Evolution of British Diplomatic Strategy for the Washington Conference', and Sadoa Asada 'From Washington to London: The Imperial Japanese Navy and the Politics of Naval Limitation, 1921–30' *Diplomacy and Statecraft* Vol. 4, No. 3, 1993.

31 Gray, *House of Cards*, pp. 128–33.

32 On SALT see, for example, Raymond Garthoff *Detente and Confrontation* Washington DC: Brookings Institute, 1985; Dan Caldwell *The Dynamics of Domestic Politics and Arms Control: The SALT II Ratification Debate* Columbia South Carolina: University of Carolina Press, 1991; A. Platt *The US Senate and Strategic Arms Policy 1969–77* Boulder CO: Westview, 1978; John Newhouse *Cold Dawn: The Story of SALT* New York: Holt, Rinehart and Winston 1973; and Gerard Smith *Doubletalk: The Story of SALT I* Lanham: University Press of America, 1985. On START, see Ivo H. Daalder and Terry Terriff *Rethinking the Unthinkable: New Directions for Nuclear Arms Control* a special issue of *Arms Control: Contemporary Security Policy* Vol. 14, No. 1, 1993, and the sections on START in Chapters 2 and 3 of this book.

33 Gray *House of Cards*, p. 123.

34 On the centrality of this concern in the process, see Steven Miller 'Western Diplomacy and the Soviet Nuclear Legacy' *Survival* Vol. 34, No. 3, 1992.

35 Gray *House of Cards*, p. 52.

36 *Ibid*, p. 154.

37 Such a view came under fierce attack from groups such as the Committee on the Present Danger. See Charles Tyroler III *Alerting America* Washington DC: Pergamon-Brassey's, 1984. Also see notes 2 and 3 of this chapter. For analysis, see Mike Bowker and Phil Williams *Superpower Detente: A Reappraisal* London: Sage for the RIIA, 1988; David H. Dunn 'The Politics of Threat: Minuteman Vulnerability in the Carter and Reagan Administrations' unpublished Ph.D. thesis, University of London 1995; Fred M. Kaplan *The Wizards of Armageddon* New York: Simon and Schuster, 1983; Robert Scheer *With Enough Shovels: Reagan, Bush and Nuclear War* New York: Vantage, 1983; and Lawrence Freedman *The Evolution of Nuclear Strategy* London: Macmillan for IISS, second edition, 1989, especially Chapter 26.

38 This was over the question of whether the ABM Treaty could be reinterpreted in a 'broad' fashion to allow the development of the Strategic Defense Initiative. For a view in favour of reinterpretation, see the Heritage Foundation 'US–Soviet Arms Accords Are No Bar to Reagan's Strategic Defense Initiative' *Heritage Foundation Backgrounder 421* Washington DC: The Heritage Foundation, April 1985. For a view against, see Raymond Garthoff *Policy Versus the Law: The Reinterpretation of the ABM Treaty* Washington DC: The Brookings Institution, 1987. For a proposed compromise, see Donald G. Gross 'Negotiated Treaty Amendment: The Solution to the ABM–SDI Treaty Conflict' *Harvard International Law Review* Vol. 28, Winter, 1987, pp. 31–68. Also see William Durch *The ABM Treaty and Western Security* Cambridge MA: Ballinger, 1988.

39 Gray *House of Cards*, p. 130.

40 *Ibid*., p. 13.

41 See, for example, Hans Gunter Brauch *Star Wars and European Defence* London:

Macmillan, 1987; Ivo H. Daalder *The SDI Challenge to Europe* Cambridge MA: Ballinger, 1987; Stuart Croft 'The Impact of Strategic Defences on European American Relations' *Adelphi Paper 238* London: IISS, 1989; Samuel F. Wells and Robert S. Litwak *Strategic Defenses and Soviet–American Relations* Cambridge MA: Ballinger, 1987; and John Holden and Joseph Rotblat *Strategic Defences and the Future of the Arms Race* London: Macmillan for Pugwash, 1987.

42 Gray also sets out to provide a general theory of why arms control is bound to fail, but seeks to achieve this, in part, by focusing upon the arms control policy of the United States. The general and the particular tend to become confused and overlap, to the detriment of the general theoretical propositions.

43 Gray *House of Cards*, p. 2. This claim is repeated throughout the book. See, for example, p. 69: 'More arms control agreements will be signed in the 1990s. But that fact will have no importance for what arms control primarily is supposed to be about – the prevention of war.'

44 *Ibid*., p. 137.

45 By this, it is meant that, for example, arms control agreements between France and Germany would have been insubstantial in 1939 on the verge of war, and meaningless in 1990 when both states were firmly at peace.

46 Gray *House of Cards*, p. 232. Elsewhere, the Arms Control Association and the Federation of American Scientists are condemned for showing greater loyalty to a theory of arms control than to the reality of Soviet cheating. *Ibid*., p. 166.

47 Hedley Bull *The Control*, p. vii.

48 One exception to this is when unilateral reductions are designed to be reciprocal. A very important example of this will be examined in Chapter Two which, in part, will analyse the Bush–Gorbachev unilateral nuclear reductions announced at the end of 1991.

49 Strategic Arms Reduction Treaty (START), Conventional Forces in Europe (CFE) Treaty, and Nuclear Non-Proliferation Treaty (NPT).

50 T. Schelling and M. Halperin *Strategy*, p. 1.

51 Hedley Bull *The Control*, p. xiv.

52 *Ibid*., pp. 3–4.

53 See, for example, Hedley Bull *The Control*, p. xi, and Thomas Schelling and Morton Halperin *Strategy*, p. 77. The issue of reciprocal unilateral measures is examined in Chapter Two of this book.

54 See, for example, Joseph S. Nye 'Arms Control and International Politics' *Daedalus* Vol. 120, No. 1, 1991.

55 On the importance of regimes in this area see, for example H. Mueller 'The Internationalization of Principles, Norms and Rules by Governments: The Case of Security Regimes' in V.Rittberger with P. Mayer (editor) *Regime Theory and International Relations* Oxford: Clarendon, 1993; M. Enfinger and V. Rittberger 'The CSBM Regime In and For Europe: Confidence Building and Peaceful Conflict Management' in Michael Pugh (editor) *European Security – Towards 2000* Manchester: Manchester University Press, 1991; and O. Young 'International Regimes: Toward a New Theory of Institutions' *World Politics* Vol. 39, No. 1, 1986; and Frank Schimmelfennig 'Arms Control Regimes and the Dissolution of the Soviet Union: Realism, Institutionalism and Regime Robustness' *Cooperation and Conflict* Vol. 29, No.2, 1994, pp. 115–48.

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The evolution of arms control

Introduction

The Introduction to this book has suggested that one of the problems with the debate over arms control has been that the phenomenon of arms control has not been defined in a sufficiently comprehensive manner. Too often, arms control has not been seen to be significant before, at best, the early part of the twentieth century. In fact, as this chapter will seek to demonstrate, arms control has a long and rich history across many different cultures. Further, since there has been little emphasis on the historical record of arms control, there has been little focus upon one of the most important changes introduced in the twentieth century, and certainly developed in the cold war era: the process of deepening. All of these issues will be illuminated by a more thorough examination of the arms control record.

Arms control has been a significant area of human activity throughout recorded history. However, many different types of enterprise have been emphasised during this historical development, since arms control activities have always reflected the norms and concerns of the international political system of the time. Nevertheless, it is the argument of this chapter that common practices of arms control can be identified, despite the differing nature of international relations over long periods of time.

This chapter will first examine the historical development of arms control from its origins in the ancient world to the practice of the inter-war period. Second, it will examine the contribution of the cold war period both in terms of the nature of the treaties, and in terms of the arms control theory developed during the late 1950s and early 1960s. Finally, drawing on the first two sections, the chapter advances a typology for the understanding of arms control that suggests that five distinct types of arms control can be identified.

The historical development of arms control

Arms control is often seen to be a modern invention, a creation of the cold

war. However, the practice of arms control is many thousands of years old. Arms control agreements can be identified not only in the inter-war period of the twentieth century, but also in the eighteenth and nineteenth centuries, in the Middle Ages, and even in the ancient world. Arms control in one form or another has in fact been practised throughout history. In the centuries before Christ, examples would include the Rome–Carthage Treaty; in medieval Europe, agreements included Canon 29 of the Second Lateran Council of 1139 (which outlawed the use of crossbows against Christians and Catholics), and Canon 71 of the Fourth Lateran Council of 1215 (which banned the transfer of weapons to the Saracens); in the period before the First World War, examples would include the Anglo-French Naval Limitation Pact of 1787, the Franco-Prussian Treaty of 1808 (by which the Prussian army was limited in size), and the 1902 Argentine-Chilean Protocol limiting naval forces; in the inter-war period, one would consider the 1919 Agreement to Restrain Trade in Arms and Munitions of War with China, the 1925 Geneva Protocol regarding prohibition on the use of gas, and the League of Nations One Year Armament Truce of 1931; and finally, there were many arms control agreements in the cold war period, such as the SALT agreements.

An examination of the history of arms control is useful, therefore, not only in terms of correcting an emphasis on the post-1960 history of arms control, but also in defining different emphases in the practice of arms control. For the purposes of this analysis of the historical development of arms control, five distinct periods can be identified: the ancient world; the medieval world; the period between the Peace of Westphalia and the end of the First World War; the inter-war period; and the cold war period. Each of these phases will be examined in turn in order to illustrate the dynamic nature of the development of arms control.

Arms control in the ancient world

Two factors distinguish much of the arms control activity of the ancient world from later arms control practice. First, warfare was endemic, whether in the Middle East, pre-Han China, ancient Greece or the Roman world.[1] Second, warfare, sometimes highly stylised, often very violent, was essentially fought with relatively unsophisticated concussion or cutting weaponry. These two factors had important implications for arms control. With warfare so common, and so important to the cultures of many of the peoples of the ancient world, incentives to prevent conflict in general, as opposed to limiting violence in specific circumstances (when it was clear that no victor would easily emerge) were low. Some exceptions to this have been noted; for example, amongst Iron Age peoples, the League of the Iroquois in pre-colonial North America prevented warfare between the con-

stituent nations for over three hundred years.[2] Further, it was difficult to control weaponry given its relative simplicity, (although some limited attempts were made: note the Philistines' efforts at preventing the Israelites from acquiring iron-based weapons in around 1100 BC).[3] Thus, both the political culture and the practical problems were not conducive to arms control solutions. However, arms control still occurred, notably at the end of wars or when significant technological advance occurred (for example, the development of the Greek trireme naval vessel).

Arms control in the ancient world largely took one of two forms: the establishment of buffer regions; and the disarmament of the defeated. Examples of the former include the agreement between the Egyptian Rameses II and the Hittite Hattusilis III following the Battle of Qadesh around 1280 BC, or the agreement between Rome and the Parthians to manage the buffer state of Armenia between them.[4] Examples of arms control which led to the disarmament of the defeated would include the imposition of the *foedus inaequuum*, or unequal treaty, by the Romans on Carthage in 201 BC, and on Macedon in 196 BC. Under the *foedus inaequuum*, the Romans insisted that the defeated states accept widespread measures of disarmament. Both Carthage and Macedon had their navies largely eliminated, and Carthage had to destroy its war elephants. Both states had to pay reparations, and were forbidden to undertake any military action in regions adjacent to their home cities.[5] A further example occurred at the end of the Peloponnesian War in 404 BC, when Sparta imposed terms on Athens which included the destruction of Athens' walled defences, and the destruction of all but twelve of the Athenian warships.[6]

Arms control in medieval Europe

Arms control had developed little by the Middle Ages. While the limited arms control moves of the ancient world tended to focus on relations between empires, arms control in the medieval world was placed in an altogether different context. While war between states was a significant issue, of perhaps greater concern to the medieval world was the degree of violence within states. This violence was both extra-legal (with the operation of bandits on the edges of society wreaking damage on both towns and countryside), and legal (with the acceptance of the feud and the joust, which in the early medieval period frequently led to widespread violence in the region). The international and extra-legal forms of violence often came together during periods of warfare. Major wars tended to be short, with armies fighting only during the late spring to early autumn period; however, mercenaries and some knights would continue wreaking destruction outside these times for their own gain. Thus private and public violence were frequently hard to distinguish. Yet violence was not limited to actions within

Christian Europe. There were many incursions and invasions from outside – whether from Muslim, Viking or Mongol sources – which in part led local rulers to centralise their powers behind new and more powerful fortifications. As Michael Howard put it, 'War is really too benign a term to describe the condition of the European continent.'[7]

This centralisation of power was in itself to contribute to change in the nature of relations within the medieval world. The major political debate of the period focused upon the secularisation of power, and consequently the somewhat troubled relationship between Church and state, although both Church and state recognised the need to impose limits on the scope of violence.[8]

Would moves to limit violence, both public and private, and within as well as between polities, best be organised by bishops, or by local political leaders? In the former category were the Peace of God in the Synod of Charroux in 989, the Truce of God in the Diocese of Elne in 1027 and the Truce for the Bishopric of Terouanne in 1063. The penalty for breaking the set restrictions on behaviour was to be declared anathema and face excommunication. In the latter category fell the Peace of the Land for Elsass from 1085 to 1103, and the Peace of the Land established by Henry IV in 1103. The penalty for breaches was to be capital punishment or, for lesser offences, the removal of the eyes or the hand of the offender.

The medieval response to this confusion was to attempt to limit violence through a series of agreements. Through what were termed the Peace of God and the Truce of God, and the Peace of the Prince and Peace of the Land, agreements were reached which were designed to control violence.[9] Restrictions were set on the justification for resorting to violence, and limits were set on the scope of the violence in terms of both time and legitimate targets. For example, the Peace of God proclaimed in the Synod of Charroux in 989 decreed:

1. Anathema against those who break into churches. If anyone breaks into or robs a church, he shall be anathema unless he makes satisfaction.
2. Anathema against those who rob the poor. If anyone robs a peasant or any other poor person of a sheep, ox, ass, cow, goat, or pig, he shall be anathema unless he makes satisfaction.[10]

The Truce of God proclaimed in the Diocese of Elne in 1027 included a requirement not to fight on the Sabbath:

throughout the whole of the said country and bishopric no one should attack his enemy from the ninth hour on Saturday until the first hour on Monday, so that everyone may perform his religious duties on Sunday.[11]

Part of the Peace of the Land established by Henry IV in 1103 included the requirement 'to keep the peace with churches, clergy, monks, merchants,

women, and Jews'.[12] Of course, this is not to argue that such declarations were successful in protecting large numbers of people from the violence of the times. Indeed, these exemptions 'did not apply if they were suspected of giving "aid and countenance" to the war, which they usually were'.[13] But these were initial attempts to set normative constraints upon violence and, in the broad sense, were therefore arms control measures.

