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**Bridging the Weapons Gap:
The Convergence of Conventional Arms
and Weapons of Mass Destruction**

John Sislin

**BRIDGING THE WEAPONS GAP:
THE CONVERGENCE OF CONVENTIONAL ARMS
AND WEAPONS OF MASS DESTRUCTION**

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Abstract

Scholars and policy-makers tend to place conventional arms in a separate category from weapons of mass destruction--nuclear, chemical, and biological weapons. This distinction among weapons emerges from the perceived attributes of the two weapons as well as from the way in which the weapons have traditionally been studied. However, the two types of weapons share meaningful characteristics. Ignoring these similarities may contribute to less efficient and productive arms control and nonproliferation policies and prevents greater theoretical progress in the study of the consequences of arms. The analysis suggests that future scholars and policy makers would do well to consider, at times, conventional arms and weapons of mass destruction as indistinguishable in the study and application of war and peace.

Bridging the Weapons Gap:

The Convergence of Conventional Arms and Weapons of Mass Destruction

INTRODUCTION

Since the end of the Cold War the idea of security has come under increased scrutiny from both academics and policy-makers. As a result of this reflection, the concept of security has been expanded to encompass a variety of challenges to peace, which would not likely be found within the rubric of security studies or national security policy even a decade ago. The original construct focusing on the nation-state, national interest, and military power has been out-paced by a new paradigm emphasizing the important relationship to security of such factors as the environment, demographics, and economics. Additionally, the idea of the state as the object of security is being challenged by notions of world security and individual security. Finally, the sources of security threats may come from actors aside from the state, including terrorists and ethno-political groups. One issue, however, has been largely overlooked in this era of reflection: the relationship between conventional arms and weapons of mass destruction (WMD). Much of the existing literature on the causes and strategic effects of the spread of WMD and on the motivation for and impact of conventional arms transfers treats these weapons as distinct categories. This reinforces a perception that these categories are mutually exclusive. Traditionally, the definition of WMD has connoted a concern for the spread of nuclear weapons and technologies beyond the declared nuclear powers. Additionally, WMD includes biological and chemical weapons, as well as missiles for the delivery of such

warheads.¹ Conventional arms and arms transfers are clearly not weapons of mass destruction according to analysts.²

The perception that WMD and conventional arms differ prevails in both analytical and policy-making circles. The research agendas of scholars studying the two types of weapons are distinct. Proliferation research focuses on which countries have or may be acquiring WMD technologies, how WMD technologies are acquired, and additionally on the impact of such diffusion and what might be done about it. Conventional arms research focuses on examining trends in arms exports and imports--principally the transfer of major weapons (e.g., artillery, planes, naval vessels)--involving governments and firms, and on the motivations and consequences of arms exports.³ Analytically, then, the weapons are separated by scholars.

Policy-makers likewise treat the weapons separately. In the United States, the two categories of weapons are separated both in pronouncements and in practice. Each type of weapon is the subject of its own policy statements. The defining U.S. WMD policy was announced before the United Nations General Assembly on September 27, 1993, laying out general efforts to control nuclear, chemical, biological weapons and ballistic missiles. These weapons were earlier declared a national security threat in annual Executive Orders. None of these statements mention conventional arms, except in their capacity to deliver WMD. Conventional arms export policy, on the other hand, was the subject of Presidential Decision Directive 34 released in February 1995. It is noteworthy that the word "proliferation" is not used in conjunction with "arms transfers" in this document. Only WMD proliferate. U.S. policy also separates the two weapons. Arms control efforts are negotiated separately for different types of weapons as are efforts for export controls. For example, a recent Office of

Technology Assessment (OTA) report on export controls and nonproliferation policy suggested keeping conventional weapons on a separate track from mass-destruction weapons vis-a-vis strengthening multilateral export controls.⁴

In the United Nations (UN), discussions on arms are often relegated to different forums, treaties focus on specific weapons, and the language contained within recent annual reports to the UN by the secretary-general suggest that overall, conventional arms are treated differently than WMD.⁵ The consequences of the Iraqi invasion of Kuwait in 1990 vividly illustrate how actions on the different types of weapons proceed along different tracks. The IAEA was charged with verifying the destruction of Iraq's nuclear program, UNSCOM set out to verify the destruction of Iraq's biological and chemical arsenal, while the UN Register of Conventional Arms which emerged partly as a result of the perceived Iraqi military buildup, focused on "transparency" in the conventional arms trade, that is, making arms imports and exports more visible to interested observers. Thus, among policy-makers, the two types of weapons tend to be approached in discrete fashion.

While conventional wisdom and practice hold that the two concepts "weapons of mass destruction" and "conventional arms" are distinct, in reality they are not fully so. Perpetuation of this belief may hinder a better understanding of the critical issue of international weapons proliferation. A fresh examination of the weapons is made more important by the fact that current debate is shifting toward further sub-dividing conventional arms. Some scholars have suggested that a military-technological revolution is underway, making advanced weapons and militarily significant technologies more important; others suggest that since most conflicts today are intrastate, small arms are becoming more important. The division of weaponry into

various niches risks obscuring important generalizations. Moreover, it may produce policy parochialism, where each weapon is the subject of its own set of rules and regulations for production, trade, and use. This may prevent broader arms control, undermine arms control efficiency or hinder greater cooperation among states. Finally, categorizing the weapons may produce undesirable policy choices in related areas of technology transfer and nonproliferation policies.

