Pre-empting Nuclear Terrorism
in a New Global Order

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Executive Summary

The main danger many nations face in the near future is a nuclear attack by terrorists. Attempts to defend against it by hardening domestic targets cannot work, nor can one rely on pre-emption by taking the war to the terrorists before they attack. Hence, there is an urgent need to limit greatly the damage that terrorists will cause by curbing their access to nuclear arms and the materials from which they can be made. Focusing our energy on intercepting car and shoe-bombers will save less lives than ensuring that terrorist groups will not lay to waste a whole city. Preventing nuclear terrorism, the much neglected third front, should be accorded first priority. Suggesting that we should advance full throttle on all three fronts of homeland protection simultaneously will lead to boundary busting, loss of prioritization, and ultimately a sense that we face a task that cannot be carried out. In the near future, curbing terrorism requires turning from problem-solving to damage control. In other words, we must recognize that we will be unable to stop all attacks and thus ensure that terrorists will not be able to strike with weapons of mass destruction (WMD).

We must focus not on terrorism per se but on nuclear terrorism. We should stop referring to WMD as if they were all of one kind; the main danger comes from nuclear arms and a few biological agents. Chemical attacks and most biological weapons, as well as dirty bombs, should be treated as a lesser priority. Here too, boundary busting and defining the mission too broadly will make the task too onerous and cause loss of focus.

More attention should be paid to failed and failing states (in which the government does not effectively control nuclear arms or the material from which they can be made). We should pay less mind to rogue states such as North Korea and Iran. Each failing state is like hundreds of actors with too wide a variety of motives and too low a visibility for them to be easily deterred. On the other hand rogue states – which have singular and effective governments – might be deterred. Therefore failing states are a much more likely source of nuclear materials and arms than are rogue states.
The current foreign policy focus of the United States and its allies on the Axis of Evil is very much misplaced. Russia – the failing state of greatest concern – should be treated often as part of the problem and only rarely as part of the solution. Pakistan is another troubling failing state. In addition, highly enriched uranium (HEU), which is found in the reactors, pools, and vaults of at least twenty failing states, is the material from which nuclear bombs can be made relatively easily. These nations should be incentivised, pressured, and if all this fails be treated with ‘all available means’ to trade HEU for low-enriched uranium (LEU) or other sources of energy or economic resources. Most immediately, the United Nations should stop authorizing the building of new reactors with HEU, as China has just done in Nigeria.

Beyond details, there must be a strategic shift from controlled maintenance, the basic concept that underlines the nuclear non-proliferation treaty (NPT), to deproliferation; from a license to keep nuclear arms and fissile materials under various conditions such as submitting to inspections, towards a policy that seeks removal of these dangerous items in one way or another. The difference is akin to the difference between gun registration and removing guns from private hands.

This pre-9/11 conception of controlled maintenance must be replaced by one of deproliferation, which ultimately aims to:

a) Upgrade security at facilities that store nuclear arms and fissile materials as a temporary measure rather than as part of a lasting solution. The reason I say temporary and in general emphasize upgraded security much less than do other analysts, although I recognize its importance, is because in my view, the best security is that which removes the items from the reach of those from whom they are to be secured. To put it in plain English, rather than upgrading security in facilities in failing states, fissile material, and when possible nuclear arms, should be expropriated, blended down, or converted. Security is inherently unreliable, especially in failing states.
b) Expropriate fissile materials to safe havens and blend them down in these havens rather than doing so on location. Replace all HEU with LEU, which in effect cannot be used in making bombs, or with other sources of energy. Furthermore, HEU replacement could be accomplished by providing incentives such as large scale foreign investment or foreign aid.

c) Prevent trans-national trade and transportation of nuclear bombs and the materials from which they can be made.

d) Compel both failing states and rogue states (and in the longer run still other states) that have nuclear bombs to destroy them. (This in turn may require, in some cases where there is a great imbalance in conventional forces, for the international community to guarantee the country’s borders.)

e) Prevent the construction of new facilities that use HEU, rather than condone such construction as legal and legitimate (as it is currently under the NPT).