In these general attempts to codify and enforce the Just War, the control of weapons themselves had a limited role. The clearest example of direct control took place at the Second Lateran Council of 1139 which prohibited the use of the crossbow under the following decree: 'We forbid under penalty of anathema that that deadly and God-detested art of slingers and archers be in the future exercised against Christians and Catholics.'[14] Three factors are important to note about this Canon, which emphasises the context of arms control during the medieval period.[15] First, the legitimising authority for the prohibition of the crossbow was the Church, and the penalty for breaching the prohibition was an ecclesiastical one. The relationship between secular and religious authority was still confused, as illustrated by the differences between the Peace of God and the Peace of the Prince.[16] Second, the prohibition on the use of the crossbow was not a general one. It was acceptable to use the weapon against non-Christians whether they be invading the Christian world, or being confronted in the Holy Land. Also, the weapon was acceptable for use against heretics within the Christian world. Third, the pressure for the ban on crossbows came from the nobles. The crossbow was the most significant military innovation of the twelfth century. Crossbows were used by relatively unskilled lower class soldiers, yet were able to pierce the armour of the knights and, if laced with poison, were almost certain to produce a fatality. Thus the crossbow was a weapon with potentially socially revolutionary implications. Arms control in this period was thus clearly a product of the confused political relations of the medieval world, and yet had a relatively clear focus: to assist in the regulation and limitation of certain types of violence by creating norms of behaviour.

Arms control from 1648 to 1914

In the period from the Peace of Westphalia in 1648 to the outbreak of the First World War, arms control began to develop much more clearly into its modern form. Many of the activities in the medieval period had laid the foundations for the modern state system, conveniently although not always accurately dated to the Peace of Westphalia.[17] Some early examples showed a degree of continuation with the medieval concern to limit the scope of violence, thereby creating norms of behaviour. For example, in Article XXIII of the Treaty between the United States and Prussia, signed in 1785, both

states committed themselves to follow some of the precepts of the Peace of God and the Truce of God, and the Peace of the Prince and Peace of the Land, although no penalties, either ecclesiastical or secular, were stipulated. Part of the Article read:

> If war should arise between the two contracting parties ... all women and children, scholars of every faculty, cultivators of the earth, artisans, manufacturers and fishermen unarmed and inhabiting unfortified towns, villages or places, and in general all others whose occupations are for the common subsistence and benefit of mankind, shall be allowed to continue their respective employments and shall not be molested in their persons, nor shall their houses or goods be burnt, or otherwise destroyed.[18]

In a similar agreement in a Treaty of Commerce between the Netherlands and the United States in 1782, it was agreed that:

> For the better promoting of commerce, on both sides it is agreed that if a war should break out ... there shall always be granted to the subjects on each side, the term of nine months after the date of the rupture, or the proclamation of war, to the end that they may retire, with their effects, and transport them where they please.[19]

These concerns with limitations on the scope of war developed further. Perhaps most obviously, in the latter part of the nineteenth century and the early part of the twentieth many conventions were negotiated and signed concerned with creating and perpetuating rules and laws of war. These ranged from the creation of codes of conduct to the abolition of certain forms of weapons. In the former category, The Hague Conventions (1899 and 1907) set out a series of restrictions on the right to wage war; for example, prohibiting the use of poisoned weapons, the killing or wounding of prisoners, and the unnecessary destruction or seizure of the property of the enemy.[20] In the latter category, the Declaration of St Petersburg in 1868 renounced the use of 'any projectile of less weight than four hundred grammes, which is explosive, or is charged with fulminating or inflammable substances' since such use would 'uselessly aggravate the suffering of disabled men.'[21] This was further developed in the Declaration Concerning Expanding Bullets of 1899, which outlawed 'the use of bullets which expand or flatten easily in the human body, such as bullets with a hard envelope which does not entirely cover the core or is pierced with incisions'.[22] However, in a further echo of the medieval debate in which norms were designed only to exist only amongst like-minded states, the Declaration of St Petersburg forbade the use of certain projectiles 'among civilised nations', while the Declaration Concerning Expanding Bullets would not be 'binding from the time when, in a war between the contracting Powers, one of the belligerents is joined by a non-contracting Power'.[23]

Elements of the ancient world approach to arms control also reasserted

themselves in this period. It has already been argued that arms control in the ancient world largely took one of two forms: the establishment of buffers or neutralised areas; and the disarmament of the defeated, sometimes through the *foedus inaequuum*, or unequal treaty.

There were a number of examples of agreements on neutralisation. In the Treaty of Utrecht in 1713, under Article IX the French agreed to British demands:

> that all the Fortifications of the City of Dunkirk be Razed, that the Harbour be filled up, and that the Sluices or Moles which serve to cleanse the Harbour be Levelled, and that at the said King's own Expence, within the space of Five Months after the Conditions of Peace are Concluded and Signed.[24]

Similarly, under Article XXVII of the British–Spanish–Dutch Treaty of 1715, 'The fortifications and all the works of the citadel at Liege, and also those of the chateau of Huy, including all forts and works, shall be razed and demolished, in such a way that they can never be rebuilt or restored.'[25] In the nineteenth century, treaties were signed neutralising countries (Belgium 1831, Luxembourg 1867) and regions (the Black Sea, in 1856).[26] One of the most interesting of these arms control agreements was the Rush–Bagot Agreement of 1817. Under Rush–Bagot the United States and the United Kingdom (subsequently Canada) agreed to the naval demilitarization of the North American Great Lakes. Under this agreement, each side was allowed to deploy a maximum of one ship on Lake Ontario, two ships on the Upper Lakes, and one on Lake Champlain; none of the ships could exceed one hundred tons and one eighteen pound cannon.[27] This agreement did not take the form of a treaty; rather it took the form of an exchange of notes. Nevertheless, this arms control agreement assisted in the general improvement of Anglo-American relations in the period after the war of 1812, which had witnessed a massive build up of naval force to an extent where the British had deployed a ship in the lakes more powerful than the *Victory* which had been so successful at Trafalgar in 1805, while the Americans were in the process of building the two largest warships in the world. Disarmament had begun before Rush–Bagot was agreed; the agreement was nevertheless a stabilising factor in relations between the two states for the rest of the century.[28]

In a further echo of the arms control practices of the ancient world, unequal treaties were also arranged. In 1807, the Prussians and Russians were defeated by Napoleon at Friedland and, following the deal between France and Russia in the Treaty of Tilsit, Prussia was forced to accept a treaty with France that limited the total size of the Prussian army to 42,000 troops, with exact sub-limits of infantry regiments, cavalry regiments, artillery miners and sappers, and the King's Guard, for a period of ten years from 1 January 1809.[29] In addition, under Article V, Prussia would be com-

pelled to send 16,000 troops to fight with the French should a Franco-Austrian war break out.[30] A further example was the series of restrictions imposed on the Egyptians by their imperial overlords, the Ottoman Turks. In 1841, a limit of 18,000 was imposed on the Egyptian army, although this could rise if troops were needed by the Sultan of Turkey in wartime, and the Egyptians were prohibited from building ironclad warships. Increases in the size of the Egyptian army were allowed in 1866 and 1873, but in 1879 the original limitations were reimposed.[31]

Arms control in the inter-war period

The inter-war period in many ways brought many of the disparate arms control approaches of the past together. There had been arms control connected with attempts to end conflicts, to create stability between states, and connected with attempts to develop rules of war. The inter-war period was to witness arms control of all these different types, but in addition was to strengthen a focus upon the problem of proliferation which had not previously been a major issue, and was to introduce one new form – international control.

Firstly, there were arms control agreements connected with the ending of conflicts. As already seen before the dawning of the inter-war period, arms control had been used on several occasions as a part of a post-war settlement. The clearest examples of this form of arms control in the inter-war period were, of course, in the terms of the post-First World War peace settlements. The Treaty of Versailles of 1919 limited Germany in Part V to an army of 100,000 (Article 160), a navy of six battleships (Article 181), and prohibited the development of a German air force (Article 198).[32] The Treaty of St Germain-en-Laye of 1919 limited the Austrian army to a maximum of 30,000 troops. The Treaty of Neuilly of 1919 prohibited the Bulgarian army from exceeding a limit of 33,000 troops. Finally, the Treaty of Trianon of 1920 limited the Hungarians to an army of 35,000. Each of these treaties set detailed terms for not only the size of the armed forces, but also their structure (for example, Germany was allowed a maximum of seven infantry divisions and three cavalry by Article 160 of the Treaty of Versailles). For some, the treaties at the end of the First World War were forms of the *foedus inaequuum*; for others, they were similar to the more limited forms of arms control designed to create a new post-war stability as, for example, had been the Treaty of Utrecht.

Second, there had been arms control agreements designed to create or strengthen strategic stability between two or more states that did not result from the immediate aftermath of a war. In the inter-war period there were also many agreements negotiated and signed that were designed to stabilise relations between particular states. For example, in 1930 Turkey and

Greece reached an agreement on a Naval Protocol by which both states undertook:

> to effect no order, acquisition or construction of war units or armaments, without having notified the other Party six months previously, so that both Governments may thus be enabled if necessary to prevent any competition in the sphere of naval armaments by means of a friendly exchange of views and explanations on either side in a spirit of perfect sincerity.[33]

Similarly, the following year Turkey and the Soviet Union exchanged a protocol under which both states agreed not:

> to lay down any naval fighting unit whatsoever for the purpose of strengthening its fleet in the Black Sea or in neighbouring seas, or to place orders for any such unit in foreign shipyards, or to take any other measure the effect of which would be to increase the present strength of its war fleet in the above-mentioned seas without having notified the second Contracting Party six months previously.[34]

More substantial naval agreements were negotiated and signed between the major naval powers. The Washington Naval Treaty of 1922 between the United States, Great Britain, France, Italy and Japan created a ratio of naval force between the five powers. Great care was taken over the definition of types of ships, their dimensions and the sizes of their armaments, and in a series of attached tables a schedule for the replacement of named ships was set out.[35] The London Naval Treaty of 1930, under Article 1, stipulated that the 'High Contracting Parties agree not to exercise their rights to lay down the keels of capital ship replacement tonnage during the years 1931-6 inclusive as provided in Chapter II, Part 3 of the Treaty for the Limitation of Naval Armament signed between them at Washington.'[36] In 1935, the British and Germans exchanged notes setting the ratio of naval tonnage between their two countries at 100:35 (excluding submarines, which were subject to a different ratio).[37] During 1935 to 1936 the British, Americans, Japanese, French and Italians met to negotiate an extension to their 1930 Treaty. The resulting London Naval Treaty of 1936 differed markedly from the previous naval treaties, however, in that the quantitative approach was abandoned, and instead the treaty set out a series of qualitative restrictions such as, under Article 4, limits to the standard displacement of a capital ship (35,000 tons), and to the maximum gun calibre of a capital ship (14 inches).[38] Over the next two years, Great Britain sought to extend the treaty regime by signing agreements similar to the London Naval Treaty with Germany (1937, and a protocol was added in 1938), the Soviet Union (1937), Poland (1938), and the Scandinavian countries (1938).[39]

Third, as in previous periods, there were many efforts to develop the rules of war and create a general world order in the inter-war period. In common with the practice of the past, these efforts focused upon limiting types of

weapons, identifying illegitimate targets and the setting of restraints on the acceptable space for warfare. In the first category, perhaps the most famous agreement was the Geneva Protocol of 1925. Under the Protocol, states agreed that:

> the use in war of asphyxiating, poisonous or other gases, and of all analogous liquids, materials or devices, has been justly condemned by the general opinion of the civilised world ... the High Contracting Parties, so far as they are not already Parties to Treaties prohibiting such use, accept this prohibition, agree to extend this prohibition to the use of bacteriological methods of warfare and agree to be bound as between themselves according to the terms of this declaration.[40]

The clearest example of further setting limits upon acceptable violence in warfare was the Red Cross Convention of 1929, which set terms for the treatment of the wounded, and the Convention of the Treatment of Prisoners of War, also of 1929.[41] In terms of restraints on the space for warfare, the Treaty of Lausanne of 1923 demilitarised the Straits of the Dardanelles, the Sea of Marmora and the Bosphorus, even though the Montreux Convention of 1936 allowed a certain amount of fortification by Turkey.[42] A more esoteric example was the so-called Roerich Pact of 1935, by which states in the Americas agreed to the protection of artistic and scientific institutions and historic monuments in time of conflict.[43]

Much of the above activity was in many ways a continuation of the arms control efforts of previous periods. The issues changed, but the forms of arms control had much in common with the past. Of course, this is not to argue that there were not also significant developments. The level of detail certainly increased, notably in agreements such as the Treaty of Versailles and the Washington Naval Treaty. Further, a growing concern with verification began to become apparent. This deepening of the arms control process was also matched in the inter-war period with a widening as new types of arms control – proliferation and international control – came to the fore.