Six conventional wisdoms about WMD and conventional arms are examined in this paper. Each proposition suggests the two types of weapons are separate. The first three conventional wisdoms emerge from perceptions about the characteristics of the two types of weapons. The last three assertions focus on how the two types of weapons are treated in international affairs. For each argument, the areas where the two concepts are essentially equivalent and where the two concepts diverge in meaningful ways are identified. The analysis then identifies some of the consequences of the current conceptual separation, both for policy-making and in a theoretical sense. Although WMD and conventional arms are not synonymous, the two terms do share important characteristics. A more sophisticated view of WMD and conventional arms helps to identify areas where the two concepts reflect similar characteristics, thus further clarifying the impact of arms and facilitating the design of export and nonproliferation policies.

WHY THE WEAPONS ARE SEPARATED

Six reasons underlie the apparent truism that conventional weapons are not WMD and vice versa. These “conventional wisdoms” arise from two foundations: perceptions of the

weapons' characteristics, and the manner in which the weapons are approached by analysts and policy-makers. Together, these six arguments are offered in support of the argument for separating the two categories of weapons. The first three assertions emerge from the perceived attributes of the weapons.

Conventional Wisdom #1: The military characteristics of the weapons systems are different.

This argument is most forcefully made in the comparison between conventional arms and nuclear weapons. Nuclear weapons occupy a special place in the pantheon of weapons, in spite of some attempts to "conventionalize" them for use in limited war-fighting scenarios. Michael Klare suggests that a "firebreak" exists between the two weapons, that is, the perception that nuclear arms are truly different from conventional weapons. This perception arises from the destructive forces of the weapons and is founded both on the psychological and moral implications of the two weapons as well as technological and military characteristics.⁶ According to this view, WMD possess three characteristics which make them significantly different from conventional arms. Two--the indiscriminate and destructive nature of WMD as contrasted with conventional arms--are suggested in a recent OTA report:

The large-scale and indiscriminate nature of their effects--particularly against unprotected civilians--differentiates mass-destruction from conventional weapons. Mass-destruction weapons make it possible for a single missile or airplane to kill as many people as thousands of planeloads of conventional weaponry. These weapons can give small states or subnational groups the

ability to inflict damage that is wholly disproportionate to their conventional military capabilities or to the nature of the conflict in which they are used.⁷

This position holds, according to the OTA, in spite of the fact that conventional arms are known to be capable of causing massive casualties, as was the case in the fire bombings of Dresden and Tokyo in World War II, or the more recent conflicts in Cambodia, Rwanda, and the Sudan.

The third distinction focuses on the rapidity of destruction afforded by weapons of mass destruction. The destructive effects of nuclear weapons are felt almost instantaneously. As a result, the political utility of WMD in war-fighting situations is diminished. Thus, these weapons are better suited for deterrence roles. Conventional arms can be employed in limited ways, allowing them to be part of a state's broader foreign policy. Conventional arms, thus, have more uses and the impact of their use is slow enough to allow for bargaining, coercive diplomacy, and brinkmanship while the presence of WMD in an international crisis compresses the time for and the range of actions and reactions.

These three distinctions are not as sharp as they first appear. The OTA's first point is that weapons of mass destruction are large-scale, indiscriminate, and target civilians. Conventional arms can have similar effects. One weapon in particular, the antipersonnel mine, is made by approximately 50 countries and found in over 60 nations. Globally, it is conservatively estimated that there are between 80 to 100 million in use. Their deployment "involves elements of arbitrariness and terror" and they are "often scattered indiscriminately in areas where they become a major threat to civilians"--as demonstrated by estimates that at least 80% of the 15,000 injuries and casualties annually produced by mines were to civilians.⁸ For

these reasons, Human Rights Watch calls landmines "a weapon of mass destruction in slow motion."⁹

The second part of the OTA's contention is that WMD are more efficient: fewer are needed to kill more people. However, advanced conventional arms can be just as destructive. High leverage weapons, such as submarines, unmanned air vehicles (UAVs), and relatively advanced command, control, communications, and intelligence (C³I) capabilities can create highly lethal results when integrated effectively.¹⁰ The U.S. success in the Gulf War was partly attributable to its successful integration of intelligence assets, precision guided munitions, and defense suppression.¹¹ The coalition forces were able to destroy many Iraqi military targets quickly and with few losses. While advanced conventional arms can be quite destructive, the third distinction is durable. It is possible for conventional forces to approach the rapidity of destruction of WMD with very specific, expensive, and sophisticated weapons--as in reconnaissance strike systems for instance.¹² These technologies, while possessed by only a few states such as the United States, are best illustrated by the U.S. military performance in the 1991 Persian Gulf War where they contributed to a high rate of Iraqi force losses at an accelerated rate.