Pre-empting nuclear terrorism through deproliferation is not a vision. In effect, several steps in the right direction have been taken, albeit on a case by case basis and not as part of a general strategy. However, these steps have been accorded few resources and low priority. The opposite allocation of resources and attention is called for.

We need a form of triage that asks: From which dangers we must first be saved, which treatments may be delayed if delay we must, and so on. As mentioned above, failing states ought to get priority over rogue states. Among failing states Russia and Pakistan are the most in need of repair. Reactors, pools and vaults in more than 20 nations such as Indonesia and Ghana rank next among failing states. Among rogue states Iran should be treated in the opposite manner of North Korea: Iran should be defanged urgently; in contrast, North Korea may well have to be made the last member of the nuclear club. Removal of HEU should be ranked higher than removal of plutonium; and plutonium should be ranked higher than removal of spent fuel.
Deproliferation fits well into an evolving new global architecture, which I call the Global Safety Authority (GSA). It was formed by the United States and its allies, working with most states of the world, to fight terrorism. It has many governmental features; it is often coercive although not without legitimacy as it has the approval of the United Nations and NATO, in sharp contrast to the invasion of Iraq. This global governmental agency is and ought to be expanded to take the lead in bringing about deproliferation. First, all peaceful means must be exhausted, so deproliferation will contribute to rather than undermine the development of global law and legitimate worldwide institutions. However, if soft power fails, in this area especially, the application of hard power is called for. Deproliferation may well have to be quite muscular. However, the more nations that give up their nuclear ambitions and wherewithal, the stronger the taboo against proliferation will become, requiring less of an enforcement regime and making the world safer for one and all.
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Introduction

The combination of terrorism and nuclear weapons poses the gravest threat to national security. This conclusion is shared by several leading scholars who have recently written about the subject, including Ashton Carter, Matthew Bunn and his associates, Graham Allison, and George Perkovich and his associates.¹ Senator Richard Lugar noted that ‘The minimum standard for victory in this war is the prevention of any terrorist cell from obtaining weapons or materials of mass destruction’.² One cannot ‘harden’ targets to protect cities from being incinerated; one cannot ‘eliminate’ all the terrorists before they strike; and one cannot deter them, through a balance of terror, from using nuclear bombs. One can, though, largely pre-empt a nuclear attack by greatly limiting terrorists’ ability to obtain nuclear arms and the materials from which they are made, thus reducing the terror. The gravest threat, we shall see, is not posed by rogue states (such as North Korea and Iran) but by failing states (such as Russia, Pakistan, Ukraine, Ghana, and Nigeria, among others) in which nuclear weapons and materials are readily available. This position paper favours a radical shift in the treatment of the sources of nuclear arms from controlled maintenance (under the anachronistic Treaty on the Non-Proliferation of Nuclear Weapons, or NPT) to deproliferation (removal of these materials and weapons from failing states and ensuring that no new states obtain them). If Japan is the poster child of the NPT, Libya is the poster child of deproliferation. As far as rogue states are concerned, not all can be treated in the same manner; North Korea, we shall see, must be approached very differently than Iran.

Some hold that the threats of nuclear terrorism are an American problem and are not high on the list of priorities for other nations. They ought to be. Even if only American cities lie in the cross-hairs of terrorists – even if Karachi, Madrid, Moscow, New Delhi, Tel Aviv, and Tokyo need not fear – all decent human beings should concern themselves with the hundreds of thousands of innocent civilian lives that would be lost.

Even those hardened and cynical to the point that they would claim, as they did after 9/11, that the United States ‘deserves it’ should concern themselves with the American reaction to a nuclear holocaust; the vengeance the United States will wreak on others; the massive and lasting loss of liberties that are sure to follow; a John Ashcroft to the third degree; and the terror that will come home to roost sooner or later in other cities around the globe. For instance, those who behead innocent civilians from diverse nations for merely working in Iraq, assassinate the key members of the Iraqi government (chosen by the United Nations) as it prepares for free elections, and kill fellow citizens for selling liquor, will not limit their reach to American cities once they have the wherewithal to launch nuclear attacks.

