

Reconceptualising Arms Control

Controlling the Means of Violence

Edited by
Neil Cooper and David Mutimer



Reconceptualising Arms Control

The theory and practice of arms control seemed to have its heyday during the height of the Cold War, with its focus on the East-West conflict and nuclear arms. In the past twenty years, both arms technologies and various practices aimed at their control have continued to develop, but scholarly thinking has not kept up. This volume seeks to redress this scholarly neglect of the range of issues associated with the control of the means of violence, by asking the question: what does arms control mean in the 21st Century?

In asking this question, the volume examines issues surrounding sovereignty, geopolitics, nuclear disarmament, securitization of space, technological developments, human rights, the clearance of landmines, the regulation of small arms and the control of the black market for arms and nuclear secrets. The book discusses terrorism with reference to the case of the suicide attacks in Beirut in 1983 and how the Obama administration is orientating its posture on nuclear arms.

This book was published as a special issue of *Contemporary Security Policy*.

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Arms Control for the 21st Century: Controlling the Means of Violence

NEIL COOPER AND DAVID MUTIMER

The period between 1960 and 1961 saw the emergence of some of the key texts upon which Cold War arms control practice and theory was built. This included the *Daedalus* special issue on arms control of 1960, Schelling and Halperin's *Strategy and Arms Control*, and Hedley Bull's *The Control of the Arms Race* both of which appeared in 1961.¹ The same year also witnessed the publication of Donald Brennan's edited book, *Arms Control, Disarmament and National Security*, based on the articles in the earlier special issue of *Daedalus*.² The influence of the *Daedalus* publication in particular is reflected in the journal's production of further special issues on arms control in 1975 and 1991 each of which reviewed progress on the agenda of the 1960 publication and assessed the new arms control challenges emerging on its fifteenth and thirtieth anniversary respectively.³ Given the fiftieth anniversary of the *Daedalus* special issue has only just passed and that the same landmark has now been reached for the other publications, it is an apposite time to once again review the arms control agenda of the 1960s, to consider new practices that have emerged since then and to ask whether either are fit for purpose in a post-Cold War, post-9/11 era, apparently replete with new arms control challenges.

Over and above the question of timeliness however, the production of this special issue was animated by our concern that the academic community has largely been reduced, on the one hand, to recording the new practices or challenges of arms control (although often using language other than that of arms control), rather than shaping the former or anticipating the latter. On the other hand, it has engaged in an extensive reconceptualization of security and its associated practices that has, nevertheless, managed to pay scant attention to questions of arms and their control. Instead, it has tended to be the policy or NGO community that has driven new agendas in arms control rather than the academy. Moreover, given the predominantly problem-solving orientation of academic arms control, there has not even been much that can be described as an attempt to critically reflect on the relationship between current practice and traditional arms control theory, on the security framings underlying current policies or on the functions served by the current global architecture of arms control. In part, this may reflect one of the downsides of the widening and deepening of security studies that has occurred since the 1980s, which has arguably resulted in relatively less attention being paid by more critical analysts to some of those areas normally associated with the thinner and shallower notion of security held in traditional security or strategic studies.

It was this context that led us to hold two conferences on *Arms Control for the 21st Century* from which the papers in this special issue have emerged. The first

took place in New York in February of 2009, in conjunction with the annual convention of the International Studies Association. The second took place at York University in Toronto in January of 2010. The articles collected in this special issue are drawn from those presented at one or both of those meetings. This is not to claim that this special issue offers some grand theory of arms control replete with multiple policy panaceas – although we do suggest there is a need to move away from the label *arms control* and to reformulate the traditional aims of arms control (see below). Nor is it even to suggest that the papers included here arrive at a critical consensus on the role and functions of arms control in the 21st century. Indeed, the Toronto conference was marked by notable divisions between what became labelled as the problem-solvers and the paradigm shifters.

We would claim, however, that the special issue makes an important contribution to our thinking about weapons, military technologies and security in other ways. First, whilst there were many differences between the participants at both conferences, most, if not quite all, were drawn from various radical traditions of thinking on international affairs and security – a rough and ready mixture of disarmers, post-positivists and campaigners. In this sense the conferences bore some similarity to the earlier York conference of 1994 that produced the broad church understanding of critical security studies.⁴ The two conferences and this publication therefore can be viewed as reflecting a similarly broad church critical school of thought on the challenge of controlling arms. Second, the two conferences and this publication were never envisaged as providing the last word on arms control. On the contrary, both of us in our role as convenors and editors are acutely aware of the need for arms control as a field to come out of its intellectual (and sometimes literal) Cold War silos, to engage in what Duffield in another context has termed ‘unscripted conversations’ and to foster what Campbell has labelled an ‘ethos of democracy’.⁵ Our aim here then is to bring together a series of articles that collectively start a conversation designed to explore options rather than foreclose them, as much of mainstream arms control has tended to do.

We are aware that for those used to the frisson that comes from speaking acronyms to power (START, NPT, CWC, etc. . .) this may not seem a particularly ambitious agenda. By contrast, we would suggest that ours is actually quite a radical move in a field that has more usually operated as the servant of various academic, economic and military hegemonies. We would also note that given the current role of arms control as an instrument of global counterinsurgency (see below) mainstream policy discourse does not so much consist of unscripted conversations as overbearing monologues performed to audiences unable to speak by speakers unwilling to listen – a rather worrying state of affairs when the topic supposedly being *discussed* is how to constrain technologies specifically designed to perpetrate mass killing. Indeed, we would suggest that in this respect at least, the state of the international debate on controlling arms is at an even lower ebb than was the case in the Cold War – for all its flaws, classical arms control did at least inaugurate an era of scripted conversations within the same paradigm. There is not even much of this kind of discussion going on at the moment. If we sound overly pessimistic, it is worth briefly reviewing the

core tenets and practices of classical arms control as enumerated in those earlier texts and reflecting on the changes in practice that have occurred post-Cold War.