An adherent to this conventional wisdom, however, might counter by arguing that what distinguishes nuclear weapons, in particular, from conventional arms is the amount of damage which a single weapon can inflict. The damage a tank or fighter aircraft can inflict is nowhere near the degree of destruction a nuclear weapon can produce. However, what has happened over the course of the nuclear era is that the firebreak described by Michael Klare has eroded as conventional arms have become more sophisticated and the possibility and desirability of

small nuclear arms has grown. In the words of the Presidential Advisory Board on Arms Proliferation Policy, conventional arms “have in some cases attained degrees of military effectiveness thought of in the past as associated only with nuclear weapons.”¹³ Further, Michael Klare suggests that very lethal, high-tech conventional arms, such as smart bombs and cluster munitions under certain conditions can “possess a destructive potential comparable to that of low-yield nuclear munitions.”¹⁴ Likewise on the nuclear side, the development of small nuclear weapons, “mininukes,” designed for use in regional conflicts, makes nuclear weapons—in the words of William Arkin—“practically conventional.”¹⁵ The gap between the two types of weapons remains on the edges, but so is a substantial overlap between the weapons in the middle of the destruction continuum. This conventional wisdom then paints the two concepts too simply. An important similarity between WMD and conventional arms is that both weapons can be very destructive. An equally important distinction is also evident: the degree of rapidity with which these weapons' effects occur. This distinction, though, is being eroded as advanced conventional arms technologies catch up with WMD and vice versa.

Conventional Wisdom #2: Proliferation of WMD is considered illegitimate; conventional arms are viewed as legitimate, and to some extent encouraged, for defense.

There is a clear implication that conventional arms may be acquired for defensive and deterrent purposes, as was codified in Article 8 of the Covenant of the League of Nations and in Article 51 of the United Nations Charter. The central idea behind these articles is that in spite of hopes for universal, complete disarmament, at least some states can be expected to maintain arsenals. For some academics and policy-makers war is a fact of life in the

international system. Given this condition, some arms thus become necessary for national defense. Additionally, to carry out a collective security mandate, the member states of international organizations will require some arms. To deter one member of the United Nations from attacking another, for example, the other members must have sufficient arms relative to any potential member-aggressor. Thus, conventional arms are to some extent seen as legitimate for defense and deterrence.

At the same time, strong norms exist against nuclear and biological proliferation. In 1995, the Nuclear Nonproliferation Treaty was indefinitely extended and the issue of the legality of nuclear weapons--both their use and threatened use--was raised in two questions submitted by the World Health Organization and the United Nations General Assembly before the International Court of Justice. The Court ruled in July 1996 that nuclear weapons were generally contrary to international law. Recent discussion within the international community has also occurred vis-a-vis strengthening the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (BWC). Chemical proliferation is more complex, since certain chemical agents have made their way into both military forces and domestic police arsenals. However, the signing of the Chemical Weapons Convention demonstrates the general view of the international community that these types of weapons should not be used.

Numerous examples illustrate the legitimacy issue. At times, the consequences of the right to self-defense can seem perverse in international affairs. Recognizing the difficulty in removing weapons from the conflict in the former Yugoslavia, many policy makers called for sending weapons to the Bosnians to produce a military balance more conducive to mediation.

Perhaps the starkest evidence for the legitimacy of conventional arms lies in the manner in which missiles and aircraft are treated. While considered conventional arms, they are also delivery systems for WMD. Interestingly, both states which acquire such advanced delivery systems and which are alleged to possess WMD as well as their neighbors are quick to focus on the weapon in its WMD role. Recent advances in the Indian ballistic missile program present one illustration. When Western governments raised concerns about India's missile program--based on concerns that the missiles could be armed with WMD--Indian officials responded that the missiles--the Agni (an intermediate-range ballistic missile) and the Prithvi (a short-range ballistic missile)--would carry only conventional warheads.¹⁶ The implication is that these weapons are not a threat *per se* and are legitimate because they are conventional arms. Thus, according to this view, India has every right to pursue such conventional weapons for its defense.

The defensive needs of states, which arise out of the security dilemma in the modern world, do not legitimize all weapons acquisitions. A number of weapons have been considered too "unfair" and terrible to use, including the crossbow, which was banned in 1139, explosives dropped from balloons (considered too indiscriminate), and the dum dum bullet developed by the British.¹⁷ Thus, the notion of "weapons of ill repute" is not new. A more recent example concerns the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons, which entered into force in 1983. This convention seeks to restrict the use of non-detectable fragments, landmines, and incendiary weapons. Current efforts under the aegis of this convention have focused in particular on the landmine. Thus, there is some precedent for restricting certain conventional weapons. Additionally, attempts have been undertaken to limit

the recipients of conventional arms, while recognizing the universality of the "defensive needs" argument. U.S. embargoes against states believed to support terrorism are one example. The United Nations has likewise enacted arms embargoes against Angola, Haiti, Iraq, Libya, South Africa, and Yugoslavia--in spite of the possible technical contradiction as a result of the belief that Article 51 guarantees at least some arms acquisitions. Finally, there are efforts to limit the amounts of conventional arms possessed by states. While "defensive needs" implies a certain minimum threshold of arms, there also exists an upper threshold, above which arms acquisitions are not reasonable, but excessive. The UN Arms Register is designed in part to deal with the issue of excessive arms by making such acquisitions more transparent to the international community.