This paper proceeds by delineating the challenge nuclear terrorism poses, then compares the old-fashioned controlled maintenance strategy to deproliferation, and closes by exploring the role of deproliferation in the new global architecture that is emerging from the post-9/11 international transformation. In the process it addresses the question of whether international law needs to be adapted to accommodate the measures that must be taken to prevent further dissemination of nuclear arms, especially on the high seas.

The communitarian interest in the subject is multifold. On the domestic level, the delicate balance between individual rights and

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social responsibilities and between autonomy and the common good, which is at the heart of new communitarian theory, would be greatly disturbed if there was a massive terrorist attack on the United States’ heartland. On the international level, the development of a global community requires more than the development of a global civil society, a limited core of shared values, norms, and bonds of affinity. It requires the development of new trans-national institutions and laws that are able to cope with the swelling problems with which both national governments and old-fashioned intergovernmental organizations are unable to deal. The institutions that are developing to deal with nuclear terrorism have a key role to play in the development of what I call a Global Safety Authority (GSA). In this context, the paper examines the conditions under which soft power requires the backing of hard power – the opposite of the equation recently at the focus of international analysis. The main reason for this approach is that, as we shall see, dealing with nuclear terrorism requires a more robust trans-national system than now exists, though such a system certainly would not warrant invading independent nations in the pursuit of nuclear ghosts.

This discussion takes place ‘within history’. It asks what the current conditions and trends are and seeks to determine how these might be altered. It thus differs from a fair number of international explorations that start with what is desirable before trying to establish how we might get there. Such explorations implicitly assume a fairly pliable world in which people of good will and leaders who take heart can form a new charter for the United Nations, establish democracies in scores of nations, or bring peace to the Middle East, all in the short run. The following analysis assumes that one must build on what there is and that the capacity, of even big powers for social engineering – let alone for changing the world – is quite limited. A quest for the best should not be allowed to blind one to what can realistically be achieved.

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The Third Ought to be the First

Most of the efforts to pre-empt future terrorist attacks and to mitigate the damage of those that will occur have concentrated on hardening soft targets (especially controlling access to airplanes, but also to ports, trains, and numerous public and some private buildings, as well as better protection for nuclear facilities, dams, and water reservoirs, among others) and rooting out the terrorists before they reach the United States or attack elsewhere. These preventive efforts are most visible in Afghanistan, but occur in numerous other places as far apart as the Philippines, Colombia, the Horn of Africa, and Canada.

The first front, hardening soft targets in order to limit the harm from those terrorist attacks that break through various defenses, cannot succeed because of the very large number of soft targets. The United States alone has 95,000 miles of coastlines, 14,000 small airports, 15,000 chemical plants, and 260,000 natural gas wells. Many of these, for example the New York subway system, are difficult to protect. Moreover, the costs of progressing on this front, which run into the billions of dollars per target and entail imposing limitations on civil liberties, are so high that they have already generated strong and effective counter movements by civil rights advocates (which have led to the cancellation of TIPS, TIA, CAPPS II, and blocked measures that were to be included in Patriot Act II before it was even fully drafted). Colleges and the tourism industry complain about the loss of international business, shippers about the costs of compliance with new port (and tracking) regulations, and so on, leading to a scaling back of various security measures. The cost of protecting merely the airline industry from shoe bombers, box cutters, and nail clippers exceeds $5 billion a year. These expenditures serve largely to reassure the public and to keep the airlines in business, but they do not provide safe flights; for instance, airplanes are still fully vulnerable to attacks by mobile, handheld

missile launchers. Most other industries still have less protection than the airlines. But above all, hardening refers to protection from conventional attacks and not from nuclear ones. In short, hardening is like locking several windows while leaving the main door wide open.