Arms Control as Science Fiction

Perhaps even more so than other fields of International Relations (IR), arms control as a field has always claimed scientific rigour and policy relevance. This is reflected in the very story the academy tells itself about the birth of arms control – it is represented as the love child of game theorists, scientists, and liberal internationalists who conceived it as an alternative to the ‘maze of unrealism’ and ‘fictional utopias’ embodied in successive disarmament initiatives.⁶ Instead, proponents claimed to be adopting a hard-nosed realism (in every sense of the word) about the nuclear condition. Yet what is striking about the texts of classical arms control is that whilst very rich in many respects they don’t so much resemble science, as science fiction.

First, the field of arms control shares with science fiction, particularly science fiction of the so-called ‘Golden Age’, a fascination with new – and even fictional – technology, sometimes as a solution to arms control (national technical means of verification), but mostly as the embodiment of potentially dystopian futures that need to be guarded against. Examples include: Herman Kahn’s thought experiment (later satirised in the film *Dr. Strangelove*) regarding various Doomsday and Doomsday in a Hurry Machines that might, for instance, allow a blackmailing nation to start a process by which the temperature of the earth was artificially dropped five degrees a year; Frye’s ‘super-Damoclean threats’ of H-bombs in earth satellites ‘ready to be propelled downwards on a second’s notice’ that necessitated arms control to return them ‘to the realm of science fiction’ or Harvey Brooks’ concern in 1975 that the use of *smart bombs* in Vietnam presaged an era where war intervention by the super-powers could be undertaken ‘with minimal internal and external political cost’.⁷

Second, whilst classical arms control claimed to be an approach grounded in an appreciation of the immutable laws of state behaviour imposed by anarchy – the balance of power, the security dilemma, and mutual assured destruction (MAD) – what is really striking is the extent to which the arms control literature (like science fiction) is really a creature of its time. Indeed, one might even say it is a literature in which supposedly timeless verities become ‘what arms controllers make of them’ in particular time-bound moments. Thus, each of the *Daedalus* special issues, as with the series of *Star Treks* that appeared at about the same times, very much reflected the particular eras in which they were produced. The original *Star Trek* was both a celebration of American triumphalism, and a reflection on civil rights, despite being set in the 24th century. Similarly, the 1960 *Daedalus* edition is obsessed with the failures of disarmament, the pressures of Cold War bipolarity and the logic of deterrence. In contrast, the 1975 edition, reflecting the backdrop of oil crisis and global recession, is as much concerned with the implications of these factors as it is with issues such as India’s peaceful nuclear explosion or the evolving critiques of arms control. The 1991 edition of *Daedalus* moves on again, being principally concerned with how to handle the transition from Cold War to post-Cold War

along with the implication of Iraq's invasion of Kuwait, and the spread of both conventional and NBC weapons to the developing world. This reinvention of the themes of arms control is similarly mirrored in the way *Star Trek* was also reinvented for the same era, with the crew of *The Next Generation's Enterprise* (1987-1994) inhabiting a Federation that resembles a less assured but more inclusive United States, whose primary enemies are now its allies.

Finally, arms control shares the same schizophrenic concern with time that characterizes science fiction, although it is expressed rather differently. Science fiction rewrites or ignores the past, in part because it is ostensibly concerned with anticipating the future – although mainly to comment on our present. Similarly, one of the notable features of Cold War arms control was the way in which the much longer history of arms control was either deemed irrelevant, consigned to the category of failed disarmament initiatives or more usually, just forgotten (for a story of arms control with rather longer lineage, see the recent monograph by Burns).⁸ For example, Jerome Wiesner in his forward to the 1960 *Daedalus* publication could note 'the lack of popular or technical literature' on the problem of arms limitation, a problem he put down to the fact that 'until now there has actually been little intellectual effort expended on it'.⁹ Indeed, so new was the subject deemed to be that the publishers of the *Daedalus* edition felt compelled to publish an illustrative bibliography of key texts. Likewise, much of the contemporary literature on issues such as landmines or small arms is profoundly ahistorical in its treatment of these topics (see Cooper, this issue). Where science fiction and arms control do differ however is in their relationship to the present and the future. For science fiction, history is of only passing importance, because its primary concern is to project aspects of the present onto an imagined future. In contrast, arms control claims contemporary relevance and indeed bases its claim to authoritative knowledge on allying detailed reading of treaties and contemporary policy documents with those immutable verities noted above. Ironically however, arms control makes its claim for *salience* on its science fiction-style ability to imagine the future but to then also project various imagined futures *back* onto the present problem-solving moment.

Of course, arms control is not the only area of International Relations to do this – much of what passes for security studies bases its claims to expertise on similar prophecies of the present. Nevertheless, much of IR is concerned to study and learn from the past – what is striking, particularly about the *Daedalus* special issues, is the extent to which it is speculation about the future that informs thinking about the Cold War present. In part, this is because classical arms control was open to much the same criticisms as those levelled at deterrence theory – that it was an exercise in making assumptions about a form of war that had never occurred. But the extent to which arms control was (and is) an exercise in long-term futurology is quite striking. Examples include Kahn's suggestion in 1960 that the 20th century 'may see a world government or the equivalent' and his concern that the commercial attractions of *peaceful nuclear explosions* would exacerbate a drive to proliferation in the 1970s; Hedley Bull's confident assertion that 'There is no prospect of a system of arms control that would single out chemical or biological warfare as the subject of a separate arms control agreement' and Doty's article in 1991 entitled 'arms control: 1960,

1990, 2020'.¹⁰ Nor is this tradition unique to classical arms control – much of what passes for contemporary arms control represents exercises in predicting the future – the restraint on excessive and destabilizing arms transfers embodied in Wassenaar or the European Union Code for example.¹¹ And contemporary arms control literature is still replete with sections outlining 'visions of the future' or even whole texts on 'the future of arms control'.¹²

None of this is to suggest that we want to disparage arms control as science fiction – it would be rather at odds with a volume that claims to rethink arms control for a 21st century that is barely out of the blocks. As far as we are concerned it is as just as valid to imagine the future in order to construct the present as it is to reimagine the present in order to reconstruct it. We would however, want to make two points. First, that arms control as an academic field needs to be more modest about its claims to operate in a contemporary world of problem-solving relevance in which the 'maze of unrealism' and utopian/dystopian fictions have been abandoned. Arms control always has been the domain of the soothsayer and – ironically – probably needs to be so if it is to have any real salience in addressing the challenge of the armaments dynamic. Second, that our criticism of mainstream arms control is not that it engages in science fiction but rather that the quality of the 'sooth(ing)', is generally quite poor, in part because much of it is hindered by a lack of reflexivity about its soothsaying.