On the WMD side, policy-makers and scholars have voiced concerns that the taboo against the use of WMD is eroding. One reason for this is that newer proliferators in the Third World may be less swayed by international or national attitudes toward WMD. Chemical weapons, for instance, were used during the Iran-Iraq war for offensive purposes. Moreover, the taboo may be eroded by the use of such weapons by non-state actors, such as terrorists. The use of chemical weapons in Tokyo could be seen as a precedent. However, it should be noted that the use of WMD may reinforce the taboo against use. It is not only the international community's reaction to the use of the weapon, but also its reaction to the consequences. The future perception of WMD hinges on whether the acceptance or rejection of WMD results from a focus on the means or the ends. If the focus is on the goals which the use of WMD are designed to secure, it is possible that some use could be acceptable. For example, in the recent World Court opinion, the issue of self-defense was confounding. The

opinion stated that the “court cannot conclude definitively whether nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defense, in which the very survival of a state would be at stake.”¹⁸ Thus, sometimes, the use of WMD may be legitimate.

A second manner in which the taboo against WMD may diminish may occur as these weapons come militarily closer to conventional arms—either from the development of less destructive nuclear weapons as suggested by the mininuke program or from the development of more destructive conventional arms. If the weapons become equivalent in many respects, it may become very hard for policy-makers to limit which weapons can and cannot be used. Again, the conventional wisdom that WMD are not legitimate while conventional arms are, is not convincing under all circumstances. Nuclear weapons are considered legitimate for deterrence by those nations which possess them, for example, while some conventional arms have been banned.

Conventional Wisdom #3: Arms transfers can have benefits as well as costs; the proliferation of WMD has detrimental effects.

Besides providing for defense, conventional arms may confer a variety of benefits to both suppliers and recipients.¹⁹ The United States, for example, often justifies exports on a variety of military, political, and economic grounds. Thus, the Clinton administration’s arms export policy is designed to support a broad range of goals including: strengthening American military forces, facilitating our friends’ and allies’ ability to defend themselves and deter aggression, promoting regional stability, promoting peaceful conflict resolution, democratization and other foreign policy goals, and enhancing the U.S. defense industrial

base.²⁰ For the recipient, conventional arms imports can provide defense, and possibly deterrence, in addition to stability. Arms transfers more generally may signal a commitment and are one facet of a larger relationship between the supplier and recipient.

Proliferation on the other hand is usually, though not always, equated with negative connotations. Scholars have argued that the proliferation of nuclear weapons can add to peace and stability either by facilitating a state's ability to deter potential attackers or by inducing caution among states in international affairs. In this way, Israeli nuclear arms may lead to deterrence in the Middle East, Indian and Pakistani nuclear arms may promote stability in South Asia, while a nuclear armed Germany or Ukraine might balance with Russia. Ultimately, according to this view, nuclear arms prevent aggression. However, many scholars argue, and the primary view seems to be that nuclear proliferation is something to be avoided. In a review of the debate among scholars over the strategic effects of nuclear proliferation, Peter Lavoy offers twelve dangers resultant from nuclear proliferation, including: a rise in the risk of preventive or preemptive attacks, nuclear accidents, arms races, and the declining influence of the major powers.²¹ The risks are compelling.

It is probably unfair to many scholars of the arms trade to phrase the conventional wisdom as has been done in this paper. While policy-makers often praise conventional arms sales, many scholars see serious negative consequences resulting from arms transfers. Perhaps the greatest impact of arms acquisitions occurs when they contribute to internal and international conflict.²² Major powers--who are also the major arms exporters are increasingly likely to face their own weapons responding both to regional conflicts, such as the 1991 Persian Gulf conflict, or as peacekeepers, as the United States discovered in Somalia. For the

recipient, arms exports may produce expensive and wasteful arms races, economic burdens, and undesirable dependency relations. For the United States and other suppliers, arms exports may tie suppliers to disreputable regimes and create dangerous commitments--particularly by dragging suppliers into recipient's conflicts. The conclusion, therefore, is that while WMD may be very, if not entirely disadvantageous in the international system, conventional weapons also have negative consequences.

STUDYING THE WEAPONS

In addition to the three contentions raised over perceived differences in the nature of the weapons, the policy focus and study of WMD and conventional arms also proceed differently. Three reasons are given for this proposition.

Conventional Wisdom #4: The concern over conventional arms focuses on management, while the focus on WMD is nonproliferation.