The fourth area of inter-war arms control was a growing concern with proliferation. To a limited degree, this concern was not new. The Third Lateran Council of 1179 in part focused on the proliferation problem of medieval Christian Europe:

> Greed so filled their souls that although they were Christians they nevertheless provided to the Saracens arms, iron and wood for their ships, and helped them become superior in evil from the provision of arms and necessities to fight the Christians ... These we condemn to be cut off from the Communion of the Church and subject to excommunication for their iniquity and condemned to the loss of their goods, to be confiscated by the Catholic princes of cities. If they are captured they are to be enslaved by their captors.[44]

Such efforts at the control of the proliferation of weapons and technologies

were inevitably circumscribed in the Middle Ages due in part to the limited sophistication of weapons technology. In the immediate aftermath of the Great War, in a very different context in which the technological development of weaponry had led to the vast destruction of the 1914-18 war, states attempted to create a legal framework for the limitation of the spread of weapons. An initial agreement, focused on a particular conflict, was reached in May 1919 whereby:

> The Governments of Great Britain, Spain, Portugal, the United States, Russia, Brazil, France and Japan have agreed effectively to restrain their subjects and citizens from exporting to or importing into China, arms and munitions of war and material destined exclusively for their manufacture until the establishment of a government whose authority is recognized throughout the whole country.[45]

Four months later, twenty-three states signed the Convention for the Control of the Trade in Arms and Ammunition, providing a more general level of proliferation restraints, motivated in part by the desire to prevent the escalation of limited wars, in part by the hope that such an action might facilitate the more comfortable control of colonies. Under Article 1, the Convention prohibited the export of:

> artillery of all kinds, apparatus for the discharge of all kinds of projectiles explosive or gas-diffusing, flame-throwers, bombs, grenades, machine guns and rifled small-bore breech-loading weapons of all kinds, as well as the exportation of the ammunition for use with such arms. The prohibition of exportation shall apply to all such arms and ammunition, whether complete or in parts.[46]

Further, under Article 2, the importation of 'firearms and ammunition, whether complete or in parts' was prohibited in the regions set out in Article 6:

> The whole of the continent of Africa with the exception of Algeria, Libya and the Union of South Africa ... all islands situated within a hundred nautical miles of the [African] coast ... Transcaucasia, Persia, Gwadar, the Arabian Peninsula and such continental parts of Asia as were included in the Turkish Empire on August 4, 1914 ... the Red Sea, the Gulf of Aden, the Persian Gulf and the Sea of Oman.[47]

In addition, sections of the Convention dealt with forms of supervision of the Convention both on land and sea. This Convention was developed further in 1925 into the Convention for the Supervision of the International Trade in Arms and Ammunition and in Implements of War.[48] A further attempt was made to control the proliferation of weapons in 1929, with a more detailed Draft Convention with Regard to the Supervision of the Private Manufacture and Publicity of the Manufacture of Arms and Ammunition and of Implements of War under the auspices of the League of Nations.[49]

The fifth and final area of inter-war arms control was a completely new

innovation, arms control through international agency. This was first instituted in the Covenant of the League of Nations. Under Article 8:

> 2. The Council, taking account of the geographical situation and circumstances of each State, shall formulate plans for such [arms] reduction for the consideration and action of the several Governments.
> 3. Such plans shall be subject to reconsideration at least every ten years.
> 4. After these plans have been adopted by the several Governments, the limits of armaments therein fixed shall not be exceeded without the concurrence of the Council.[50]

Several attempts were made to take these provisions further. Perhaps the clearest example of subsequent efforts can be read into the text of the Preparatory Commission's draft on arms limitations written in 1930 and presented to the General Disarmament Conference of 1932. Detailed forms of limitations were set out, but the key section illustrating the importance of international control was Part VI. Under Article 40, it was proposed that:

> There shall be set up at the seat of the League of Nations a Permanent Disarmament Commission with the duty of following the execution of the present Convention ... Members of the Commission shall not represent their Governments.[51]

The success of such efforts at international control during the inter-war period was, of course, very limited. However, they were to be a forerunner of more extensive efforts later in the century.

The widening and deepening of arms control

This brief examination of the practice of arms control in the past has included agreements and treaties from many different contexts and circumstances. What is plain is that the form of arms control practised is always a product of the international political culture and context of the time. Yet this historical overview illustrates that, up to the beginning of the Second World War, the process and scope of arms control had both widened and deepened.

The widening of arms control relates to the areas in which arms control has been deemed to be politically appropriate. In the ancient world, in a context of endemic warfare and simple weapons, arms control had two purposes: it was used at the end of conflicts to impose a new balance (for example, the Rome–Carthage Agreement of 201 BC); and it was used by political leaders to create or perpetuate stability between their political entities (such as the Egyptian–Hittite Agreement of 1280 BC). During the Middle Ages, in the context of the confusion between public and private violence, and the changing relationship between church and state, arms control was used to only one purpose: to develop a more orderly state of affairs in the world,

defined at the time as the Christian world (for example, the Truce of God proclaimed in the Diocese of Elne in 1027). During the period between the Peace of Westphalia and the Treaty of Versailles, in a context of the emergence of nation-states, the development of the technology of warfare, and the further development of concerns to devise rules for the use of violence, arms control had three purposes: it was used at the end of conflicts to create a new balance (as in the Treaty of Utrecht); it was used to develop or perpetuate stability between states (the Rush–Bagot Agreement); and it was used to develop norms of behaviour in international relations (as in the Hague Conventions).

Thus in the period up to 1919, arms control had developed in three distinct areas, and arms control of all these three types was pursued in the inter-war period: at the end of conflicts to create a new balance (as in the Treaty of Versailles); to devise or perpetuate stability between states (the 1930 Greco-Turkish Naval Protocol); and it was used to develop norms of behaviour in international relations (as in the Geneva Protocol). In addition, arms control developed in two further areas: the control of the proliferation of weapons (such as the 1919 Convention for the Control of the Trade in Arms and Ammunition); and international control (clearly in the Covenant of the League of Nations). However, in these latter two areas there was much less deepening of the process of arms control compared to the other three types.

The deepening of arms control refers to the nature of the agreements themselves in three areas. First, over time there was a trend away from agreements set in broad terms to much more detailed agreements (compare, for example, the arms control provisions of the Treaty of Utrecht with the Treaty of Versailles). Second, issues of verification became increasingly important. Whereas there was no method of verification on the limitation of the Prussian army in the Treaty of Paris in 1808, and the Prussians were able to break the spirit of the Treaty, the Treaty of Versailles set up Inter-Allied Commissions of Control under Section IV with wide ranging powers; for example, under Article 209, it was the Naval Inter-Allied Commission of Control's 'duty to proceed to the building yards and to supervise the break-ing-up of the ships which are under construction there, to take delivery of all surface ships or submarines, salvage ships, docksand the tubular docks, and to supervise the destruction and breaking-up provided for'.[52] Third, agreements increasingly became seen in terms of a regime that could contribute to stability over time, rather than an agreement that merely dealt with an immediate problem. The arms control process began to be seen as a means of managing political difficulty; for example, the Rush–Bagot Agreement (especially in the middle and latter part of the nineteenth century), or the naval arms control agreements of the 1920s and 1930s. By the standards of the debate over arms control during the cold war, such a

deepening was very shallow and uneven in different treaties (especially with regard to verification); however, there had been a series of significant developments up to the outbreak of the Second World War.

There was, therefore, a process of the widening and deepening of arms control in the period up to the dawning of the nuclear age. Did the practice of arms control during the cold war further this development? And how did the development of a theory of arms control in the late 1950s and 1960s affect the way in which arms control was perceived?

The influence of the nuclear age

Arms control after 1945 was restructured around the concept of nuclear deterrence. Nuclear deterrence theory was developed from the original ideas of analysts such as Bernard Brodie into a refined series of propositions during what has been termed the 'Golden Age' of thinking about nuclear deterrence from the mid-1950s to the mid-1960s.[53] Analysts such as Schelling, Wohlstetter, Kahn, Bull, Halperin and others set out and refined the central propositions of nuclear deterrence thinking that came to underpin judgements about nuclear weapons and arms control in both the academic and policy-making communities.[54] Generalising about much of this literature, it can be said that there were at least seven main assumptions. First, that the world would be dominated by two nuclear armed superpowers. Second, that there would be a parity or rough equivalence in destructive nuclear capacity between the two. Third, there would be an inevitable competition and rivalry between these countries. Fourth, the power of nuclear weapons was so great that all rational people would seek means to avoid their widespread use. Fifth, that in order to avoid nuclear warfare the major states and their allies would seek to avoid any sort of armed conflict, for fear of escalation to nuclear use. Sixth, this was a long term proposition, as the power of nuclear weapons meant that the offensive had a clear advantage over the defensive. Seventh, although all would seek to avoid nuclear use, the nature of the competition between the two main nuclear powers meant that there was a danger of miscalculation; in order to minimise this, there was a need for dialogue and arms control.

It was these assumptions that created the context for much of the nuclear debate during the cold war period. This thinking was important as it became clear that under these assumptions the practical implication was that nuclear deterrence had to be constantly worked at by policy-makers in order to maintain stability within the competitive relationship between the superpowers. Political will to maintain a deterrent relationship had to be communicated and made credible, based on an evolving capability. On the other hand, political reassurance also had to be worked at, to ensure that natural worst-case analyses on all sides would not lead to the outbreak of war in

times of crisis or arms race instability; this was the central role for arms control. For James E. King:

> if it is to be the function of arms control to safeguard the stability based upon mutual deterrence, proposals to *abolish* the 'terror' in the 'balance of terror' are clearly out of order. It may be appropriate, nevertheless, to seek early agreement to *limit* the number ... on each side, and thereby to diminish the implicit threat of terror.[55]

In this new intellectual and political framework it became possible for analysts to argue that 'The history of arms control is quite short.'[56] Of course what is meant here is that the history of the form of arms control practised and theorised about in the nuclear age was quite short. This 'arms control in the nuclear age' was seen by its originators to be something quite new.[57] The core of the theory was that in a nuclear world with two ideologically opposed blocs competing politically and strategically, the outbreak of nuclear war was a possible, but was never a desirable, outcome. Thus the leaders of both blocs had a mutual interest in limiting the possibility of conflict occurring. As Herman Kahn noted, 'Neither the United States nor the Soviet Union wants a war that would annihilate us both – neither side wants the cost of the arms competition to become more onerous; neither side wants to permit lax operational practices for nuclear forces.'[58] These common interests provided a basis for arms control in the nuclear age which therefore rested 'essentially on the recognition that our military relation with potential enemies is not one of pure conflict and opposition, but involves strong elements of mutual interest in the avoidance of a war that neither side wants'.[59] Arms control thus had to ensure strategic stability, and to prevent it from being undermined by technological developments which in turn could lead to incentives being developed which might encourage a surprise attack. Under crisis conditions such an attack would be designed to destroy the opponent's strategic nuclear arsenal in a situation in which the advantages of striking first clearly outweighed those of being second in terms of achieving strategic goals, and in particular in terms of damage limitation. The key task for the originators of arms control in the nuclear age was, therefore, the reduction of the vulnerability of retaliatory forces to ensure that any second strike capability remained invulnerable, thus ensuring the stability of nuclear deterrence.

Five periods of arms control may be identified in the cold war era: the focus on nuclear disarmament to the late 1950s; 'pure' arms control to 1972; political arms control to 1979; the collapse of arms control to 1985; and the new arms control of the late 1980s. Each of these periods will be examined in turn in terms of the influence of the new concepts of arms control.

In the first period, from the origins of the cold war to the end of the 1950s, the political debate was framed by notions of general and complete

disarmament mainly, although not exclusively, of nuclear weapons. For example, the Baruch Plan of 1946 proposed 'the creation of an International Atomic Development Authority, to which should be entrusted all phases of the development and use of atomic energy' and further that:

> 1.   Manufacture of atomic bombs shall stop;
> 2.   Existing bombs shall be disposed of pursuant to the terms of the treaty; and
> 3.   The Authority shall be in possession of full information as to the know-how for the production of atomic energy.[60]

Thirteen years later, ambitions – or the desire for good publicity – had grown greater, with a proposal by the Soviet Union to the General Assembly of the United Nations that:

> over a period of four years, all States should carry out complete disarmament ... land armies, naval fleets and air forces will cease to exist ... All atomic and hydrogen bombs at the disposal of States will be destroyed, and all further production of such bombs will cease.[61]

It was the dissatisfaction with what was thought to be the unrealistic nature of such proposals that led to the work of the late 1950s and early 1960s to develop an approach to arms control that was deemed appropriate for the nuclear age. As James E. King put it:

> total disarmament is a tragic illusion, if not a deliberate fraud. No conceivable inspection system could prevent the 'internal security' forces envisaged by every such proposal from being a threat to neighbouring countries, nor commercial aircraft from being converted for military purposes.[62]

However, as Robert Bowie put it, 'Within these limits ... there appears room for substantial arms control if the parties wish to pursue it.'[63] Arms controllers, therefore, sought reductions in a strategic context in which it was clear that:

> very small forces are more vulnerable to a clandestine attacking force that lead many who concern themselves with arms control to think of a goal well short of the complete elimination of strategic weapons. It is not simply that a reduction to modest levels is a less ambitious goal. It is that the situation may become safer in the event of war, and more stable with respect to the likelihood of war, if forces are substantially reduced, but that *beyond a certain point* further reductions may increase both the fears and the temptations that aggravate the likelihood of war.[64]

It was these considerations that provided the context for the development of arms control theory, an approach which revolved around two major assumptions: that nuclear states had an overriding and mutual desire to avoid warfare, since nuclear war would completely devastate their own states; and that arms control would have to be used to reduce the incen-

tives to launch a first strike, thus lessening crisis and arms race instability, and hence strengthening strategic stability.[65] This was the basis for the second period, which might be termed 'pure' arms control, by which is meant that there was an attempt to create a close relationship between arms control theory and practice. The major goal of the nuclear arms control thinkers of this period was to achieve strategic stability based on MAD (mutually assured destruction), in which instabilities through either the arms race or crises would be minimised. In bringing about this situation, arms control had a role in both commission and omission.