At its best however, the literature on arms control can be remarkably prescient. For instance, the following extract from Richard Falk's contribution to the 1975 special issue is worth quoting at length – despite his explicit recognition that his article represented a 'futurist inquiry' and a 'utopian exercise' undertaken by a 'problem-stater' rather than a 'problem-solver'.¹³ Looking forward to a world where underdevelopment and ecological scarcity predominated, he suggested:

the most powerful states may come to feel extremely vulnerable to disruption by escalating terror tactics. In this eventuality such governments may undertake actively to disarm the weaker and poorer regions of the world, subjecting them at the same time to rigorous forms of imperial administration, including surveillance and suppression of any threatening mode of deviance. It seems likely that such a global strategy, by its very character, would necessarily be preceded by the destruction of democracy in the United States... In such circumstances, governance would involve protracted counter-revolutionary warfare on a global scale, since popular sentiment would be strongly aligned with insurgent goals. To offset its universal unpopularity, the constituted authorities would come to rely on terror and military repression, both at home and abroad.¹⁴

This, we would suggest, captures important aspects of arms control practice today – not least that, in its post-Cold War, post-9/11, non-proliferation mode, the global architecture of arms control operates largely as a form of counter-insurgency directed at rogues, rebels, and, in particular, terrorists. Indeed, counter-insurgency itself has become a key instrument of arms control practice in an era where intervention in Iraq (and the associated biopolitical strategies designed to transform sensibilities in imperial outposts) was principally justified as arms control – a prophylactic designed to prevent a nuclear 9/11. Similarly, strategies of verification have now been extended

to the employment of national technical means (for example, airport body scanners) to ensure that bodies operating as weapons delivery systems are detected and disarmed.

In its non-proliferation mode then, post-Cold War arms control practice represents a radical break with the principles of classical arms control which focussed primarily (if not exclusively) on nuclear deterrence between the superpowers; which assumed that rational actors had a mutual interest in the avoidance of nuclear destruction, and; which aimed to achieve strategic and crisis stability partly through the design of force structures but also through negotiations underpinned by a commitment to mutual vulnerability and the principle of parity. As Nixon's fourth report on foreign policy issues noted in 1973 'there can obviously be no agreement that creates or preserves strategic advantages'.¹⁵ Indeed, for Bull writing in 1961, the search for absolute security was illusory, and was one characteristic of idealist proposals for world government or for the abolition of war – only 'relative security' was possible and proposals not founded on this recognition represented a 'corruption of thinking about international relations'.¹⁶

Moreover, whilst critics on the left denounced arms control as merely legitimizing superpower arms competition and critics on the right renounced arms control on the grounds that it weakened American security, proponents of arms control responded by emphasizing the crucial importance of the arms control *process*. In particular, serial arms control negotiations were deemed to create an epistemic community of politicians and experts who engaged in forms of mutual learning and understanding that gave the Cold War political stability even in the face of large accumulations of nuclear weapons. To be sure, negotiations were characterized by megaphone diplomacy and the search for narrow advantage, but they were also combined with literal and metaphorical 'walks in the woods'.¹⁷

In contrast current arms control practice is focussed not on deterrence *per se*, but on proliferation – principally Weapons of Mass Destruction (WMD) proliferation and to a lesser extent the proliferation of small arms and light weapons; actors are assumed to be irrational or depraved; mutual interest in the avoidance of WMD destruction is deemed to be absent; there is a far greater concern with technological potentials (nano, cyber, robotics, etc.) as opposed to finished weapons systems, and; (notwithstanding exceptions such as the India–Pakistan relationship) the prime focus of arms control is no longer on managing dyadic relationships between superpowers or alliances but on addressing armaments proliferation in a context where there are multiple relevant actors including non-state actors such as warlords, mafia groups, terrorists, bankers, defence companies, and diaspora communities. Moreover, whereas the confidence-building of Cold War arms control involved at least some mutual learning and a degree of mutual respect, contemporary arms control practices increasingly include programmes that aim to transform sensibilities and cultures via one way socialization processes designed to cure the deviancy of target populations in a manner reminiscent of the worst excesses of European colonialism. Examples include the way disarmament, demobilization and reintegration (DDR) and security sector reform (SSR) programmes are focussed as much on transforming the sensibilities of participants as removing their arms (see both Krause and Stravrianakis, this issue).

Most significant of all, strategic and crisis stability are no longer considered achievable through mutual vulnerability and the search for parity but rather through overwhelming dominance, the maintenance of global military inequalities and the search for *invulnerability*. Thus, the key feature of contemporary arms control practice has been the proliferation of non-proliferation initiatives aimed at preventing WMD acquisition by rogues and terror groups, most notably al Qaeda. Examples include: a new focus on combating terrorist financing adopted by the Financial Action Task Force since 2001; the 2002 G-8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction; the 2002 Container Security Initiative now incorporating some 58 ports around the world; the Proliferation Security Initiative announced in 2003; the adoption in 2004 of UN Security Council Resolution 1540, requiring all states to establish effective controls over WMD-related assets and to impose criminal penalties against individuals or groups developing or assisting in the development of WMD; the Global Initiative to Combat Nuclear Terrorism launched in 2006; the International Convention for the Suppression of Acts of Nuclear Terrorism that entered into force in 2007, and; the expenditure of \$800 billion on the global war on terrorism by the United States between 2001 and 2008.¹⁸

This proliferation of non-proliferation initiatives, it should be noted, has taken place in a context in which NATO countries combined now account for some two thirds of global military expenditure, with the United States alone accounting for more than forty percent and the only notable terror attacks on American soil involving WMD would appear to have been perpetrated by a scientist at the US Army Medical Research Institute of Infectious Diseases who sent anthrax through the postal system, killing five people shortly after 9/11.¹⁹ Despite this, it is not inconceivable that Iran will be subject to a strategy of forcible disarmament because of concerns that it might develop a nuclear weapons capability sometime in the future.