This point highlights not the weapons, but the goals of proliferation and conventional arms policy. By and large, proliferation analysis and research are much more concerned with the control of these weapons--for reasons both selfish and altruistic. In the former sense, states such as the United States which possess WMD may not wish to see other states achieve similar military capabilities. From the latter point of view, the world may be a safer place with less of such weapons, if WMD is disadvantageous. A third reason, for nuclear weapons, is that it is important to prevent development of technologies which might undermine the firebreak against conventionalizing nuclear weapons. For years the U.S.-Soviet nuclear strategy rested on a

policy of Mutual Assured Destruction (MAD). The point of strategic arms control measures as the ABM Treaty is not to make nuclear weapons manageable, but to keep them so heinous that they will not be used except in a deterrence role. Numerous conventions, treaties, and institutions exist to try to prevent the proliferation of weapons of mass destruction, including the recently extended 1968 Treaty on the Non-Proliferation of Nuclear Weapons and the 1993 Chemical Weapons Convention.

With conventional weapons, the record on arms control--for the most part arms trade management--is much less spectacular. The 1990 Treaty on Conventional Armed Forces in Europe demonstrates that arms reductions are possible, but the Treaty is limited relative to the global arms market. Many arms control efforts fail for lack of cooperation among the participants. This is the case for the Tripartite Declaration of 1950, President Carter's Conventional Arms Talks, and the recent P-5 talks.²³ Currently, the control of conventional weapons focuses on efforts to manage arms transfers through transparency. This is most evident in the design of the United Nations' Register of Conventional Arms. By voluntarily submitting data on their arms imports and exports, states which participate in this endeavor hope to make arms buildups less surprising and thus less destabilizing. Participation, additionally, may be seen as a confidence-building measure. While many dozens of nations do participate, the UN Register is only designed to manage arms flows, and participation by itself is not the most meaningful measure of success. The potential value of the Register is realized when states make use of these data in their diplomatic efforts and it is less evident to what extent this has occurred. Likewise, the Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies, established in principle at the end

of 1995, is also essentially a transparency regime. As in the UN Register, transparency is expected to facilitate consultation among members, which may then produce coordination of national export policy. The overall impact of conventional arms control regimes, however, seems very limited when compared with nonproliferation institutions.

The distinction between management and prevention is made most stark when seen against the counterfactual of efforts to deal with WMD. It is difficult to imagine a transparency regime for chemical weapons or a major power agreement to collude on the sale of nuclear weapons to states in the Middle East to maintain military symmetry. Managing WMD seems almost as unthinkable as efforts to prevent arms sales--in spite of historical prohibitions on a few weapons of ill repute. However, the contention alluded to above is not so clear. On the WMD side, the management of nuclear weapons is becoming a more common issue. First, policy-makers have tolerated nuclear proliferation to some countries, for example, with respect to India, Israel, and Pakistan. With respect to Pakistan in particular, recent American efforts to link military aid--particularly the release of arms purchased by Pakistan and then held up for shipment by the Pressler Amendment in 1990--with a Pakistani cap on production of fissile material is a far cry from earlier efforts to deter or derail the Pakistani nuclear drive. Second, recent policy initiatives in the United States herald a growing emphasis on the management of nuclear proliferators and would-be proliferators along side preventative policies. The 1993 Defense Counterproliferation Initiative (DCPI), for example, seems to point to policies geared to both prevention and maintenance. On the one side, discussions of strengthening the IAEA and preemptive measures against states with WMD continue the nonproliferation agenda; while discussions of passive and active defenses and

command, control, communications, and intelligence (C³I) issues point to the acceptance, however grudgingly, of WMD proliferation. While planning should be undertaken to deal with the political and military consequences of proliferation, the concern raised by some scholars is that such proliferation management policy will squeeze out future efforts to prevent proliferation.²⁴

At the same time, efforts have been undertaken to control conventional arms, that is, to deny them to some states. For example, certain states are deemed terrorist nations, such as Libya, and there are efforts to control arms flows to these nations. Moreover, UN arms embargoes have been enacted since World War II against several states. Finally, as opposed to prohibiting all weapons to specific, rogue states, states and international organizations have enacted policies to limit the use of specific, conventional weapons by all states, as illustrated by the Conventional Weapons Convention. Policy-makers have therefore blurred the goals regarding the diffusion of WMD and conventional arms: for both weapons there is some emphasis on management and some on prevention.

Conventional Wisdom #5: Because WMD and conventional arms are different, analysis and policy recommendations cannot be generalized across the two areas.