In terms of commission, the Anti-Ballistic Missile Treaty of 1972 ensured that mutual assured destruction had become and would remain the central strategic reality. As agreed in Article I, 'Each Party undertakes not to deploy ABM systems for a defense of the territory of its country and not to provide a base for such a defense'.[66] With national defence prohibited by arms control, the nuclear superpowers would always be vulnerable to nuclear destruction thus, in the logic of nuclear deterrence, giving the strongest possible incentives to each state to avoid any form of conflict between them. Further, through the Interim Agreement on Limitation of Strategic Offensive Arms of 1972, both sides acknowledged that an acceptable level of nuclear parity had developed between them. Under Article I, 'The Parties undertake not to start construction of additional fixed land-based intercontinental ballistic missile launchers after July 1, 1972.'[67] Under Article III, 'The Parties undertake to limit submarine-launched ballistic missile launchers and modern ballistic missile submarines to the numbers operational and under construction on the date of the signature of this Interim Agreement.'[68] The arms balance in terms of missile launchers (although not warhead numbers) was to be stabilised at existing levels of parity.[69]

In terms of omission, arms control had not restrained developments in three areas. First, it had not regulated the increase in the size of the Soviet nuclear arsenal during the 1960s as it approached parity with the United States. A 'natural' parity was allowed to emerge which was then codified through arms control, rather than arms control being used to shape that emerging parity. Second, it had not been used to control the emergence of certain new technologies (such as the SLBM (submarine-launched ballistic missile) and the MIRV (multiple independently-targetable re-entry vehicle), which were deemed to be stabilising. Third, arms control in this period produced an Interim Agreement on OffensiveArms between the United States and Soviet Union at levels of weapons which ensured that there would be a level of nuclear overkill in which a second strike capability should always seem survivable. As Hedley Bull argued in *The Control of the Arms Race* it was necessary in arms control efforts to recognise 'those kinds and quantities of forces and weapons that promote the stability of the balance of power, and those which do not; to tolerate or even to promote the former, and to

restrict the latter'.[70]

This approach to arms control was highly successful in that by the mid-1970s, many of the fears which initially animated the new arms controllers had largely been allayed. However, this form of arms control, in which theory and practice were to be closely linked, was to be heavily compromised from the mid-1970s onwards in two ways. First, arms control expanded its scope from the central strategic question – ensuring the survivability of a second strike capability – into a range of other forms of arms control. There were negotiations over biological weapons, conventional weapons and over the level of the arms trade. In other words, the original focus of the new arms control of the nuclear age was blunted as a process of widening took place. Second, political issues – which had originally been ruled out of the new nuclear arms control – grew enormously in importance. For much of the 1970s it seemed that the terms 'arms control' and 'detente' had become synonymous. Further, as political debate raged around the value of detente, so arms control was taken from its realm of expert discussion and placed into the public political debate. In the United States, there was great argument over whether there was any value to this new form of arms control, with the political right wing, in the form of the Committee on the Present Danger, arguing for less emphasis on bilateral and multilateral measures, and for a greater focus on unilateral efforts.[71] In contrast, in many European countries the debate became polarised between those who supported arms control efforts on a multilateral basis, and those who sought disarmament, arguing that arms control merely legitimised the arms race.[72]

The new arms control of the nuclear age thus fell into disrepute by the late 1970s and early 1980s. There were essentially two reasons for this. First, it had probably never been feasible to limit the discussion over arms control to the technical, expert level, and the introduction of partisan politics into the debate, along with the widening of the arms control agenda, in retrospect appear almost inescapable. This widening was perhaps inevitable, not only because of the success of arms control (at least as widely perceived at the time) in improving strategic and political relations, but also given that the security concerns of the 1960s related not only to the stability of the central nuclear relationship between the superpowers, but also to the fear of nuclear proliferation. The success of the negotiation and signing of the Non-Proliferation of Nuclear Weapons Treaty in 1968 represented a success for the process of arms control, but a challenge for the theoretical base of the arms control of the nuclear era, since arms control theory could at best only partly explain and shape the drive for non-proliferation.

Second, as already seen, much of the immediate arms control agenda of the early 1960s had, by the mid-1970s, been achieved. The strategic focus of increasing strategic stability seemed less urgent in a period in which

strategic parity had been achieved and ratified, and at a time in which mutual assured destruction had clearly become the reality of nuclear deterrence.[73] In such circumstances, the essence of the drive to create an arms control theory in the early 1960s had been transformed. As Phil Williams noted, 'Schelling and Halperin (along with Hedley Bull) had provided much of the philosophy which was to inform arms control efforts during the 1960s. During the 1970s, however, this philosophy appeared increasingly less relevant to the arms control experience.'[74] This separation of the theory and practice of arms control had been a subject that had worried the theorists in the early 1960s. As Schelling and Halperin had warned:

> One of the difficulties with a substantial agreement on arms limitation might be the difficulty of reaching a common expectation of just how much of a 'truce' in diplomacy, propaganda, and even military activity is involved ... The least favourable prognosis is probably for an agreement that one party expects to symbolise the burying of the hatchet, a new era of good feeling, and a resolution to live up to new standards of international friendship, while the other takes for granted that 'realistic' diplomacy will prevail, subject only to the concrete matters agreed on. In this case acute disappointment and recrimination might result, and the greatest of misunderstandings.[75]

If Schelling and Halperin had mentioned the possibility of such division, disappointment and misunderstanding occurring within states as well as between them, they would have given an almost perfect prediction of the problems facing arms control in the late 1970s. Perhaps nowhere was the loss of the theoretical focus of arms control more evident than in the SALT II negotiations and treaty. SALT I had ratified and confirmed strategic parity and the reality of mutual assured destruction. In contrast, SALT II produced an agreement with no such fundamental results, and a general increase in the levels of nuclear warheads.

In the fourth period of arms control in the cold war era, the early 1980s, the new arms control introduced by the theorists of the 1960s had lost its central focus, been broadened to issues beyond its theoretical base, and become politicised in a manner most unwelcome to its originators. The debate over arms control in this period recognised the collapse of many of its initial assumptions.[76] The fate of SALT II and the difficulty of identifying a strategic logic for arms control, along with the worsening of cold war relationships, led to a period from 1983 to 1985 in which for the first time since 1969, there were no nuclear arms control negotiations between the superpowers.

However, arms control re-emerged as a major international issue in the mid- and late-1980s, from the elevation of Mikhail Gorbachev to General Secretary of the Soviet Communist Party. In this final period of arms control in the nuclear age during the cold war, a different purpose emerged.

Whereas arms control had been initially conceived of by the nuclear arms control theorists in terms of enhancing bilateral stability, it had been broadened by the mid-1970s to include certain elements of world order and proliferation control. Increasingly after 1985, Gorbachev and the reformist element in the Soviet Union sought to broaden arms control further by seeking to use the process in order to end the cold war conflict. This theme will be developed later in this book when looking at the transition to the post-cold war world.

Arms control, therefore, moved through five periods during the cold war. Initially there was little arms control, largely the rhetoric of disarmament.[77] In the second period from the early 1960s, a new theory emerged which focused arms control efforts on the need to create a particular form of weapons stability between the nuclear superpowers. The success of this ambition led to a third period in which arms control was broadened to include attempts at proliferation control (most notably with the Nuclear Non-Proliferation Treaty), and to create new norms of behaviour (the Environmental Modification Treaty of 1977, for example).[78] In the fourth period, arms control fell into disrepute during the early 1980s, as the theoretical underpinning to arms control collapsed. Finally, from the mid-1980s, arms control increasingly came to be concerned with regulating the end of conflict as the cold war came to an end.

Thus, the pattern of development in arms control identified in the first section of this chapter continued after the hiatus of the first two decades of the cold war, and after having been forgotten at a time when a new theory of arms control was developed. The pattern of the past – the widening of the areas in which arms control was used – was again repeated. However, there was one particularly significant contribution made by arms control in the cold war period, and that was to accelerate the process of deepening, in three ways.

First, the trend towards increasing the level of detail of agreements continued, although admittedly unevenly. The Interim Agreement on Offensive Arms, the ABM Treaty and SALT II all used a series of attached statements and understandings to the treaty by both signatories in order to clarify as far as possible the exact meaning of the relevant articles.[79] However, such attempts to further increase the amount of detail and precision in treaties did not prevent argument over issues of interpretation, as was seen, for example, in the middle of the 1980s in relation to the debate over the ABM Treaty.[80]

Second, issues of verification further increased in importance, although the technical possibilities for more detailed verification tended to be constrained by the politics of the cold war. Whereas the Partial Test Ban Treaty of 1963 made no provisions for verification in the terms of the treaty, the Interim Agreement on Offensive Arms, the ABM Treaty and the SALT II

Treaty all provided for verification by national technical means in Article V, Article XII and Article XV respectively. Some of the difficulty of judging the required level of verification had been foreshadowed by the debate amongst the arms control theorists in the early 1960s. For some, verification was of only limited importance; Schelling and Halperin, for example, suggested that 'even if violation cannot with great confidence be completely deterred, it may be sufficient to deter the most profitable violations, or to make violation so costly that little can be gained by it'.[81] In contrast, Fred Iklè feared that democratic governments might be tempted to ignore repeated violations for fear of suffering domestic political damage, especially were the violations only to be apparent through clandestine sources, and were the government to be politically committed to the arms control agreement.[82]

Third, many agreements increasingly came to be seen as part of a regime: for example, the non-proliferation regime, the ABM Treaty regime, the biological weapons regime, and even the SALT regime. Particularly by the end of the 1980s, policy-makers and analysts came to see arms control not only in terms of aiding the prevention of a movement towards war, but also in terms of being able 'to lay the foundation for a movement in relations toward those characteristic of a pluralistic security community'.[83]

Thus the historical pattern of the development of arms control reasserted itself during the cold war, even if much of the arms control practice that pre-dated the nuclear age was largely ignored in the creation of arms control theory in the early 1960s. The process of widening was demonstrated in microcosm during the cold war period, while the process of deepening continued further. The remainder of this chapter will seek to explore the concept of widening in order to develop a typology of arms control.

A typology of arms control

The debate over arms control theory in the cold war period was initially very narrow by historical comparisons. Although bilateral arms control designed to create strategic stability is an important function of arms control, it represents only one of five different approaches that have been identified from the history of arms control: arms control used to end conflicts; arms control focused on strategic stability; arms control to create norms of behaviour; proliferation control; and arms control by international organisation. Each of these forms of arms control is important to the understanding of the concept. In order to demonstrate this argument and the validity of these categories, historical examples of each form of arms control will be examined in turn.

Arms control at the conclusion of conflicts

This category refers specifically to arms control agreements that have been

reached at the end of wars or major conflicts. The focus in these cases has not been the strengthening of strategic stability and the aversion of impending conflict; rather, the attempt has been made to create a new series of post-war relationships. These have been treaties in which the terms have been overwhelmingly dependent upon the nature of the military and political outcome.

Four possibilities exist. First, where one state has been overwhelmingly defeated, an initial response may be to totally disarm that state, as in the cases of Germany and Japan at the end of the Second World War. Second, where a participant may be largely – although not completely – defeated, such as Carthage by the Romans, arms control terms may be very unequal: the *foedus inaequuum*, designed to create strategic and political inferiority. A third possibility is that where there has been a clear military success, the victors may wish to dictate terms to the defeated states that would impose a semi-permanent strategic stability through the superiority of the forces of the victors in order to create the conditions for peace, rather than conditions to perpetuate the political inferiority of the defeated states. Examples of such arms control would be the post-First World War peace treaties, or the peace treaty between the victorious allies and Italy and other defeated states in 1947. Finally, where one group of forces is merely in the ascendancy, but has not achieved an overwhelming victory, the terms of the treaty have been rather more balanced, although still in favour of the dominant parties, as is clear in the terms of the Peace of Westphalia. Each of these alternatives will be examined in turn.

The first possibility is that an overwhelmingly defeated state may be completely disarmed by its vanquishers. At Potsdam in 1945, the powers that were to occupy defeated Germany – Great Britain, the United States, France and the Soviet Union – reached a Protocol in which they agreed that:

> The purposes of the occupation of Germany by which the Control Council shall be guided are:
>
> (i) The complete disarmament and demilitarisation of Germany and the elimination or control of all German industry that could be used for military production. To these ends:
> (a) All German land, naval and air forces, the SS, SA, SD, and Gestapo, with all their organisations, staffs, and institutions, including the General Staff ... shall be completely and finally abolished in such manner as permanently to prevent the revival of German militarism and Nazism.[84]

A slightly different form of the same approach may be seen in the disarmament of Japan after the Second World War. Limitations on Japan did not take the form of a treaty: rather, Japanese disarmament took the form of a constitutional commitment. That this was imposed by outside forces, above all the United States and the personal influence of General MacArthur, is

clear in the context of the American occupation and role in the political restructuring of Japan following its military defeat. Article 9 of the Japanese constitution declares:

> Aspiring sincerely to an international peace based on justice and order, the Japanese people forever renounce war as a sovereign right of the nation and the threat or use of forces as means of settling international disputes.
>
> In order to accomplish the aim of the preceding paragraph, land, sea, and air forces, as well as other war potential, will never be maintained. The right of belligerency of the state will not be recognised.[85]

Of course in both cases, the prohibition on the development of military forces did not last, and the permanency implied in the phrases 'completely and finally abolished' and 'never be maintained' soon took on a rather fleeting character.

In contrast to the attempt to establish permanent disarmament, another form of establishing a new series of relationships at the end of conflict has been to impose severe military, and political, limitations upon the defeated state. Whereas the former may seek to impose permanent disarmament, the latter seeks to create permanent political inferiority. At the end of the Second Punic War, the terms of the Treaty of Zama in 202 BC were overwhelmingly in favour of Rome. Whereas the Romans had only to 'cease their raiding attacks', the Carthaginians had to observe strict limitations:

> all warships to be surrendered, with the exception of ten triremes, and all the trained elephants in their possession were to be handed over and no more to be trained. They were not to make war on anyone inside or outside Africa without permission from Rome; they were to make restitution to Masinissa [the Numidian prince] and draw up a treaty with him; they must supply grain and pay to the allied troops until their own envoys had returned to Rome. They were to pay 10,000 talents of silver spread by equal instalments over fifty years, and to hand over 100 hostages.[86]

Such use of arms control was designed to cement political relations whereby the defeated, through the limitations on their arms, would be kept in semi-permanent weakness in relation to the victor. It was not the strategic balance that was the key to the treaty for the Romans, but rather the effect of maintaining political dominance over Carthage. In this case, a Carthaginian attempt to change the power balance some fifty years later through rearming and waging war on the Numidians led to the complete destruction of Carthage at the hands of Rome.

The third possibility is that where there has been a clear military success, the victors may wish to dictate terms to the defeated that would impose upon them a semi-permanent position whereby the defeated state would not be able to upset strategic stability. This did not imply a position of political

inferiority; rather, a guarantee to the victors that they would not be placed in a position of strategic inferiority and therefore, since the victors interpreted their behaviour and desires as non-threatening, peace would be kept. The clearest examples of such agreements were those arrived at in the aftermath of both the First and Second World Wars. The Treaty of Versailles, for example, identified Germany as a destabilising power and therefore set a series of restrictions upon the German armed forces 'In order to render possible the initiation of a general limitation of the armaments of all nations.'[87] In a similar way, in the case of the restrictions placed on Italy, Bulgaria, Finland, Hungary and Romania in the peace treaties of 1947, limitations were placed on the size and quality of the army, navy and air force in the interests of preventing these states from being able to engage in militarily destabilising behaviour.