We have thus moved from an era where arms control was principally about ensuring societies remained at risk of extermination to one where it is principally about exterminating risk all together – at least for the major powers. In many respects then, it is now the practitioners of the contemporary WMD non-proliferation agenda who have become the new unilateral disarmers (albeit of the forcible kind) and the new idealists in search of the kind of absolute security (albeit for themselves) that Bull dismissed in 1961.²⁰ Ironically however, this search for absolute security appears to be giving rise to ever more arms control challenges as illustrated by the way in which prophylactic interventions to prevent the next 9/11 have given rise to threats of improvised explosive devices and the copycat use of unmanned aerial vehicles.²¹ It is also the search for the absolute security of the boiling frog, where low risk, high impact, events such as 9/11 prompt intense efforts to escape from repetition, but the gradual ratcheting up of normalized threats such as global warming are treated within a policy paradigm characterized by exceptionally high levels of tolerance for the associated risks, mutual vulnerabilities and insecurities they produce – including, in the case of global warming, the possibility of global ecocide.

Needless to say, these aspects of contemporary arms control practice do not suggest a propitious environment for arms control. Of course there are a number of

positive developments that we have neglected so far. These include Obama's commitment to nuclear disarmament and a turn to what is increasingly being labelled *humanitarian arms control* – the attempt to restrict *pariah weapons* deemed inhumane (landmines, cluster munitions) or to prevent the spread of small arms deemed to fuel internal conflicts. In some respects, current attempts to develop a global Arms Trade Treaty might also be described as a form of humanitarian arms control. On all counts we remain somewhat sceptical about the radical nature of these developments. In the case of the first, we note Obama's qualification in his Prague speech that nuclear disarmament may not be achieved 'in my lifetime' and also note that American proposals for disarmament can be better interpreted as an attempt to formalize the military advantage that comes from its huge conventional defence budget in a context where there is acute concern about the potential for WMD proliferation to finally go critical.²² We are also sceptical about the roots and nature of the pariah weapons agenda as well as the scope for further action on this agenda. Similarly, action on small arms and light weapons has focussed predominantly on the illicit trade obscuring both the role of the legal trade in small arms and light weapons (SALW) and the role played by major conventional weapons in civil conflicts. Moreover, whilst a putative Arms Trade Treaty (ATT) has the potential to act as a corrective to the latter, we are also acutely aware of the limited time allowed for negotiation, the current emphasis on consensus, and American linkage of the treaty with the fight against terrorism and rogue states all of which seem likely to produce either a weak agreement or yet another instrument in the war on terror rather than a properly functioning system of global arms trade regulation.²³

Controlling the Means of Violence (CMV) in the 21st Century

Despite such reservations however, we do think it is worth engaging in our own form of science fiction in order to identify those factors immanent in contemporary global society that might point to a more optimistic evolution of arms control theory and practice. In order to do this we will draw on themes from the discussions at the two conferences, reflected in the articles collected in this special issue.

First, a clear theme emerging from these discussions concerns the need to re-label the activity that actors engage in when they attempt to place restraints on the development and/or employment of instruments and technologies capable of being used to perpetrate direct (as opposed to structural) violence against states, communities or individuals. In other words, an alternative to the term *arms control* is necessary. In part, this is because so much of the future control agenda is likely to be concerned with limiting the offensive potentials and applications of dual-use technologies rather than finished armaments *per se*. It is also partly because at least some of the technologies of *war* are not linear developments of that category of objects we generally recognize as *arms*, but rather represent novel innovations in the military instruments of war (for example, cyber-warfare) – although we recognize that this is by no means the only era that has experienced such novel innovation. And finally, it is because the concern with limiting the means of violence has gone beyond a Cold War concentration on the military potentials of states normally

associated with the term *arms control* to also encompass limits on the means of violence in civil conflicts and even against individuals. By definition, this suggests a much more expansive control agenda than that associated with traditional *arms control*. Instead, we would suggest that a better epithet for the terrain into which this special issue ventures is *controlling the means of violence* (CMV).

It should be noted that even this more expansive control agenda did not go far enough for some of our conference participants who argued that the limitation of armed violence also necessitated a focus on changing mindsets and cultures of violence. We would not disagree with the idea that cultures of militarism and violence need to be rejected if meaningful peace is to be secured (although we do have reservations regarding the way in which contemporary CMV practice has tended to become more about problematizing the cultures of violence possessed by *others*, rather than critiquing our own militarism). However, we would also argue that for CMV as a field to have coherence it also needs to maintain a concern with the means by which armed violence is perpetrated, including both the *instruments* (for example, armed forces, suicide bombers) and *technologies* (such as fighter planes, bio-weapons, communications systems, improvised explosive devices [IEDs]) of armed violence against individuals, communities, and even states. This includes, for example, limits on small arms to prevent inter-communal violence; even restrictions on knives to prevent knife crime against individuals; while also including sustained attention to the most potent means of the most extreme violence, controlling the military capacity of states, whether this be via multilateral disarmament initiatives such as the CWC; arms limitation agreements such as the New START agreement between the United States and Russia; confidence-building measures designed to reassure actors that particular force structures are not threatening; or the harnessing of nano or biotechnology in as yet undreamed of ways to serve the goals of arms control (verification, for example) rather than to undermine them.