The analytical foundations of research into WMD proliferation and the conventional arms trade differ. Each type of weapon possesses its own corresponding concepts and theories. Scholars and policy-makers draw lessons from different empirical cases and rely on different data. For example, although WMD and conventional arms are both categories of weapons, research in each generally starts from very different theoretical positions. The

underpinnings of proliferation studies tend to relate to relatively well-developed concepts such as deterrence, crisis stability, arms race stability, and first- and second-strike capability. Theoretical implications of nuclear weapons began to be examined almost simultaneously with the development of atomic weapons. The Cold War experiences of the superpowers also lent themselves to the study of proliferation. The arms trade literature, on the other hand, has tended to be less theoretical and more descriptive. It relies on military concepts culled from doctrinal debates over military sufficiency for its theoretical foundations.²⁵ Interestingly, much of the theoretical progress made regarding conventional arms, followed only after a large body of data on the international arms trade was collected beginning around 1970, whereas theory of nuclear weapons began much earlier, with questions about whether and how the weapons might be used. This raises the question of whether it is more difficult to examine the proliferation of a weapon and its consequences before the proliferation happens or after the fact. In any case, the two types of weapons are approached analytically in different ways.

Second, scholars of proliferation studies and of the conventional arms trade employ different data sources. Conventional arms data have traditionally been collected by the U.S. Arms Control and Disarmament Agency (ACDA), the International Institute of Strategic Studies (IISS), and the Stockholm International Peace Research Institute (SIPRI), while information on nuclear weapons is found in the *Nuclear Weapons Databook* series.

Proliferation researchers seem to be more interested in black and white categories--do countries have the capabilities to produce WMD or not--though within these two categories there are important nuances. For example, proliferation scholars are of course concerned with how close a state is to developing a nuclear bomb or how close states might be to deploying

WMD. There remains though a critical threshold between possession and non-possession. This distinction is not as salient an issue in the international arms market. Arms transfer scholars are certainly interested in qualitative differences, but the data that they typically employ in their analyses is quantitative, focusing on changes in weapons stocks, resulting from changes in exports, imports, or national production. It may be harder to interpret the meaning of changes in conventional arms inventories: whereas the acquisition of a first nuclear bomb by a state is of relatively clear consequence--or at least it is a clear distinction--the acquisition of 200 T-72 tanks is less clear and more dependent on a variety of other factors, such as regional military balances and political stability.

Because of different guiding concepts and theories, as well as uneven conceptual development, discourse cannot easily cross back and forth between the weapons types. This barrier is a real problem, as the impact of military technology on regional stability demonstrates. The manner in which the infusion of new military capabilities into a country generates instability differs depending on the weapons. That is, the ability to produce a nuclear weapon is destabilizing for different reasons than those which result from the acquisition of advanced avionics technologies. This is true even if WMD and conventional arms under some circumstances have the same destructive capabilities. As a result, mitigating the instability created by these weapons takes different courses. Thus, the different conceptual approaches to the weapons produce different assessments of the weapons' impacts and different policy programs.

Conventional Wisdom #6: Conventional arms studies focus on individual weapons;

proliferation studies are as much concerned with the acquisition of knowledge.

The concern over the spread of conventional arms concentrates on which countries have added what categories of weapons to their stockpiles, what they might do with those weapons, and what their neighbors might think of the changes. That is, the focus is on the weapons themselves and their consequences. For scholars studying proliferation, a major concern is the spread of the ability to make WMD--or technological know-how. As Burrows and Windrem write: "the new danger [of WMD] is not so much the flow of components but of ideas. Weapons technology is now moving across borders, not only on compact discs and through modems, but in the heads of engineers and scientists who roam the world looking for fat profits or simply for employment. Ideas are infinitely harder to stop than finished missiles or supercomputers."²⁶ The fear of a nuclear "brain-drain" from Russia, which captured media and governmental attention in 1992-93 illustrates this point. Along side the concern that nuclear technologies were being smuggled out of the deteriorating Soviet empire, was the fear that scientists capable of making the weapons might leave for other countries--including Third World states with nuclear programs--and could transfer their knowledge. This threat was seen to be of greater concern than the loss of nuclear weapons or material from the former Soviet Union.²⁷ The focus on WMD know-how is recognized not only by analysts in national intelligence agencies, but by the scientists themselves. As Jafar Dhia Jafar, the father of the Iraqi nuclear program put it: "You can bomb our buildings. You can destroy our technology. But you cannot take it out of our heads. We now have the capability."²⁸ Conventional arms studies, conversely, are much less concerned about the spread of knowledge about arms production. Knowledge to produce conventional arms is already diffused over the globe in the

form of technology transfer, co-production agreements, licensing agreements and offsets. Proliferation concerns, on the other hand, are much more concerned about the spread of knowledge related to the production of WMD.²⁹

CONSEQUENCES OF THE CURRENT THINKING

A deeper examination of the six conventional wisdoms leads to the conclusion that the relationship between conventional arms and WMD is muddled by oversimplification of the characteristics of the weapons and the myopia in which they are approached. It is not the case that the two categories of weapon systems are mutually exclusive. Nor is it the case that one can be subsumed as a specific instance of the other, or that the two can be fully integrated. Rather, there are some important similarities noted in the first through fourth propositions, but meaningful differences highlighted in the last point of the first argument and the last two arguments.