The final possibility is that at the conclusion of a war, there is no overwhelming victor, and that any arms control agreements reached would thus tend to be more balanced than the above. A good example of this would be the seven-year negotiations that eventually led to the Peace of Westphalia in 1648. The nature of the negotiations changed with the fortunes of war throughout the period. At the end of the conflict, the balance of advantage lay with France and its allies against the Holy Roman Emperor, and consequently the treaty terms reflected this. Taken as a whole, the treaty appeared to offer the prospect for a general peace between France, Sweden and their German allies on the one hand and the Holy Roman Empire on the other. There was a general disarmament section, Article CXVIII, in which it stated 'that the troops and armies of all those who are making war in the Empire, shall be disbanded and discharged; only each party shall send to and keep up as many men in his own dominion, as he shall judge necessary for his security'.[88] Under Article III:

> that a reciprocal amity between the Emperor, and the Most Christian King [of France], the Electors, princes, and states of the Empire, may be maintained so much the more firm and sincere ... the one shall never assist the present or future enemies of the other, under any title or pretense whatsoever, either with arms, money, soldiers, or any sort of ammunition; nor no-one, who is a member of this pacification, shall suffer any enemy's troops to retire through or sojourn in his country.[89]

Yet although these articles were designed to create a more pacific central Europe at the end of the Thirty Years War, they were also to be used specifically in the interests of the French, for not only had the French been at war with the Emperor, but also the Spanish who were close allies of the Emperor. Through Article IV, the French forced the Emperor to make a separate peace, thus making the Circle of Burgundy (the Spanish Netherlands) vulnerable to France. Article IV stipulated that:

the Circle of Burgundy shall be and continue a member of the Empire, after the disputes between France and Spain (comprehended in this treaty), shall be terminated. That nevertheless, neither the Emperor nor any of the states of the Empire shall meddle with the wars which are now on foot between them. That if for the future any dispute arises between these two kingdoms, the above said reciprocal obligation of not aiding each others' enemies, shall always continue firm between the Empire and the kingdom of France.[90]

Other elements of the treaty were to be more balanced. The French ally, the Elector of the Palatinate, was restored to power, but the Elector of Bavaria, one of the Emperor's closest allies, was recognised in a more powerful position. The French won the right to 'keep a garrison in the castle of Philippsburg' and thereby control of part of Alsace, but their further ambitions were to be constrained since they were to be 'limited to such a number of soldiers, as may not be capable to give any umbrage, or just suspicion to the neighbourhood'.[91] Further, sovereign control of the region was not to be ceded, since 'the King shall pretend to nothing more than the protection and safe passage of his garrison into the castle ... but the property of the place, all jurisdiction, all its profits, revenues, purchases, rights, *regales*, servitude, people, subjects, vassals ... shall appertain' to the Chapter of Speyer in the Empire.[92]

Arms control at the end of conflicts, therefore, has covered a large sphere of political and military activity. In addition, some elements of treaties such as those at Westphalia, Utrecht and Versailles have also sought to develop new norms of international behaviour.

Arms control to strengthen strategic stability

The second type of arms control focuses upon the attempt to create a greater measure of strategic stability between two or more states. There are many examples of this form of arms control, but in the classic form generally such measures focus upon one form of weaponry or upon one particular military concern. Often these agreements have taken place between two or more states equally concerned about the threat from the other. The use of arms control to strengthen strategic stability between two or more states has a long history, and may be traced back at least as far as the Egyptian–Hittite Agreement of 1280 BC. On certain occasions, such agreements have been brought about by the desire to strengthen crisis stability, sometimes in the context of a perception that war may be imminent; thus arms control has been used as a war prevention measure. The Anglo-French Naval Limitation Pact of 1787 is one example. On other occasions arms control has been used to strengthen arms race stability, and thereby also to avoid a costly arms race at some stage in the future; here the Argentine–Chile Naval Limitation Convention of 1902 is examined as an example.

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The Anglo-French Naval Limitation Pact of 1787 was clearly designed to strengthen strategic stability between the two countries in the context of a high probability of war breaking out between Great Britain and France. After the outbreak of civil war in Holland both the British and French sought to avoid being drawn in on opposite sides. In a Reciprocal Declaration both sides decided that:

in the current position of affairs, to agree that no one on either side will prepare any naval armaments beyond the peacetime establishment; and that neither will make any attempt to place in the water a greater number of ships-of-the-line than the six whose armaments have already been reciprocally communicated; and that in a situation where one of the two sovereigns should find it necessary to make some different arrangement, it would not take place until after preliminary notification.[93]

Within three weeks of this agreement, however, direct conflict between Britain and France appeared even more likely over Holland; yet, as a result of negotiations, a further strengthening of an arms control regime took place with the signing of a joint declaration at Versailles on 27 October, in which:

the undersigned, in the name of their respective sovereigns, agree, that the armaments, and in general all warlike preparations, shall be discontinued on each side; and that the navies of the two nations shall be again placed upon the footing of the peace establishment, as it stood on the 1st of January of the present year.[94]

Through the use of arms control, both the British and French were able to convince themselves that war over Holland, an objective that neither desired, could be avoided by obtaining sufficient confidence that the adversary would be unable to mobilise an adequate force to intervene fully in the Dutch civil war.

In contrast to the tense relations of 1787, the Argentine–Chilean Naval Limitation Convention of 1902 took place in a general context in which war was not seen to be imminent. Strongly encouraged by the British, both Argentina and Chile decided to enter into an arms control agreement which would prevent the two countries from entering into a direct naval arms race.[95] Article 1 of the Convention required that:

the Governments of Chile and of the Argentine Republic desist from acquiring the vessels of war now building for them, and from henceforth making new acquisitions. Both Governments agree, moreover, to reduce their respective fleets, with which object they will continue to exert themselves until they arrive at an understanding which shall establish a just balance between the said fleets. This reduction to take place within one year, counting from the date of the exchange of ratification of the present Convention.[96]

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Under Article 2, 'The two Governments bind themselves not to increase their naval armaments during a period of five years, without previous notice; the one intending to increase them shall give the other eighteen months notice.'[97]

Such classic forms of arms control to strengthen strategic stability should not exclude other forms of agreement in this category. At least two other examples need to be given to illustrate the variety of different arms control measures designed to strengthen strategic stability: bilateral measures over neutralisation to strengthen crisis stability; and multilateral efforts to avoid arms race instability.

The first of these forms concerns the limitation on weapons within a particular area in order to strengthen crisis stability. The Aaland Islands Convention of 1921 between Finland and the Soviet Union set measures for the neutralisation of the area. Article 3 stipulated that 'No military or naval establishment or base of operations, no military aeronautical establishment or base of operations, and no other installations utilized for war purposes shall be maintained or created in the zone.'[98] In such cases, areas over which conflict might occur were identified and neutralised in order to reduce the likelihood of conflict occurring between the parties.

The second type concerns multilateral efforts to strengthen arms race stability. The Central American Arms Limitation Treaty of 1923, amongst other arms control measures, set firm limits on the total size of the Army and National Guard of Guatemala (5200), El Salvador (4200), Honduras (2500), Nicaragua (2500) and Costa Rica (2000) for a period of five years (Article 1); a maximum of ten 'war aircraft' and no 'war vessels' excluding armed coast guard boats (Article 4); and forbade the export of arms to other Central American countries (Article 3). The treaty's limits could be exceeded in cases of civil war or impending attack by another state (Articles 1 and 4), but states had no right to withdraw from the treaty for five years, and after that period states had to give twelve months notification of withdrawal. States had to provide 'a report on the measures adopted by said Government for the execution of this Convention' every six months.[99] Clearly designed to strengthen arms race stability and to control the costs of an arms race in the region, the agreement applied the concept of strategic stability to a multilateral environment.

There have therefore been a number of agreements reached which were designed to strengthen strategic stability between one or more nations by reducing the dangers of crisis and arms race instability in the context of strategic relationships in which war may always be possible. In contrast, arms control at the end of conflicts seeks to create a new set of strategic relationships. Whereas arms control to create strategic stability is likely to be balanced between the participants, arms control at the conclusion of conflicts is much more likely to be uneven in the treatment of the parties.

Arms control to create norms of behaviour

There have been a number of agreements and treaties that have sought to create norms in international relations, particularly as they affect the use of arms. Arms control that has sought to create or develop such norms may be divided into three categories. First, there have been efforts to contain the destructive effect of warfare by prohibiting the use of certain weapons. Examples of this include the Declaration of St Petersburg in 1868, and the 1925 Geneva Protocol. Second, there have been attempts to create rules on the identification and treatment of non-combatants, such as the Peace of God, proclaimed by Guy of Anjou in 990, or the 1923 Rules of Air War. Third, some agreements have sought to identify geographic areas in which conflict is illegitimate, as with the 1881 Straits of Magellan Treaty and the Antarctic Treaty of 1959. Each of these categories will be examined in turn.

Numerous attempts have been made over the course of human history to constrain the use of certain forms of weapons which have been deemed to be unacceptable because of the level and nature of destruction which their use would bring. Certain basic forms of weapons have repeatedly been the focus of arms control efforts. For example, a prohibition on the use of poison is attributed by Leon Friedman to the Seventh Book of the Hindu *Book of Manu* in the fourth century BC.[100] The Treaty of Strassbury in 1675 prohibited the use of poison and poisoned weapons in warfare in France and Germany.[101] Such prohibitions later included gas along with poisons, and were included in agreements such as the Declaration of Brussels of 1874, the Hague Convention of 1899, and the Washington Treaty on Use of Submarines and Gases in Wartime of 1922.[102] The Geneva Protocol on Poisonous Gases of 1925 added to this list a prohibition on 'bacteriological methods of warfare'.[103] There are many other examples. Canon 29 of the Second Lateran Council of 1139 outlawed the use of crossbows against Catholics, as has already been mentioned. In the more contemporary period, as technology has increased the level of possible destructiveness, and as humanitarian concerns have grown, arms control has focused on other forms of weapons. Prohibitions have been issued against other weapons, such as exploding bullets in the Declaration of St Petersburg in 1868. In each of these and other examples, it was deemed possible to identify weapons that could be defined as uncivilised, barbarous tools of violence which it was the duty of political leaders to attempt to eliminate. Especially in the earlier agreements, a key notion was that of 'civilisation'. The prohibition on the use of the crossbow did not include heretics and Saracens. The ban on the use of expanding bullets was suspended 'with regard to non-contracting powers, or powers that shall not have acceded to it ... [and] ... from the moment when, in a war between contracting and acceding parties, a non-contracting party, or a non-acceding party, shall join one of the bel-

ligerents'.[104] Rules of conduct, which included expectations of the social order, required restrictions on certain forms of weapons where those rules were recognised and the suspension of the rules where they were not.

An examination of arms control agreements thus also indicates the nature of the world in which decision-makers believed that they were operating. This is most evident with respect to the two most extreme arms control initiatives of this type, for both the Kellogg–Briand Pact and the Saavedra Lamas Treaty sought to identify all weapons as uncivilised, and thereby to make all war illegal and unacceptable. An early forerunner of these efforts took place at the Fourth Lateran Council of 1215 during which the Pope proclaimed that 'for four years peace be observed in the whole Christian world.'[105] Nine states signed the Kellogg–Briand Pact of 1928, under which they 'solemnly declare in the names of their respective peoples that they condemn recourse to war for the solution of international controversies, and renounce it as an instrument of national policy in their relations with one another'.[106] The more extensive Saavedra Lamas Treaty of 1933 between states in the Americas declared under Article I that 'the settlement of disputes or controversies of any kind that may arise among them [the signatories] shall be effected only by the pacific means of international law'.[107] The treaty also attempted to create a conciliation service.

Across many centuries there has been a remarkable continuity in the efforts to control the most destructive forms of weapons. And continuing this trend in the cold war period, the United Nations declared that:

(a) The use of nuclear and thermo-nuclear weapons is contrary to the spirit, letter and aims of the United Nations and, as such, a direct violation of the Charter of the United Nations;
(b) The use of nuclear and thermo-nuclear weapons would exceed even the scope of war and cause indiscriminate suffering and destruction to mankind and civilization and, as such, is contrary to the rules of international law and to the laws of humanity;
(c) The use of nuclear and thermo-nuclear weapons is a war directed not against an enemy or enemies alone but also against mankind in general, since the peoples of the world not involved in such a war will be subjected to all the evils generated by the use of such weapons;
(d) Any State using nuclear and thermo-nuclear weapons is to be considered as violating the Charter of the United Nations, as acting contrary to the laws of humanity and as committing a crime against mankind and civilization.[108]

Regardless of the level of success of these agreements, and treaties such as Kellogg–Briand were clearly failures, repeatedly states have sought to control the destructive effect of warfare by prohibiting the use of certain weapons. Some agreements have been rather more successful: for example, the prohibitions on the use of exploding bullets and on the use of poison.