We would therefore make a distinction between the immediate and direct aims of CMV initiatives on the one hand and the longer term, indirect *effects* of the *strategies* of control employed. With regards to the former, we would argue for the following reformulation of the classic aims of arms control as outlined by Schelling and Halperin in 1961:²⁴

1. To reduce the likelihood that the instruments of armed violence are used against individuals, communities, or states;
2. To reduce the effects of armed violence should it be employed; and
3. To reduce the resources employed in the development, acquisition and deployment of the instruments of armed violence (a deliberately more ambitious formula than that of classical arms control).

In all efforts to advance a ‘controlling the means of violence’ agenda, and particularly those directed to the third goal, the longer term, *indirect effect* should be to reduce militarism and to promote cultures of peace. In other words, whilst control initiatives should only be directed at the instruments and technologies of violence, the strategies of control employed should, at the very least, avoid further embedding

cultures of militarism and, ideally, have the indirect effect of promoting global and local cultures of peace in the longer term. Such a standard would mark a significant shift from the traditional practices of arms control, which were expressly designed to seek security in and through an armed, militarized world.

Thus, whilst our formulation of CMV is quite expansive in one sense, this constraint regarding the indirect effects of its practices delimits the range of strategies that might be deployed to promote such control. Most obviously perhaps, it would rule out strategies of forcible disarmament employed in contravention of international law, and those now common practices of proliferation control which have the effect of enshrining extravagant military dominance. Conversely, it would place a premium on the adoption of strategies that are underpinned by processes of dialogue and mutual understanding, processes that are based on, and develop, what Booth and Wheeler have termed a ‘security dilemma sensibility’ – an appreciation of the fears that can be aroused in others by one’s own search for security.²⁵

This is not to suggest that we necessarily envisage controlling the means of violence as a vehicle to completely eliminate the security risks associated with weapons and the military potentials societies invent for supposedly civil technologies – at least not in the short-term. Wherever such risks are deemed to exist, CMV will, like Cold War arms control, be geared to managing and reducing risk rather than eliminating it, as we indicate in the first two of our revised CMV goals. In contrast to Hedley Bull however, we would suggest that this more hard-headed approach to the weapons-security nexus is, ironically, more the preserve of radicals and idealists than contemporary policy makers who, operating in their own maze of unrealism, endlessly pursue the chimera of absolute security via militarism and authoritarianism and the unilateral disarmament of others.

At the same time, given that identities and sensibilities are not fixed we can envisage a politics of controlling the means of violence that contributes to the development of more peaceful global cultures, in which armed violence, both among and within political communities, becomes ever-less acceptable. This is not simply because we think the reduction or even elimination of arms and other technologies of violence will eradicate military security dilemmas surrounding technological potentials – on its own it will not. Rather, it is because the forms and methods of CMV can contribute to a politics that is transformatory. In other words, rather than CMV only being possible when it is least needed, as critics have suggested of arms control, we would argue that what makes CMV most relevant will not be the substance of agreements *per se*, but the extent to which its practices contribute to a transformatory politics that produces demilitarized communities where such control is no longer needed.²⁶

Overview of the Special Issue

The articles in this issue take up the challenge of thinking about the control of the means of violence in the contemporary world, exploring both the continuities with arms control as it was practiced in the Cold War and earlier, as well as seeking the forms and means of control in places that would not normally be considered *arms*

control. To begin, Keith Krause and Simon Dalby set contemporary practices of controlling the means of violence in the long historical context of modes of rule and of geographic representations. Krause argues that Cold War arms control represents both a break and a continuity from a range of practices which are grounded in the defining modern institution of sovereignty. He then examines a range of contemporary practices which engage with the means of violence to show the ways in which this particular Cold War legacy is being both reproduced and supplemented, resulting in a set of practices, following Foucault's account of the development of modern government, that is more *governmental* than *sovereign*. Dalby deploys the insights of critical geopolitics, which argues that social practices are predicated on specific geographic assumptions, to examine contemporary arms control. In particular, he locates the New START Treaty and the 'Iranian threat' within the specific geopolitical imaginaries that make them possible, showing how these are then connected to larger questions of world order. Together these articles place a number of key issues on the table that are taken up in a range of ways by most of the subsequent articles, in particular, the relation of CMV to broader modes of government, and the centrality of issues of *framing* for understanding the nature of the means of violence and of their practices of control.

These scene-setting articles provide a context for the remainder of the contributions, which focus more tightly on particular weapons or forms of effecting control. The next four articles examine a series of technologies of violence that either have been or, we believe, will be at the heart of efforts at CMV. David Mutimer's article continues with Krause's earlier deployment of the work of Michel Foucault to consider, in particular, the shift in the control of nuclear weapons from Cold War arms control to President Obama's desire for a nuclear free world. Where Dalby set the New START into the context of a geopolitical imaginary, Mutimer locates it in the history of modes of governmentality to suggest that it reproduces its Cold War heritage in a fashion that prevents an ultimate denuclearization. Space weapons, whether in terms of the science fiction promise of ballistic missile defence or the actually existing nuclear-tipped ballistic missiles, were second only to nuclear weapons themselves as a focus of Cold War Arms Control. Columba Peoples turns our attention to those weapons in his contribution, suggesting that the ways in which they have been treated – within either a frame of *militarization* or *weaponization* – fails to account for the transformation of space in recent decades which makes it central to key aspects of the civilian as well as military economies. Peoples' article introduces the concept of *securitization* to this issue, to suggest it provides a more adequate framing than either *weaponization* or *militarization* for space-based means of violence.

The close connection between civilian and violent technologies is also at the heart of Jim Whitman's discussion of nano-technology. He argues that nano-technology changes the traditional notion of *dual-use* to the potential for *multi-use*, and this in turn undermines the very basis of the Cold War Arms Control paradigm Krause set out in his initial article. Nano-technology, Whitman argues, will undermine and ultimately remove all of the distinctions among the kinds of technology we use, on which the means for controlling violent technologies rest. The blurring of boundaries is also

seen in the last of these four articles, in which Michael Dartnell examines suicide bombers as a violent technology through a re-reading of France's *Action directe*. Dartnell's concern is with the body, which traditional approaches to arms control and CMV treat as the object to be secured, but which with the growth of suicide terrorism becomes at the very least a potential *delivery system*, if not a weapon itself. Dartnell's question, then, is how can we think about the control of the means of violence when the body is not only that which deploys those means, but the very means itself?