The existing conceptual separation has both policy and analytical implications. The policy impact occurs in two central areas: arms control and nonproliferation policy. The primary policy impact is on arms control efforts. Those academics and policy-makers who believe in the conventional wisdoms outlined above are likely to make the argument that arms control is best served by slicing up the arms problem into more manageable components. Tackling "arms" broadly conceived may be too vague in the practice of international diplomacy, hindering international cooperation. Focusing on one type of weapon may be more likely to produce an arms control agreement. In such cases as the Intermediate range Nuclear Forces (INF) Treaty and the recent 1996 agreement in Geneva concerning landmines, efforts to

control both WMD and conventional arms may proceed more quickly when the focus of negotiations is narrowed to weapons where there exists a predisposition for control. However, compartmentalization of weapons for the purposes of achieving a particular arms control agreement or even a series of such agreements may hurt arms control in general.

First, one consequence of the belief that WMD are more destructive, less legitimate, and have less positive value than conventional arms is to shift attention towards the former weapons and away from the latter. This hierarchy of weapons is manifest in arms control efforts, which focus primarily on nuclear weapons, and less so on more common conventional arms.³⁰ Edward Laurance suggests that:

In effect there is a typology of international concern over the transfer of military capability. Concern is the highest when nuclear weapons are involved, and it is not surprising that the most success in controlling the trade exists at that level (e.g., the Nuclear Non-Proliferation Treaty). Concern decreases when the type of military capability is less than nuclear--chemical weapons, strategic technology, major conventional weaponry, and down to those weapons used in terrorism, insurgency warfare, domestic crime, and defense of one's domicile, where concern about trade rarely exists at the national level.³¹

The result of this perceived hierarchy, is that there is a much more fully developed arms control policy and analysis for weapons of mass destruction (and within WMD, for nuclear rather than biological and chemical), than for conventional arms control.

The lop-sided focus on WMD is problematic since the third conventional wisdom--that conventional arms are essentially beneficial--is incorrect. Most importantly, the many current

conflicts underway today are being fought with conventional arms. John Holum, the Director of the Arms Control and Disarmament Agency makes the point succinctly: "Priorities set according to arms' potential for damage obviously mean a focus on weapons of mass destruction, which can destroy whole cities at a time. But priorities based on weapons' actual damage draw us to conventional arms, which every year do destroy whole cities, a few people at a time."³² The additional negative consequences of conventional arms acquisitions might also be mitigated by arms control agreements.

A second consequence, primarily of the fourth conventional wisdom, is that where there is conventional arms control, it may not be the best possible, since management of conventional arms is becoming increasingly untenable. In one sense, management of conventional arms essentially is the agreement of states in the international system to keep the level of destruction at an acceptable level. However, this threshold is eroding from two directions. One force chipping away at policy-makers' ability to look the other way is the growing destruction wrought as a result of ethno-political conflict. Ethno-political groups have growing access to weapons, most of which are small arms. These weapons are producing great numbers of casualties (e.g., more than one million dead in Sudan) and millions of refugees among their other consequences. Aside from ethical concerns, these arms can indirectly hurt U.S. economic possibilities, undermine U.S. efforts to promote democracy and human rights, and directly threaten U.S. citizens abroad and soldiers in peacekeeping roles. At the same time, the growing sophistication of arms also makes management increasingly less satisfactory. Would the U.S. be satisfied simply managing submarine proliferation or the diffusion of spy satellites? As military technologies increase, management becomes less

attractive.

Finally, the first three conventional wisdoms produce a parochial arms control policy which may not be less effective. Separating each weapon may produce an overall arms control policy which stays one step behind Third World nations' efforts to acquire weapons. If the policy becomes reactive, as Third World nations move to acquire new, advanced weapons, arms control efforts may focus on the weapons they leave behind. An example of this type of shift occurred in the context of the superpower arms relationship in the late 1980s, when advances in conventional arms coupled with changes in military doctrine concerning the importance of military technologies allowed for agreements on nuclear weapons. As conventional arms could increasingly substitute for nuclear arms on the battlefield, it became more possible to limit nuclear arms.³³ Secondly, a parochial focus risks obscuring important lessons learned within the arms control environment. If a chemical weapons verification regime can be informed by the International Atomic Energy Agency (IAEA) verification mechanism, why is it impossible to apply techniques from WMD controls to conventional arms controls and vice versa? In fact, such a step might be beneficial. Finally, parochial arms control may produce suboptimal arms control. Establishing the bureaucracy needed for analysis, verification, implementation of legislation/treaties, and oversight may be inefficient, redundant, and counterproductive. Moreover, if the right hand does not know what the left hand is doing, the possibility of contradictory pressures or legislation vis-a-vis arms or export control may develop. This possibility calls for better coordination.

Overall, more importance needs to be placed on conventional arms control. Current efforts are insufficient to address this problem. The failed P-5 talks, where the permanent

members of the UN Security Council sought to agree on restrictions to arms exports to the Middle East demonstrate that conventional arms control will be difficult to establish.

Individual nations are resistant to arms control efforts. The U.N. Register of Conventional Arms and the Waasenaar Arrangement are first steps in the right direction but their impact, which focuses on creating greater transparency in arms transfers is minimal at present.