The second area of interest has been connected with the attempts to identify and protect non-combatants. As early as 990, the Bishop of Puy, Guy of Anjou, declared the Peace of God in which rules for the control of violence were set out including prohibitions on the seizure of peasants and merchants.[109] More precisely, the Peace of the Land of Elsass from 1085 to 1103 decreed that 'All clergy and women, merchants, hunters, pilgrims, and farmers while they work in the fields and on their way to and from their labour, shall have peace.'[110] In the seventeenth century, it became common practice to ransom prisoners of war, which led to some improvements in their treatment. In an agreement of 1673 between France and the States General of the United Provinces (the Netherlands), prices were agreed that ranged from 50,000 *livres* for a General to 25 *livres* for an auditor.[111] Later norms developed which stipulated that the sick and wounded should be well treated in wartime (for example, the Geneva Convention of 22 August 1864) and that prisoners of war should be treated as non-combatants. Two of the most extensive treatments of this subject were in the Hague Conventions of 1899 and 1907, in Chapter II of the Annexe to the Convention. In those documents, signed by twenty-four states in 1899 and forty-one in 1907, nations agreed on a series of limitations on the violence in war relating to issues such as sieges, flags of truce, armistices, and on the behaviour of an occupying army.[112] In the inter-war period, many of these norms were taken further in agreements such as the Red Cross Convention of 1929 on the Amelioration of the Condition of the Wounded and Sick of Armies in the Field, and the Convention on Treatment of Prisoners of War of 1929.[113] The Hague Rules of Air Warfare of 1923 even went so far as to attempt to regulate the use of military aircraft at a time when surgical precision was a technical impossibility, in order to try to define civilians as non-combatants in air war. Article XXIV stipulated that:

1. Aerial bombardment is legitimate only when directed at a military objective, that is to say, an object of which the destruction or injury would constitute a distinct military advantage to the belligerent.
2. Such bombardment is legitimate only when directed exclusively at the following objectives: military forces; military works; military establishments or depots; factories constituting important and well known centres engaged in the manufacture of arms, ammunition, or distinctively military supplies; lines of communication or transportation used for military purpose.
3. The bombardment of cities, towns, villages, dwellings, or buildings not in the immediate neighbourhood of the operations of land forces is prohibited ...
4. In the immediate neighbourhood of the operations of land forces, the bombardment of cities, towns, villages, dwellings, or buildings is legitimate provided that there exists a reasonable presumption that the military concentration is sufficiently important to justify such bombardment, having regard to the danger thus caused to the civilian population.[114]

Such attempts to control the use of weapons against particular targets have frequently been ignored in warfare, and this discordance between what has been prescribed and the action actually taken has been one area that from time to time has led the whole process of arms control into disrepute.

The final area where arms control has been used in the attempt to create norms has been related to preventing warfare occurring in particular areas. In the Middle Ages, efforts were made to eliminate violence from churches and church land, as is clear in the Peace of God proclaimed by Guy of Anjou in 990: 'From this hour forth no one shall seize ecclesiastical lands, whether those of a bishop, chapter or monastery.'[115] Later arms control efforts sought to focus on particular geographic regions, not so much in order to stabilise relations between states, but in order to avoid national competition in the region. One such example was the Clayton–Bulwer Treaty of 1850 regarding the Panama Canal, by which both Great Britain and the United States agreed 'that neither the one nor the other will ever obtain or maintain for itself any exclusive control over the ship-canal; agreeing that neither will ever erect or maintain any fortifications commanding the same.'[116] In 1881, Argentina and Chile agreed under the Straits of Magellan Treaty to the neutralisation of the region to allow free navigation.[117] A final example would be the Antarctic Treaty of 1959 which declared, under Article I, that:

> Antarctica shall be used for peaceful purposes only. There shall be prohibited, *inter alia*, any measures of a military nature, such as the establishment of military bases and fortifications, the carrying out of military manoeuvres, as well as the testing of any type of weapons.[118]

Attempts to create or develop norms affecting the use of arms may therefore be divided into those efforts to contain the destructive effect of warfare by prohibiting the use of certain weapons, the attempts to create rules on the identification and treatment of non-combatants, and the agreements that have sought to identify geographical areas in which conflict is deemed to be illegitimate. These activities have been a part of the history of war and peace for at least a thousand years, certainly in Europe. The next area of arms control, the management of the proliferation of arms, has been a much less significant issue until more recent times.

Managing the proliferation of weapons

Political leaders have always been concerned with the proliferation of weapons into the hands of their potential enemies, and have sought agreements to contain such threats. However, in the twentieth century, there have also been agreements designed to control proliferation not simply because there may be a direct threat to a participating state, but rather because weapons in general, or particular forms of weapons specifically, have

been seen to be generally destabilising in international relations either to a region or country, or to the world as a whole. Thus three types of proliferation control may be identified: first, defensive, such as the agreement between Great Britain and Spain in 1814 to limit the arms trade in Spain's American colonies; second, arms control designed to control proliferation in order to try to enhance global stability, with the Non-Proliferation Treaty of 1968 being a good example; and third, arms control to try to limit violence and the danger of war and escalation in a particular country or region, such as the 1950 Tripartite Arms Declaration to limit instability in the Near East. Each of these different forms of proliferation control will be examined in turn.

In terms of defensive management of proliferation, many of the examples pre-date the twentieth century. As already seen, both the Third Lateran Council of 1179 and the Fourth Lateran Council of 1215 sought to prevent military supplies, and especially naval materials and skills, from being sold to the Saracens. During the Middle Ages, it was fairly common practice to insert clauses into commercial treaties which would limit the arms trade to the enemies of the governments of the signatories. For example, the *Confirmatio Tractatus Flandriae* of 1370 between the English King, Edward III, and the Count of Flanders included the stipulation that:

> it is agreed that none of the subjects of the Count of Flanders will bring, or will have brought, by sea, any arms, artillery or supplies for the aid and comfort of the enemies of the King of England. Excepted from this are the arms, artillery and suppliers necessary for the guard and defence of their own bodies of masters, merchants, sailors and shipboard servants on board the boats and vessels of the Count.[119]

In the 1814 agreement between Great Britain and Spain, in the context of the rebellion of the colonies in the Americas against Spanish rule:

> His Britannic Majesty being anxious that the troubles and disturbances which unfortunately prevail in the Dominions of His Catholic Majesty in America should entirely cease, and the Subjects of those Provinces should return to their obedience to their lawful Sovereign, engages to take the most effectual measures for preventing his Subjects from furnishing Arms, Ammunition, or any other warlike article to the revolted in America.[120]

A third example may be drawn from the Convention as to the Pacific Ocean and Northwest Coast of America in 1824, in which the Russians and Americans agreed to occupy part of the northwestern coast of the North American continent, and sought to ensure that they would be relatively safe from destructive attack by the indigenous peoples. Article V set limits upon the type of trade that the Americans and Russians could engage in with the indigenous peoples, and stipulated that:

> fire-arms, other arms, powder, and munitions of war of every kind, are always

to be excepted from this same commerce permitted; the two powers engage, reciprocally, neither to sell, nor suffer them to be sold, to the natives by their respective citizens and subjects, nor by any person who may be under their authority.[121]

A final example of efforts to limit the area in which certain weapons could be used would be the Brussels Convention of 1890, which stated that:

The experience of all nations that have intercourse with Africa having shown the pernicious and preponderating part played by fire-arms in operations connected with the slave-trade as well as internal wars between the native tribes ... the powers decide, so far as the present state of their frontiers permits, that the importation of fire-arms, and especially of rifles and improved weapons, as well as of powder, ball and cartridges, is ... prohibited in the territories comprised between the 20th parallel of North latitude and the 22nd parallel of South latitude, and extending westward to the Atlantic Ocean and eastward to the Indian Ocean.[122]

Such measures were designed to assist in the management of colonial Africa by further controlling the slave trade.

Thus, the control of the proliferation of weapons prior to the twentieth century focused on the defence of the particular state against rebels, indigenous peoples and other actual or potential enemies. The contribution of the inter-war period, however, was to see the introduction of the idea into arms control that the regulation of weapons in general might lead to global peace. Although many of the roots of this argument lay in the interpretations of the causes of the First World War, others pre-dated 1914. An example of the official thinking behind the arms control and peace efforts of the pre-1914 period can be seen in the letter issued by the Russian Foreign Minister on behalf of the Tsar inviting participants to attend what became the First Hague Conference. The Tsar called for a meeting to agree:

the most effective means of assuring to all peoples the blessings of real and lasting peace, and above all of limiting the progressive development of existing armaments ... the accumulation of war material renders the armed peace of today a crushing burden more and more difficult for the nations to bear. It consequently seems evident that if this situation be prolonged, it will inevitably lead to that very disaster which it is desired to avoid, and the horrors of which make every humane mind shudder by anticipation.[123]

In the immediate aftermath of the First World War, the Tsar's overt agenda was taken up with renewed enthusiasm. In 1919 the Convention for the Control of the Trade in Arms and Ammunition was signed, stating that 'the long war now ended, in which most nations have successively become involved, has led to the accumulation in various parts of the world of considerable quantities of arms and munitions of war, the dispersal of which would constitute a danger to peace and public order'.[124] Yet this enthusiasm

quickly waned. In 1925, a follow-up Convention for the Supervision of the International Trade in Arms and Ammunition and in Implements of War was signed; however, it was never ratified. Further illustrating the decline of the globalist vision, the Convention with Regard to the Supervision of the Private Manufacture and Publicity of the Manufacture of Arms and Ammunition and of Implements of War drawn up in 1929 was submitted to the League of Nations' World Disarmament Conference of 1932, but was not even signed.

If the globalist approach declined markedly in the late 1920s, it was to re-emerge strongly in the cold war period in the context of the control of nuclear weapons. During the 1950s, the context for arms control was set by the public pronouncements of the need to obtain general and complete disarmament; of course it was the reaction to this that led to the development of arms control theory in the late 1950s and early 1960s. But those theories relegated the subject of proliferation control to secondary importance. The practice of globalist proliferation control, however, was moving ahead. The Statute of the International Atomic Energy Authority of 1956 was the first such measure. Article II defined the objectives of the IAEA as follows:

The Agency shall seek to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world. It shall ensure, so far as it is able, that assistance provided by it or at its request or under its supervision or control is not used in such a way as to further any military purpose.[125]

This globalist drive for nuclear non-proliferation reached its height, of course, with the signing of the Treaty on the Non-Proliferation of Nuclear Weapons in 1968. In the preamble, the globalist intentions were made clear: the Treaty was important given

the devastation that would be visited upon all mankind by a nuclear war and the consequent need to make every effort to avert the danger of such a war and to take measures to safeguard the security of peoples,
... the proliferation of nuclear weapons would seriously enhance the danger of nuclear war.[126]

Globalism in the 1980s was extended even further with the agreement on the Guidelines for Sensitive Missile-Relevant Transfer, the Missile Technology Control Regime. As stipulated in the first line of the agreement, 'The purpose of these Guidelines is to limit the risks of nuclear proliferation by controlling transfers that could make a contribution to nuclear weapons delivery systems other than manned aircraft.'[127]

Globalist arms control in the cold war era was thus more successful than globalism in the inter-war period. The failure of inter-war endeavours, along with the disillusion over the rhetoric of general and complete disarmament in the 1950s, may in part explain why many efforts were made to create

partial agreements in the cold war period, attempts to limit the proliferation of weapons to third countries or regions that might lead to a lessening of violence in that area, or might limit the likelihood of war breaking out. Only one significant partial proliferation control agreement was reached in the inter-war period, the Restraining Sales of Armaments in China agreement of 1919. In the cold war period, several such agreements were reached. One of the earliest was the very limited Tripartite Arms Declaration of 1950. This Declaration built upon United States' and United Nations' arms embargoes on the combatants in the Arab–Israeli war of 1948. In the Tripartite Arms Declaration of 1950, Great Britain, the United States and France recognised:

> that the Arab states and Israel all need to maintain a certain level of armed forces for the purposes of assuring their internal security and their legitimate self defence and to permit them to play their part in the defence of the area as a whole. All applications for arms or war material for these countries will be considered in the light of these principles ... The three Governments take this opportunity of declaring their deep interest in and their desire to promote the establishment and maintenance of peace and stability in the area.[128]

More substantial than this were the two nuclear weapons free zones treaties. Under the Treaty of Tlatelolco of 1967:

> The Contracting Parties hereby undertake to use exclusively for peaceful purposes the nuclear material and facilities which are under their jurisdiction, and to prohibit and prevent in their respective territories:
>
> (a)   The testing, use, manufacture, production or acquisition ... of any nuclear weapons ...
>
> (b)   The receipt, storage, installation, deployment and any form of possession of any nuclear weapons.[129]

Also, the South Pacific Nuclear-Free-Zone Treaty under which each Party undertook 'not to manufacture or otherwise acquire, posses or have control over any nuclear device'.[130]

Thus there was a major difference in the forms of proliferation control in the twentieth century in comparison to those which had gone before. Strictly defensive limitations were much less in evidence, and efforts to create partial and global proliferation controls developed and grew. Partly the globalist efforts were connected to one of the most significant developments of the twentieth century: the rise of the international organisation. The final form of arms control to be examined is that directly related to control by international organisation.

Arms control by international organisation

The history of arms control by international organisation is, of course, com-

pletely dominated by the activities of the League of Nations and the United Nations. Both organisations sought a role in arms control and disarmament.[131] The League, under Article 8 of the Covenant, gave the Council a role in setting the level of armaments with individual states, and after agreement had been reached those limits could 'not be exceeded without the concurrence of the Council'.[132] In contrast, very little was mentioned in the Charter of the United Nations with regard to arms control; it certainly was not given the prominence as an issue that it had received in the League's Covenant. The major reference in the Charter was in Article 26, which stated:

> In order to promote the establishment and maintenance of international peace and security with the least diversion for armaments of the world's human and economic resources, the Security Council shall be responsible for formulating, with the assistance of the Military Staff Committee referred to in Article 47, plans to be submitted to the Members of the United Nations for the establishment of a system for the regulation of armaments.[133]

The actual activities of arms control in both organisations were in essentially different areas. Under the League, most efforts concerned global controls. As Resolution XIV of the League of Nations General Assembly noted in 1922, 'No scheme for the reduction in armaments, within the meaning of Article 8 of the Covenant, can be fully successful unless it is general.'[134] Under the United Nations, although attempts to secure global controls have been an important part of its work, arms control efforts have widened into two other areas: there have been efforts to control individual countries; and security guarantees have also been given in order to elicit agreement on arms control. This section will examine all three of these activities of international organisations in relation to arms control.

In terms of global controls on weapons, it is clear that most of the work of the international organisations has taken the form of providing a forum for discussion rather than generating a great deal of activity. The League of Nations was the host for a large number of draft treaties and arms control proposals, particularly in the period of the General Disarmament Conference in the early 1930s. The Soviet Union made detailed proposals for general and complete disarmament in 1927 and 1928; the Preparatory Commission for the Conference made a further detailed draft in 1930; the United States made a series of proposals in 1932; the French also in 1932; the British in 1933; the United States again in 1933: this list is by no means exhaustive.[135] Similarly, the United Nations played host in the 1950s to a further series of proposals for global disarmament, examples of which included: the Soviet plan of 1952; the Western countries' proposals, 1952; the Soviet Union again in 1955; the United States in 1956; India, 1956; the Soviet Union and Western countries exchanged plans in 1957; and so forth – again the list is not exhaustive.[136] In all this diplomatic effort, only one clear

(and very limited) achievement can be identified. In 1931 the Twelfth Assembly of the League of Nations adopted a One-Year Armament Truce, which was formally adopted by forty-five states. The truce declared that 'a renewal of the competition in armaments would necessarily lead to an international and social catastrophe;' and therefore:

> The Assembly,
>
> Requests the Governments invited to the Disarmament Conference to prepare for this event by means of an armaments truce, and, accordingly,
>
> Requests the Council to urge the Governments ... to refrain from any measure involving an increase in their armaments.[137]

Such modest achievements in the light of so much diplomatic effort certainly implied to the arms control theorists of the early 1960s that alternative routes to arms control needed to be devised.