The next three articles shift our gaze from particular technologies to be subject to control to the socio-political judgements we make about certain kinds of arms. Neil Cooper, J. Marshall Beier, and Ritu Mathur each look at practices of CMV that have been identified as essentially *humanitarian*. Cooper takes up the concept of *securitization* that Peoples had introduced to the volume, and uses it to contest the conventional accounts of the recent spate of *humanitarian* arms control initiatives – the anti-personnel landmines ban, the ban on cluster munitions, and attempts to restrict SALW. These agreements, Cooper argues, are, not as conventionally rendered, the new result of the intervention of humanitarian NGOs, but rather part of a much longer history of the regulation of *pariah weapons*. Beier also takes on the ban on anti-personnel landmines, and asks about the framing of the weapons that made their *pariah* status possible. In a sense his argument picks up Dalby's earlier discussion of the taken-for-granted assumptions underlying arms control, but where Dalby focussed on geographical assumptions, Beier explores the popular production of *discrimination* and the framing of *indiscriminate* weapons as unacceptable. He argues that it is this popular discourse of discrimination, a product of the so-called *Revolution in Military Affairs*, that helps account for the Landmines Treaty, rather than humanitarian actors. Mathur's concern is directly with the humanitarian organizations that have come under the critical gaze of Cooper and Beier. Specifically, Mathur examines the role of the International Committee of the Red Cross (ICRC) in the history of CMV. Mathur's concern is with the manner in which a humanitarian space for controlling arms has become possible, and particularly the mutual complicity of state and non-state actors in producing this space.

One of the most important loci of so-called humanitarian arms control is the attempt to control small arms and light weapons. Small arms and light weapons have been called weapons of mass destruction in slow motion, because they are far and away the greatest source of armed violence and armed death.²⁷ In the next two articles, Anna Stavrianakis and Mike Bourne focus on the controls that have been developed recently around SALW. Stavrianakis takes on the suggestion that the control of SALW is a humanitarian practice, driven by the recognition of the close relationship between security and development. She argues, rather, that SALW control is reproductive of imperial relations, serving to re-inscribe the hierarchal North-South divisions of the past centuries. One of the constitutive features of SALW control has been the division of the *licit* from the *illicit*. Mike Bourne starts from this observation to argue that this division runs through a range of control practices aimed at *shadow trades*, whether in small arms, nuclear materials, or chemical precursors. This rigid conceptual separation, he argues, hides the fact that these trades

are not private parallels to the state-dominated trading system, but rather that state and hybrid actors are constitutive of these networks.

The issue concludes with an article by Joanna Spear that somewhat departs from the mode of the rest of the volume. One of the prompts to the project that gave rise to this issue was the seeming hibernation, if not death, of arms control through most of the Clinton and certainly Bush administrations in the United States. However, during the discussions that led us to these texts, the Bush administration was succeeded by that of President Obama, with a resulting renewed interest in the United States in arms control. Spear looks inside the new administration and draws on the bureaucratic politics literature to examine the internal politics of this renewal, focussing in particular on the politics of the 2010 Nuclear Posture Review. While American involvement is not necessary to effective CMV, it does shape the field dramatically one way or the other, and so it is important going forward to know what is and is not likely within the American state. Although Spear's analysis is rather pessimistic about the extent of change wrought by the Obama administration, she does highlight the way in which junior players such as NGOs and research funding organizations can shape both long and short-term policy agendas on arms control.

New Directions for Research and Activism

We do not view this collection of essays as the last word on contemporary 'controlling the means of violence'. Indeed, our hope is that this special issue will prompt exactly the kind of unscripted conversations on the means, parameters and politics of CMV that we consider are vital for CMV to become both more relevant as a response to the various forms of armed violence prevalent in the 21st century and, crucially, more transformational too. It is therefore worth concluding this article by both reflecting on the omissions from this special issue and also the research agendas that we think the discussions in the New York and Toronto seminars and the papers collected here point to.

Although this special issue addresses a range of topics relevant to contemporary CMV there are some obvious omissions. For example, there are a number of global control regimes that are not considered in detail (such as the Chemical Weapons Convention, the Biological Weapons Convention, the NPT, the Proliferation Security Initiative, The Wassenaar Arrangement and the UN Arms Register). We are also acutely aware that although there has been much discussion of these regimes by NGOs and mainstream arms controllers, there remains a relative dearth of more radical and post-positivist analyses.²⁸ The same could also be said for regional CMV initiatives such as the operation of nuclear weapons free zones and for localized sub-national initiatives. There are also a range of military technologies that have become particularly problematized in the post-Cold War era and which we have not been able to find room for discussion here. Perhaps the most notable of these are improvised explosive devices and unmanned aerial vehicles both of which have become technologies of concern, albeit for different reasons. We are also acutely aware that this special issue suffers from the omission of a gender perspective on CMV. In the case of the latter we had planned to include a paper on this issue but, as noted in the preface, it

was not possible to proceed with this. With regards to the other omissions, we can only plead the limits of conference funding and journal word length as excuses for our neglect of these various issues whilst calling for others to take up the baton instead.