Moreover, to the extent that those scholars who view a military technological revolution underway or those scholars who see small arms as an increasing problem are correct, than conventional arms control needs to be rethought or at least expanded. The weapons identified by such scholars have yet to be subject to significant conventional arms controls. Ultimately, the question is what sort of conventional arms control would be good for the United States. The answer must balance a variety of competing national security, economic, humanitarian, and political objectives. Additionally, the answer is obscured by the fact that the consequences of conventional arms and their legitimacy are subject to differing opinions.

A second area where this separation is problematic concerns U.S. nonproliferation policy specifically. Nations seek arms for a variety of reasons, ranging from national prestige to the security dilemma in international politics. The consequence of acting on one type of weapon may be to push states to acquire the other. For example, efforts to control WMD may push states to acquire conventional arms. Equally important, efforts to control conventional arms may push states to acquire WMD. South Africa is one example, but more importantly are states such as Israel and Pakistan, that see arms suppliers waver and hesitate and recognize the potential dangers if suppliers are less than reliable. Here the concern is not that arms control is reactive, but rather that conventional arms export policy can negatively affect

nonproliferation policy and vice versa.

This linkage is recognized by the Clinton administration. In the 1995 statement on conventional arms export policy, the Clinton administration suggested that conventional arms could be used as a functional substitute for WMD or could be manipulated in any case so that WMD would be less likely to occur. This policy has existed in one form or another certainly as far back as the 1970s. During this time, the United States sought to convince states such as Pakistan and South Korea not to go nuclear in part by playing the conventional arms card. The fact that the two weapons are related in some aspects suggests that such a policy might work, however, the differences between the weapons identified in the preceding analysis suggests caution. While the United States succeeded in deterring a South Korean program, Pakistan is today a *de facto* nuclear state.

Aside from the two policy implications, there is a general theoretical implication which results from a belief in the conventional wisdoms, particularly the fifth one identified above. The conventional wisdoms cause academics and policy-makers to miss an opportunity to further understand the proliferation and repercussions of conventional arms and WMD. Here the gap is not so wide between academics and policy-makers. Rather, the challenge is to bring together the missile specialists, the nuclear experts, the chemical and biological weapons analysts and the arms trade scholars who frequent the policy and academic communities to see where they can inform one another. Clearly, each research program can learn from the other.

Proliferation studies, for example, might inform the arms trade agenda on arms control. There is a long history of, and rich information about, arms control efforts at the strategic and unconventional arms levels. This information could be useful for designing analogous

conventional arms controls--controls which are currently experiencing a revival of interest. Likewise, the arms trade literature could provide useful information for proliferation scholars. Conventional arms proliferate too, as in the spread of advanced combat aircraft to new countries. In fact, many instances of qualitative diffusions of conventional arms and technology transfers have already occurred in the past fifty years. By studying conventional arms dispersion, proliferation scholars may uncover important patterns in the proliferation of technologies of interest primarily to them. Additionally, analysis of indigenous arms production might also inform proliferation research.

However, the fact that there are real differences between the two weapons categories along three dimensions (rapidity of destruction, conceptual/theoretical foundations, and the focus on weapons versus ideas) constrains opportunities and may make conceptual borrowing inappropriate. The tension between the study of conventional arms and WMD is similar in this regard to the study of war. Academics and policy-makers often break up the concept of "war" into a variety of observables: hegemonic war, great power war, interstate war, are common categories for academics; nuclear war, conventional war, civil war, low-intensity conflict, for policy-makers. Some information, policies and theories apply to all or most of these actions, some to only one type. By bridging the gap between conventional arms and WMD, a better understanding of weapons, generally and specifically, may be gained.

CONCLUSION

The main purpose of this essay is to clarify and refine the concepts, "weapons of mass destruction" and "conventional arms." This analysis suggests that conventional arms do have a

place in proliferation studies, because of similarities between the weapon categories. Scholars and policy-makers should exploit the similarities between WMD and conventional arms, but remain sensitive to the danger of "conventionalizing" weapons of mass destruction. One example of scholars beginning to think about breaking down the conceptual separation is Henry Sokolski's suggested inclusion of high leverage conventional weapons and technologies under proliferation's aegis. He considers a possible future gap in arms trade intelligence, proposing that one method of preventing an intelligence degradation would involve the incorporation of these weapons into the realm of proliferation intelligence assets.³⁴ It is not clear whether this would be a good policy, but suggesting such a policy is a good sign for the future integration of conventional arms and proliferation studies.

Overall, then, greater dialogue between scholars and policy-makers concerned with the arms trade and with WMD should be initiated to identify the questions each group asks, whether those questions might be relevant to the other group, and whether there are some meta-questions which are appropriate to both. Additionally, discourse should focus on the contrasting dilemmas the weapons present to policy-makers. Scholars and policy-makers concerned with conventional and WMD proliferation should attempt to speak a common language in pursuit of advances in analysis and policy-making.

Notes

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