However, it would be wrong to ignore other areas in which international organisations have been involved in arms control. The United Nations has on several occasions imposed arms restraints on an individual member, South Africa. In 1963, Security Resolution 181 initiated the United Nations involvement in imposing arms restraints upon South Africa:

> *Noting with concern* the recent arms build-up by the Government of South Africa, some of which arms are being used in furtherance of that Government's racial policies ...
>
> *Being convinced* that the situation in South Africa is seriously disturbing international peace and security ...
>
> *Solemnly calls upon all* States to cease forthwith the sale and shipment of arms, ammunition of all types and military vehicles to South Africa.[138]

Four months later, with the South African refusal to accept the above Resolution, the Security Council unanimously passed a Resolution appealing 'to all States to comply with the provisions of Security Council resolution 181 (1963) of 7 August 1963'.[139] However, it was not until after Resolution 392 (1976) condemning killings by the police and army in South Africa that the Security Council moved from voluntary to mandatory compliance. In Resolution 418 of November 1977, the Security Council declared the following:

> *Recognising* that the military build-up by South Africa and its persistent acts of aggression against the neighbouring States seriously disturb the security of those States;
>
> *Further recognising* that the existing arms embargo must be strengthened and universally applied, without any reservations or qualifications whatsoever, in order to prevent a further aggravation of the grave situation in South Africa ...
>
> *Decides* that all States shall cease forthwith any provision to South Africa of arms and related matériel of all types, including the sale or transfer of weapons and ammunition, military vehicles and equipment, paramilitary

police equipment; and spare parts for the aforementioned, and shall cease as well the provision of all types of equipment and supplies and grants of licensing arrangements for the manufacture and development of nuclear weapons.[140]

Finally, Resolution 558 of 1984 reaffirmed Resolution 418, and requested 'all States to refrain from importing arms, ammunition of all types and military vehicles produced in South Africa'.[141] Of course, Resolution 558 indicated that one of the effects of Resolution 418 had been to further increase the effectiveness of South Africa's own military industrial base; nevertheless, the United Nations had, through the force of international law, significantly isolated the military forces of South Africa, and thereby affected the structure of those forces.[142]

The third area, the giving of security guarantees to elicit arms control, has only occurred on one, very significant, occasion. In 1968, the Treaty on Nuclear Non-Proliferation was submitted to the General Assembly for consideration. Although there was general support, some nations were concerned at what they saw as a treaty that would impose nuclear disarmament on some, but not all states. In order to attempt to alleviate these concerns, and therefore to clear the way for the treaty to be as widely supported as possible, Security Council Resolution 225 was passed. It stated that:

> *Taking into consideration* the concern of certain of these States that, in conjunction with their adherence to the Treaty on the Non-Proliferation of Nuclear Weapons, appropriate measures be undertaken to safeguard their security ...
>
> 1. *Recognises* that aggression with nuclear weapons or the threat of such aggression against a non-nuclear-weapon State would create a situation in which the Security Council, and above all its nuclear-weapon States permanent members, would have to act immediately in accordance with their obligations under the United Nations Charter;
>
> 2. *Welcomes* the intention expressed by certain States that they will provide or support immediate assistance, in accordance with the Charter, to any non-nuclear-weapon State Party to the Treaty ... that is a victim of an act or an object of a threat of aggression in which nuclear weapons are used.

Such a guarantee by the nuclear haves of the security of the nuclear have-nots against threats or aggression by the possessors of nuclear weapons made a significant contribution to the wide – although by no means unanimous – acceptance of the Treaty. They were confirmed by unilateral statements by the Soviet Union, the United States and the United Kingdom in May and June 1978.[143]

Arms control through international organisation has thus been a mixed experience. The majority of the activity in this sphere has been in terms of discussion rather than agreement, and yet some limited and specific measures have been enacted. Although clearly the area in which the least arms

control has been agreed, arms control by international organisation has nevertheless still had a role to play.

Conclusion

The main purpose of this chapter has been to examine the *widening* of arms control from its limited beginnings in the ancient world to its complex practice in the inter-war and cold war periods. This notion of widening will be applied in the rest of this book to the arms control agreements that have been reached in the post-cold war world in order to demonstrate the importance of the widening concept to the understanding of arms control. However, before beginning that investigation, there is an important second theme that has emerged in the course of this chapter that merits some further analysis, and that is the notion of *deepening*.

Deepening, it will be recalled, refers to three factors related to the nature of agreements reached: the increasing amount of detail placed in agreements; the growing stress on verification; and the evolution of regimes around arms control agreements. The development of each of these elements will be briefly noted in this section.

First, many arms control agreements in the twentieth century have been far more detailed than those which had been reached before. Partly this was due to experience and increasing diplomatic sophistication. If an agreement is not carefully drawn up, it may be broken in spirit if not in letter. After the Franco-Prussian Treaty of 1808 in which the Prussian army was limited to 42,000 troops, Scharnhorst began a strategy by which recruits were given intensive training, and then sent on extended leave, during which time they received extra tuition in their towns and villages. In this way, the Prussian army never formally exceeded the limit of 42,000, yet was also developed into the army of Blücher that was so effective at Waterloo. In the period before the nuclear age one of the clearest examples of deepening in terms of greater precision was the Washington Naval Treaty of 1922. Running to twenty-three articles, the treaty was one of the first to set out technical details regarding limitations. Signed by Great Britain, the United States, France, Italy and Japan, the treaty set out acceptable sizes for ships and their weapons, and also a ratio for the total size of the relative navies in which the United States and the British Empire were to be allowed the largest navies with a maximum tonnage of 525,000, Japan 315,000 tons and both France and Italy 175,000 tons.[144] This detailed treaty set out which ships the High Contracting Parties were able to retain, and a schedule for the laying down of new ships and their completion against the scrapping of old ships. In Chapter 2, the treaty set out definitions, rules on which ships each state could retain, and also rules for the destruction of excess ships, along with a schedule for the replacement of ships, thus setting out

a clear plan for the transformation of the navies of all five parties to a situation in which by 1942 all capital ships of the parties would have been built post-Jutland.[145] In the cold war period, the SALT I and SALT II treaties took this process further through issuing common understandings and agreed statements with the treaty in order to clarify the nature of the process.

Second, the growing importance of verification has also been a feature of the arms control of the twentieth century, and in particular an attribute of the cold war period for both technical and ideological reasons. During the cold war period the development of satellite imaging has provided for a level of information that was previously inconceivable, while the nature of the East–West political rivalry was such that, with very little trust on either side, national or independent information with regard to compliance was naturally deemed to be of great importance. Five forms of verification can be identified in arms control agreements. First, the implicit understanding that information will be gathered by national technical means. Neither the Partial Test Ban Treaty nor the Biological Weapons Convention mention any verification procedures, and thereby rely not only on national restraint, but also on national intelligence gathering facilities. Second, national technical means may be explicitly mentioned in the terms of the agreement. This is the case with the Interim Agreement on Limitation of Strategic Offensive Arms, the ABM Treaty and SALT II, and in each treaty there is a prohibition on interference with such means (Article V, XII and XV respectively) which states that 'Each party undertakes not to interfere with the national technical means of verification of the other Party.'[146] Third, states may be explicitly required to provide information under the terms of the treaty. Under both the Antarctic Treaty and the Outer Space Treaty (Articles III and XI respectively) parties were committed to informing others of their activities in the regions concerned. Fourthly, measures of on-site inspection may be allowed by the signatories. An example of such provision is included in the Peaceful Nuclear Explosions Treaty of 1976.[147] Finally, states may be required to allow international bodies to inspect national facilities and activities in order to obtain information. This is most clearly the case with the Treaty on the Non-Proliferation of Nuclear Weapons, where states must accept International Atomic Energy Agency safeguards under Article III.

Third, the process by which arms control agreements tended to be seen as part of a regime to be protected and developed as a cornerstone of a political relationship pre-dated the twentieth century. Early examples include the Rush–Bagot Agreement, and also to a certain extent the Treaty of Utrecht. In the twentieth century, however, these efforts developed further. In the inter-war period, the naval arms control agreements of the five major naval states were seen, until the late 1930s, to form an arms control regime around which policy could be built between the powers, and into which other naval states – such as Germany and the Soviet Union – could be incor-

porated. Further, the post-First World War peace treaties and arms limitations were also seen to be part of a regime that would allow a general disarming of states under the League of Nations. In the cold war period, one of the purposes of the arms control theory of the early 1960s was to advocate the development of a regime for the strengthening of strategic stability through a series of arms control agreements, which in practice began with the 1972 SALT I agreements. Finally, the Non-Proliferation Treaty of 1968 was seen as only one element in a non-proliferation of nuclear weapons regime which includes the Partial Test Ban Treaty and the IAEA (International Atomic Energy Agency), amongst other elements.

This chapter has argued that an analysis of the history of arms control demonstrates that there are five areas in which arms control has been practised as arms control procedures have widened. This typology will now be applied to those agreements that have been reached in the post-cold war world in order to demonstrate the validity and significance of the widening concept. Chapter 2 will examine those agreements that have been reached in order to end the cold war conflict; Chapter 3 will analyse the agreements that have been reached in order to strengthen strategic stability; Chapter 4 assesses agreements designed to strengthen norms of behaviour in relation to weapons and the use of arms; Chapter 5 examines proliferation concerns; and Chapter 6 analyses the role of the United Nations in the international control of weapons.

Notes

1 Trevor Dupuy and Gay Hammerman in *A Documentary History of Arms Control and Disarmament* New York and London: R. R. Bowker and Co., 1973, quote Edward Parker's account (*Ancient China Simplified* London: Chapman and Hall, 1908) of a peace conference held in 546 BC attempting to end seventy-two years of war (pp. 2–4). The Peloponnesian wars lasted for some thirty-nine years. Thus not only were wars frequent, but they sometimes lasted for generations.

2 See Neta C. Crawford 'Cooperation Among Iroquois Nations' *International Organization* Vol. 48, No. 3, 1994, pp. 345–85.

3 Evidence for this may be found in the Bible: I Samuel 13: 19–22, reproduced Richard D. Burns (editor) *Encyclopedia of Arms Control and Disarmament* New York: Charles Scribner, 1992, p. 1409.

4 The Egyptian–Hittite Agreement was poorly drawn up in that the area of the buffer region was not adequately defined. See Stanley M. Burstein 'Arms Control in Antiquity' in Richard D. Burns (editor) *Encyclopedia*, p. 552.

5 *Ibid.*, p. 559.

6 *Ibid.*, p. 556.

7 Michael Howard *War in European History* Oxford: Oxford University Press, 1976, p. 1. Also see R. A. Preston, S. F. Wise and H. O. Werner *Men in Arms: A History of Warfare and its Interrelationship with Western Society* New

York/London: Holt, Rinehart & Winston.

8 See Udo Heyn 'Medieval Arms Control Movements and the Western Quest for Peace' in Richard D. Burns (editor) *Encyclopedia*, pp. 563–79.

9 Excerpts from these proclamations can be found in Richard D. Burns *Encyclopedia*, pp. 1489–96.

10 Reproduced in *ibid.*, p. 1489.

11 Reproduced in *ibid.*, p. 1491.

12 *Ibid.*, p. 1495.

13 Michael Howard *War*, p. 5.

14 Canon 29 of the Second Lateran Council of 1139, reproduced in Richard D. Burns *Encyclopedia*, p. 1367.

15 There is some debate on the nature of the interpretation of Canon 29. Dupuy and Hammerman, for example, suggest the possibility that the Latin *ballistrariorum* and the English 'slingers' referred to in Canon 29 should be interpreted in that the 'prohibition against the crossbow also applies to other bow-and-arrow weapons' (p.11). Indeed, a reliable source for the widely held assumption that *ballistrariorum* means crossbow alone is very illusive. However, this study has interpreted *ballistrariorum*, in accordance with the common usage, to mean crossbow.

16 However, secular leaders were often associated with the Peace and Truce of God, and spiritual leaders with the Peace of the Land and the Peace of the Prince, so the distinction should not be overly emphasised.

17 The sense in which this was a symbolic beginning of the state system is made clear in David Armstrong *Revolution and World Order* Oxford: Clarendon, 1993, pp. 32–4.

18 Reproduced in Leon Friedman (editor) *The Law of War: A Documentary History* New York: Random House, 1972, p. 150.

19 Cited in *ibid.*, p. 149.

20 See *ibid.*, pp. 204–50 for details of the 1899 Conference, and pp. 270–394 for the 1907 Conference.

21 Reproduced in Richard D. Burns (editor) *Encyclopedia*, p. 1500.

22 *Ibid.*, p. 1501.

23 Reproduced in *ibid.*, p. 1500.

24 Excerpted in *ibid.*, p. 1322.

25 Reproduced in *ibid.*, p. 1323.

26 The Neutralisation of Belgium, the Neutralisation of Luxembourg and the Black Sea Convention are excerpted in *ibid.*, pp. 1326–9.

27 The exchange of letters is reproduced in *ibid.*, pp. 1325–6.

28 On the Rush–Bagot Agreement see Ron Purver 'The Rush–Bagot Agreement: Demilitarising the Great Lakes, 1817 to the Present' in Richard D. Burns (editor) *Encyclopedia*, p. 592.