Despite such omissions however, the conferences that led up to it and the papers collected here suggest some fruitful areas for further research. First, Krause and Mutimer's discussion of arms control/CMV as a form of governmentality clearly represents a branch of thinking about CMV that could usefully be extended and applied to a range of specific CMV initiatives. Second, Dalby's article highlights the dearth of work on the arms trade undertaken by critical geographers and demonstrates the potential for more research on this topic by those working in this tradition. Third, both Cooper and Peoples have incorporated securitization theory into critical accounts of specific fields of CMV action, highlighting the potential for applying this approach to other fields. Fourth, Dartnell's discussion of the body as a weapon and therefore object of control, potentially opens up a whole new field for analysis of CMV initiatives. Fifth, the article on Nano-technology by Whitman highlights the immense arms control challenges presented by new technologies. However, as Whitman indicates towards the end of his article and as discussants in the two conferences noted, developments in nano and bio-technology as well as in electronics, robotics and computing may also contain the seeds of solutions to both old and new challenges for CMV. There is, therefore, an urgent need for multidisciplinary research that brings specialists from these various fields together with political scientists, NGOs and policy-makers to consider potential applications that could be developed to enhance CMV initiatives. Indeed, as Spear's article highlights, the decisions made by funding bodies can shape academic and policy agendas on CMV in quite profound ways yet, as far as we are aware, they have tended to neglect this issue, a situation we consider to be in urgent need of redress.

Sixth, the articles by Beier, Bourne, Cooper, Mathur and Stavrianakis all challenge conventional accounts of initiatives on landmines, cluster munitions and small arms that view them as progressive achievements rendered by the bottom-up power of civil society actors. Although they differ quite significantly in their approaches, they all essentially suggest that such initiatives better conform to Cooper's description of them as examples of 'arms control from below within the logic of militarism from above', a far more pessimistic reading of the turn to humanitarian arms control celebrated in much of the mainstream literature.²⁹ Rather than viewing such bottom-up action as inevitably futile however, we would suggest such analyses highlight the need for more radical and more inclusive forms of global-local social action on CMV. One obvious innovation would be to build on the novel ways in which the campaigns on landmines and small arms used the worldwide web to develop and maintain global networks of campaigners on specific issues. Whilst quite innovative at the time we would suggest that web-based transparency and activism could be extended even further. One model for this might be the campaign in 2008 launched around the 'ship of shame' that was transferring Chinese weapons to Mugabe's Zimbabwe.³⁰ Although the campaign was arguably problematic in a number of respects, the issue rapidly went viral on the internet and spurred action on the issue by governments, NGOs and trade unions. In the era of wiki-leaks, we

think this highlights the potential to mobilize global networks of web-based activists to provide *real-time* information on problem weapons transfers and *real-time* global campaigns on such transfers. Although we would also add that such campaigns need to be complemented by a broader problematization of militarism, military expenditure and defence transfers characterized by a willingness to highlight the problems of Northern militarism and intra-Northern transfers noted by Stavrianakis, as well as problematizing militarism in the South.

Seventh, one of the issues that emerged out of the two conferences was an awareness of a notable gap in data on the conventional defence trade. Although there are various sources of data on the defence trade (such as the International Institute of Strategic Studies [IISS], Stockholm International Peace Research Institute [SIPRI], Small Arms Survey and UN Arms Register) the principal focus is on recording and measuring the volume and/or value of such transfers. However, most multilateral initiatives to limit the defence trade incorporate some kind of commitment to restrict excessive and destabilizing arms transfers. Moreover, whilst some regimes such as the EU and Wassenaar produce quite detailed implementation guidelines for participants, it is still ultimately left to each state to interpret its commitments in its own way, leading to substantial variations in practice, even in quite established regimes such as the European Union.³¹ There are, of course, a variety of NGOs that also attempt to monitor, and critique, how well states live up to the commitments they make in these various regimes. However, different arms trade NGOs tend to have a different focus of concern (human rights, development, and security, for example), and therefore tend to use different rubrics to evaluate transfers of concern. This highlights the need for an independent organization capable of going beyond recording transfers and actually providing authoritative evaluations of such transfers based on a standardized methodology for evaluating whether particular transfers are excessive or destabilizing. This would not only fill a notable gap in the data currently produced on the defence trade, but it would also provide a standardized framework that would allow NGOs and other actors to hold states properly accountable for the commitments they make to restrict the defence trade. If an Arms Trade Treaty is eventually agreed, the need for such an organization is likely to become even more urgent.

Arms Control was one of the mainstays of security practice in the Cold War. Fifty years on from the initial formulation of the goals and conceptual underpinnings of that practice, the world has become a very different place. Nevertheless, while the particular problems posed by arms and their control have changed with the times, the need to confront issues raised by the means of violence has not gone away. We hope this set of essays will help to start what we see as an overdue general conversation on controlling the means of violence in the 21st century.

NOTES

1. 'Arms Control', special issue of *Daedalus: Journal of the American Academy of Arts and Sciences*, Vol. 89, No. 4 (Fall 1960); Thomas C. Schelling and Morton H. Halperin, *Strategy and Arms Control* (Washington, DC: Pergamon-Brassey's, 1985); and Hedley Bull, *The Control of the Arms Race: Disarmament and Arms Control in the Missile Age* (New York: Praeger, 1961).

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2. Donald G. Brennan (ed.), *Arms Control, Disarmament and National Security* (New York: George Braziller, 1961).
3. 'Arms, Defense Policy and Arms Control', special issue of *Daedalus: Journal of the American Academy of Arts and Sciences*, Vol. 104, No. 3 (Summer 1975); and 'Arms Control Thirty Years On', special issue of *Daedalus: Journal of the American Academy of Arts and Sciences*, Vol. 120, No. 1 (Winter 1991).
4. Keith Krause and Michael Williams (eds), 'Critical Security Studies', special issue of *Contemporary Security Policy*, Vol. 16, No. 3 (1995); and Keith Krause and Michael C. Williams (eds), *Critical Security Studies: Concepts and Cases* (London: UCL Press Ltd, 1997).
5. Mark Duffield, *Development, Security and Unending War: Governing the World of Peoples* (Cambridge: Polity Press, 2007), p.234; and David Campbell, *National Deconstruction: Violence, Identity and Justice in Bosnia* (Minneapolis: University of Minnesota Press, 1998), pp.196–200.
6. William R. Frye, 'Characteristics of Recent Arms-Control Proposals and Agreements', *Daedalus: Journal of the American Academy of Arts and Sciences*, Vol. 89, No. 4 (Fall 1960), p.741; The Harvard Nuclear Study Group, *Living With Nuclear Weapons* (New York: Bantam Books, 1983), p. 19.
7. Herman Kahn, 'The Arms Race and Some of its Hazards', *Daedalus: Journal of the American Academy of Arts and Sciences*, Vol. 89, No. 4 (Fall 1960), p.751; Frye, 'Characteristics of Recent Arms-Control Proposals and Agreements' (note 6), p.736; and Harvey Brooks, 'The Military Innovation System and the Qualitative Arms Race', *Daedalus: Journal of the American Academy of Arts and Sciences*, Vol. 104, No. 3 (Summer 1975), p.80.
8. Richard Dean Burns, *The Evolution of Arms Control: From Antiquity to the Nuclear Age* (Oxford: Praeger Security International, 2009).
9. Jerome B. Weisner, 'Forward to the issue "Arms Control"', *Daedalus: Journal of the American Academy of Arts and Sciences*, Vol. 89, No. 4 (Fall 1960), p.677.
10. Kahn, 'The Arms Race and Some of its Hazards' (note 7), p.778; *ibid.*, pp.773–8; Bull, *The Control of the Arms Race* (note 1), p.135; Paul Doty, 'Arms Control: 1960, 1990, 2020', *Daedalus: Journal of the American Academy of Arts and Sciences*, Vol. 120, No. 1 (Winter 1991), pp.33–52.
11. Saferworld (2008), *Good Conduct? Ten Years of the EU Code of Conduct on Arms Exports*, available at <http://www.saferworld.org.uk/>
12. Forest E. Waller Jr, 'New Directions in Strategic Nuclear Arms Control', in Jeffrey A. Larsen and James L. Wirtz (eds), *Arms Control and Cooperative Security* (Boulder, CO, and London: Lynne Rienner, 2009), pp.107–8; and Michael A. Levi and Michael O'Hanlon, *The Future of Arms Control* (Washington, DC: Brookings Institution Press, 2005).
13. Richard A. Falk, 'Arms Control, Foreign Policy, and Global Reform', *Daedalus: Journal of the American Academy of Arts and Sciences*, Vol. 104, No. 3 (Summer 1975), p.48, p.46.
14. *Ibid.*, pp.42–3.
15. *Ibid.*, p.36.
16. Bull, *The Control of the Arms Race* (note 1), p.26.
17. Strobe Talbott, *The Master of the Game: Paul Nitze and the Nuclear Peace* (New York: Vintage, 1988), 174–81.
18. US Customs and Border Protection, *Fact Sheet, October 2, 2007* (Washington, DC: US Department of Homeland Security 2007), at: www.cbp.gov; and Stockholm International Peace Research Institute, *SIPRI Yearbook 2009: Armaments, Disarmament and International Security* (Oxford: Oxford University Press, 2009), p.185.
19. James Wirtz, 'The New Cooperative Security Paradigm', in Jeffrey Larsen and James Wirtz (eds), *Arms Control and Cooperative Security* (Boulder, CO: Lynne Rienner, 2009), p.235.
20. Bull, *The Control of the Arms Race* (note 1), p. 26.
21. P. W. Singer, 'Defending Against Drones: How our new favourite weapon in the war on terror could soon be turned against us', *Newsweek*, 8 March 2010, at: <http://www.newsweek.com/id/234114>
22. Barack Obama, 'Remarks By President Barack Obama, Hradcany Square, Prague, Czech Republic, 5 April 2009', *Speeches and Remarks*, (Washington, DC: Office of the Press Secretary, 2009), at: <http://www.whitehouse.gov/the-press-office/remarks-president-barack-obama-prague-delivered>
23. 'Arms Trade Treaty', Remarks delivered by Special Negotiator Donald Mahley on behalf of Ellen Tauscher, Under Secretary of State for Arms Control and International Security at the Carnegie Endowment for International Peace, Washington, DC, 18 February 2010, available at <http://www.state.gov/t/us/136849.htm>. These remarks included seven references to terror / terrorists / terrorism and three to rogues in a thirteen minute speech.
24. Schelling and Halperin, *Strategy and Arms Control* (note 1), p. 1.

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25. Ken Booth and Nicolas J. Wheeler, *The Security Dilemma: Fear, Cooperation and Trust in World Politics* (London: Palgrave Macmillan, 2008).
26. Colin S. Gray, *House of Cards: Why Arms Control Must Fail* (Ithaca, NY: Cornell University Press, 1992), p.97.
27. The phrase 'weapons of mass destruction in slow motion' has become almost apocryphal. For the sense, without the words, see: Kofi Annan, '*We the Peoples*': *The Role of the United Nations in the 21st Century* (New York: United Nations, 2000), pp.52–3.
28. Exceptions include: Richard Price, *The Chemical Weapons Taboo* (Ithaca, NY: Cornell University Press, 1997); David Mutimer, *The Weapons State: Proliferation and the Framing of Security* (London: Lynne Rienner, 2000).
29. Mandy Turner, Neil Cooper, and Michael Pugh, 'Institutionalised and Co-opted: Why Human Security Has Lost Its Way', in David Chandler and Nik Hyneck (eds), *Critical Perspectives on Human Security: Rethinking Emancipation and Power in International Relations* (London: Routledge, 2011), p.87.
30. Samuel J. Spiegel and Philippe Le Billon, 'China's Weapons Trade: From ships of shame to the ethics of global resistance', *International Affairs*, Vol. 85, No. 2 (March 2009), pp.323–46.
31. Saferworld, *Good Conduct? Ten Years of the EU Code of Conduct on Arms Exports* (Saferworld, 2008), at: <http://www.saferworld.org.uk/smartweb/resources/view-resource/318> (accessed 12 December 2010); House of Commons, Business and Enterprise, Defence, Foreign affairs and International Development Committees, Scrutiny of Arms Export Control, 'Scrutiny of Arms Export Controls (2009): UK Strategic Export Controls Annual Report 2007, Quarterly Reports for 2008, licensing policy and review of export control legislation', First Joint Report, Session 2008–2009, HC 254 (London: The Stationery Office, 2009), p.65, para.135.