29 Reproduced in Trevor Dupuy and Gay Hammerman *A Documentary History*, pp. 36–7.

30 Due to the scale of Prussia's defeat, and the reorganisation of the country after the loss of much territory, this figure was reduced to 12,000 for the year 1809 only. *Ibid.*

31 Reproduced in Richard D. Burns *Encyclopedia*, pp. 1141–2.

32 See Trevor Dupuy and Gay Hammerman *A Documentary History*, p. 86.
33 See Richard D. Burns, *Encyclopedia*, p. 1193.
34 Cited in *ibid.*, pp. 1193–4.
35 The treaty is reproduced in *ibid.*, pp. 1166–75.
36 *Ibid.*, p. 1176; the whole treaty is reproduced on pp. 1176–83.
37 See *ibid.*, pp. 1183–4.
38 Excerpted in *ibid.*, pp. 1185–91.
39 See Trevor Dupuy and Gay Hammerman *A Documentary History*, pp. 273–82.
40 See Leon Friedman *The Law of War*, p. 454.
41 Reproduced in *ibid.*, pp. 476 and 493.
42 See Richard D. Burns *Encyclopedia*, pp. 1531–4.
43 Excerpted in *ibid.*, p. 1508.
44 Cited in *ibid.*, p. 1410.
45 Reproduced in *ibid.*, p. 1413.
46 Reproduced in Trevor Dupuy and Gay Hammerman *A Documentary History*, pp. 96–7.
47 Excerpted in *ibid.*, p. 98.
48 Richard D. Burns *Encyclopedia*, pp. 1419–28.
49 The text can be found in *ibid.*, pp. 1428–32.
50 Reproduced in *ibid.*, p. 1154.
51 Italics added. For the whole treaty, see *ibid.*, pp. 1155–62.
52 Trevor Dupuy and Gay Hammerman *A Documentary History*, p. 95.
53 Much of nuclear deterrence thinking is dated back to the publication of Bernard Brodie's *The Absolute Weapon: Atomic Power and World Order* New York, Harcourt Brace, 1946.
54 For examples of the 'Golden Age' thinking see Thomas Schelling *Arms and Influence* New Haven: Yale University Press, 1966; Thomas Schelling and Morton Halperin *Strategy and Arms Control* New York: Twentieth Century Fund, 1961; Hedley Bull *The Control of the Arms Race* London: Weidenfeld and Nicolson for the Institute for Strategic Studies, 1961; Albert Wohlstetter 'The Delicate Balance of Terror' *Foreign Affairs* Vol. 37, 1959; Morton Halperin *Limited War in the Nuclear Age* New York: John Wiley, 1963; John Herz *International Politics in the Nuclear Age* New York: Columbia University Press, 1959; Robert Osgood *Limited War: The Challenge to American Strategy* Chicago: University of Chicago Press, 1957.
55 James E. King 'Arms Control and United States Security' in Louis Henkin *Arms Control* New York: Ballantine Books, 1961, p. 126. This is one of the best early chapters on arms control approaches in the 'Golden Age'.
56 Barry Buzan *An Introduction to Strategic Studies* London: Macmillan for the International Institute for Strategic Studies, 1987, p. 253.
57 See Hedley Bull *The Control of the Arms Race*; and Donald G. Brennan (editor) 'Arms Control, Disarmament and National Security' *Daedalus* Vol. 89, No. 4, 1960.
58 Herman Kahn *On Escalation: Metaphors and Scenarios* London: Pall Mall Press 1965, p. 192.
59 Thomas Schelling and Morton Halperin *Strategy and Arms Control*, p. 1.
60 'The Baruch Plan: Statement by United States Representative to the United

Nations Atomic Energy Commission, 14 June 1946', reprinted in Trevor Dupuy and Gay Hammerman *A Documentary History*, p. 304.
61 'Address by Soviet Premier Khrushchev to the General Assembly, 18 September 1959', extracted in *ibid.*, p. 447.
62 James E. King 'Arms Control and United States Security' in Louis Henkin *Arms Control*, p. 140.
63 Robert R. Bowie 'Arms Control and United States Foreign Policy' in *ibid.*, p. 93.
64 Thomas Schelling and Morton Halperin *Strategy and Arms Control*, p. 57 (italics in the original).
65 See Hedley Bull *The Control of the Arms Race*, Chapter 3.
66 Excerpted in Trevor Dupuy and Gay Hammerman *A Documentary History*, p. 604.
67 Cited in *ibid.*, p. 608.
68 *Ibid.* An attached Protocol set out the agreed numerical levels.
69 For more on this, see note 32 in the Introduction.
70 Hedley Bull *The Control of the Arms Race*, p. 61.
71 See C. Tyroler II (editor) *Alerting America: The Papers of the Committee on the Present Danger* Washington DC: Pergamon-Brassey's, 1984. For more on this, see note 37 in the Introduction.
72 See, for example, Marek Thee 'Arms Control: The Retreat from Disarmament, the Record to Date and the Search for Alternatives' *Journal of Peace Research* Vol. 14, No. 2, 1977, and note 4 in the Introduction.
73 Of course, those on the right would not have agreed with this, suggesting instead that the product of SALT was to increase the threat to the United States' second strike force due to the power of the Soviet's heavy missile force.
74 Phil Williams 'Thomas Schelling' in John Baylis and John Garnett (editors) *Makers of Nuclear Strategy* London: Pinter Publishers, 1991, p. 130.
75 Thomas Schelling and Morton Halperin *Strategy and Arms Control*, p. 133.
76 See, for example, Thomas Schelling 'What Went Wrong with Arms Control?' *Foreign Affairs* Vol. 64, No. 2, 1985–6; and Barry Blechman 'Do Negotiated Arms Limitations Have a Future?' *Foreign Affairs* Vol. 59, No. 1, 1980.
77 There were some important exceptions, such as the Austrian State Treaty which neutralised Austria, and the creation of a demilitarised zone between the Koreas after the Korean War. There were also limits set on Japan and Germany at the end of the Second World War, which will be examined later.
78 Under Article I, 'Each State Party to this Convention undertakes not to engage in military or any other hostile use of environmental modification techniques having widespread, long lasting or severe effects as the means of destruction, damage or injury to any other State Party.' Richard D. Burns *Encyclopedia*, p. 1585.
79 In a real sense this represented disagreement, for real agreement would have led to the introduction of this material into the treaty itself. Were it in the treaty, it would be legally binding; outside, it was not. However, it was important in that this was a significant means of dealing with the problem of disagreement by attaching understandings to the agreement itself.
80 See note 38 in the Introduction.
81 Thomas Schelling and Morton Halperin, *Strategy and Arms Control*, pp. 100–1.
82 Fred C. Iklè 'After Detection – What?' *Foreign Affairs* Vol. 39, January 1961.

83 Ivo H. Daalder 'The Role of Arms Control in the New Europe' *Arms Control* Vol. 12, No. 1, 1991, p. 24.
84 Cited in Richard D. Burns *Encyclopedia*, p. 1195.
85 Reproduced in Trevor Dupuy and Gay Hammerman *A Documentary History*, 'The Constitution of Japan, November 3, 1946', pp. 312–13.
86 Excerpted in Richard D. Burns *Encyclopedia*, p. 1137.
87 Part V of the Treaty 'Military, Naval and Air Clauses' in Trevor Dupuy and Gay Hammerman *A Documentary History*, p. 82.
88 Cited in Geoffrey Symcox *War, Diplomacy, and Imperialism, 1618–1763: Selected Documents* London: Macmillan, 1974, p. 59.
89 Reproduced in *ibid.*, p. 42.
90 *Ibid.*
91 Article LXXVIII, *ibid.*, p. 52.
92 Article LXXIX, *ibid.*
93 Reproduced in Richard D. Burns *Encyclopedia*, p. 1139.
94 Cited in *ibid.*, p. 1140.
95 See Andrew D. Farrand 'Chile and Argentina: Entente and Naval Limitation, 1902' in Richard D. Burns *Encyclopedia*, pp. 595–603.
96 The text is reproduced in *ibid.*, p. 1142.
97 *Ibid.*
98 Cited in *ibid.*, p. 1336.
99 *Ibid.*, p. 1192.
100 Cited in Leon Friedman *The Law of War*, p. 3.
101 Excerpted in Richard D. Burns *Encyclopedia*, p. 1368.
102 For the text of the agreements, see: Leon Friedman *The Law of War*, on the Declaration of Brussels, p. 196; and Richard D. Burns *Encyclopedia*, on the Washington Treaty, p. 1369.
103 Cited in Richard D. Burns *Encyclopedia*, pp. 1390–1.
104 Reproduced in Leon Friedman *The Law of War*, p. 193.
105 However, this effort was largely designed in order to focus energies on the Fifth Crusade. See *ibid.*, p. 9.
106 'Kellogg–Briand Pact for the Renunciation of War, August 27, 1928' reproduced in Trevor Dupuy and Gay Hammerman *A Documentary History*, p. 156.
107 The treaty was drawn up by Argentina, and entered into force in 1935. The text is reproduced in Richard D. Burns *Encyclopedia*, pp. 1399–1401.
108 United Nations General Assembly Resolution 1653, 24 November 1961. Leon Friedman *The Law of War*, pp. 697–8.
109 Although 'the bishops or the archdeacon may use such means as are necessary to compel them [monks and those who accompanied them] to pay the taxes which they owe them'. See Richard D. Burns *Encyclopedia*, pp. 1489–90.
110 Cited in *ibid.*, p. 1495.
111 'Cartel for the Exchange of Prisoners Made by the Duke of Luxembourg Acting on Behalf of Louis XIV, and Count Horn Acting for the States General of the United Provinces, 26 May 1673' reproduced in Geoffrey Symcox *War, Diplomacy*, pp. 51–6.
112 The text of both Conventions are published in Leon Friedman *The Law of War*, 'Laws and Customs of War on Land (Hague II) July 29, 1899, pp. 221–35;

and 'Laws and Customs of War on Land (Hague IV) October 8, 1907', pp. 308–23.
113 See the texts reproduced in Richard D. Burns *Encyclopedia*, pp. 1505 and 1506.
114 See Leon Friedman *The Law of War*, pp. 437–49.
115 Quoted in Richard D. Burns *Encyclopedia*, p. 1490.
116 Article I, excerpted in Richard D. Burns *Encyclopedia*, p. 1331.
117 Under Article V. See *ibid.*, p. 1332.
118 United States Arms Control and Disarmament Agency *Arms Control and Disarmament Agreements* London: Transaction Books, 1984, p. 22.
119 The text is reproduced in Richard D. Burns *Encyclopedia*, p. 1311.
120 *Ibid.*
121 Cited in *ibid.*, p. 1412.
122 This is drawn from Article VIII: see *ibid.*, p. 1329.
123 The letter was dated 24 August 1898 (12 August in the Julian calendar then in use in Russia) and is reproduced in Trevor Dupuy and Gay Hammerman *A Documentary History*, pp. 48–50.
124 See the text in Richard D. Burns *Encyclopedia*, p. 1414.
125 *Ibid.*, pp. 1445–54.
126 Reproduced in *ibid.*, pp. 1437–40.
127 Cited in *ibid.*, pp. 1474–80.
128 *Ibid.*, p. 1432.
129 Reproduced in *ibid.*, p. 1348. The treaty covered the whole of Latin America, but did not come fully into effect for several decades.
130 The treaty was signed in 1985; this quote is from Article 3. See *ibid.*, pp. 1359–64.
131 For a contemporary account of the League's work, see Salvador de Madariaga *Disarmament* New York: Coward-McCann, 1929. De Madariaga was Chief of the League's Disarmament Section for five years in the 1920s.
132 Cited in Richard D. Burns *Encyclopedia*, p. 1154.
133 Reproduced in Trevor Dupuy and Gay Hammerman *A Documentary History*, pp. 288–90.
134 Excerpted in *ibid.*, p. 122.
135 These documents are reproduced in *ibid.*, pp. 138–259.
136 Extracts of these proposals are reproduced in *ibid.*, pp. 353–426.
137 See *ibid.*, pp. 187–8.
138 Adopted by 9 votes to 0, Britain and France abstaining, 7 August 1963. This resolution implied voluntary compliance. Reproduced in Richard D. Burns *Encyclopedia*, p. 1433.
139 Adopted 4 December 1963, Resolution 182: *ibid.*, p. 1434.
140 *Ibid.*, p. 1135.
141 Excerpted in *ibid.*, p. 1436.
142 For more information, see *The United Nations and Apartheid, 1948–1994* New York: UN Department of Public Information, 1995.
143 Each state renounced the use of nuclear weapons against non–nuclear states: for the texts of the statements, see Jozef Goldblat *Agreements for Arms Control* London: Taylor and Francis for SIPRI, 1982, pp. 252–3. China and France were not members of the Nuclear Non–Proliferation regime at this time.

144 On this, see for example Emily O.Goldman *Sunken Treaties* Pennsylvania: Penn State Press, 1994.

145 For the text, see Richard D. Burns *Encyclopedia*, pp. 1166–75.

146 This is the same phrase used in all three Treaties.

147 See SIPRI *Arms Control: A Survey and Appraisal of Multilateral Agreements* London: Taylor and Francis, 1978, p. 29.

Arms control at the conclusion of major conflicts

Introduction

In the course of the first chapter it was argued that arms control at the end of conflicts takes one of four forms. First, it was suggested that where one state was overwhelmingly defeated, an initial response may be to totally disarm that state. A second possibility was that where a participant may be defeated heavily, although not completely over-run, arms control might take very unequal forms. This was the *foedus inaequuum*, designed to create strategic and political inferiority. Third, where there has been a clear military success, the victors may wish to dictate terms that would create a semi-permanent strategic stability through the superiority of the forces of the victors. The purpose here was to create the conditions for peace. The fourth and final possibility was that where one group of forces is merely in the ascendancy, but has not achieved an overwhelming victory, the terms of the treaty have been rather more balanced, although still in favour of the dominant parties. The purpose of this chapter is to examine these concepts in relation to the arms control agreements reached at the end of the cold war. In addition, it will seek to examine the degree of deepening in those arms control agreements.

However, before initiating such a discussion, one significant issue needs to be addressed. In considering this concept in historical terms, it was related to those arms control issues and agreements reached at the end of major *wars*. There was discussion of the Treaty of Zama at the conclusion of the Second Punic War; the Peace of Westphalia at the end of the Thirty Years War; the Treaty of Versailles and the other post-First World War agreements; and the post-Second World War arrangements over Germany, Japan, Italy and other defeated states. This section seeks to consider the end of the cold war in a similar light, even though the ending of the cold war did not bring about a conclusion to an outright military conflict. Such a perspective may be justified if one considers the two central features of international relations at the conclusion of major conflicts, such as those just