The second front, preventive measures, which entails bringing the war to the terrorists in order to defang them before they attack, has been more successful. The details are largely unreported, but a fair number of planned attacks have been prevented due to the joint efforts of the intelligence services of many nations and by covert actions. However, it is difficult to find, capture, or eliminate terrorists in parts of the world where both the geographic and political terrain are severely taxing, as they are in northwest Afghanistan and in parts of Pakistan that border Afghanistan, as well as in the jungles of the Philippines and Colombia. Moreover, it seems that for every terrorist captured, another one is being recruited, as there is a sizable pool of people from which to draw. (The notion that the West can 'drain the swamp of terrorism' by providing the nations of the world with economic wellbeing and democratic polities is so unrealistic that it will not be further discussed here.7)

Hence the importance of what currently is the third front: Pre-empting nuclear attacks by terrorists by preventing them from gaining access to the most devastating means of attack, especially nuclear weapons. The underlying assumption of this approach is in conflict with the optimistic ‘problem solving’ approach and the ‘can do’ attitude that dominates much of American thinking in public policy. In contrast, I hold that unfortunately one must assume that defenses along the first and second fronts will sooner or later fail and that some terrorist attacks will occur, as practically all experts expect. As one terrorist put it, ‘We only have to be lucky once. You have to be lucky all the time’.8

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8 Threat from the Irish Republican Army (IRA) subsequent to the near murder of Margaret Thatcher in 1984.
James Hoge argues that ‘...a stronger homeland defense is also needed in case prevention by offense fails’,\(^9\) which is hard to disagree with, and he adds that it should become an even higher priority. However, we face here the danger of boundary busting. If we define the mission of homeland protection ever more broadly, then we will come to the conclusion that the mission cannot be successfully completed, we will lose sight of where priority must be placed, and we will spread our limited resources and attention too thinly.

One then turns from the problem-solving approach to damage control towards greatly limiting the effects of those attacks that will occur by preventing terrorists from obtaining nuclear weapons. Fortunately, this is a much more delineated task, a point well documented by Graham Allison,\(^10\) that can be accomplished much more readily than hardening targets or preventing attacks altogether. It follows that this third front, pre-empting a nuclear attack, should be granted the highest priority rather than be accorded, as it currently is, at best a third ranking, an argument made by leading authorities in this field.\(^11\) Indeed, in several critical situations, this front has been deliberately neglected in order to help catch some terrorists, especially in dealing with Pakistan, as the United States continues to focus on preventing a re-run of a 9/11-like attack. These times call for a major shift of resources, powers, and attention from the first and second front to what currently is the third.

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\(^11\) For more, see the resources listed in footnote 1.
Massive Terrorism = Nuclear Terrorism

To prevent boundary busting, one must sharply differentiate between small-scale terrorism, of the kind the United States and other nations have faced so far, and massive terrorism in the form of a nuclear attack. Small-scale terrorism, which Britain faced at the hands of the Irish Republican Army, Israel faced during the two intifadas, and the United States faced overseas before 9/11, is damaging enough. Its victims include not merely the hundreds of individuals involved but also people’s basic sense of safety; these attacks do terrorize. They often have driven the nations involved to curtail individual rights, to everyone’s loss, and their economies have paid a considerable price.

This kind of terrorism though is almost trivial compared to the effects of an attack with a nuclear bomb, which could obliterate a large city. To gain a sense of the scale of the horror that could be caused, one must recall that the United States incinerated Hiroshima and Nagasaki with nuclear weapons already available in 1945. Today, the number of victims, the human and economic costs, the resulting rage, and the demands to restore safety whatever the cost (even to democratic institutions) would be of a significantly higher magnitude.

Nicholas D. Kristof provides a telling picture of the devastation that would occur:

If a 10-kiloton nuclear weapon, a midget even smaller than the one that destroyed Hiroshima, exploded in Times Square, the fireball would reach tens of millions of degrees Fahrenheit. It would vaporize or destroy the theatre district, Madison Square Garden, the Empire State Building, Grand Central Terminal and Carnegie Hall...The blast would partly destroy a much larger area, including the United Nations. On a weekday some 500,000 people would be killed.12

In short, the difference between small-scale and massive terrorism is comparable to the difference between a crime wave and genocide.

**Nb, Not WMD**

In this context, I strongly urge that the phrase ‘weapons of mass destruction’ should be avoided because it conceals the fact that not all WMD are of the same calibre. The main danger of a massive attack lies in the use of nuclear weapons, not in chemical or most biological weapons. Perhaps the proper notation should be ‘Nb’ attacks, the capitalized ‘N’ standing for nuclear, the gravest source of danger, and the lower case ‘b’ for a smaller subcategory of biological agents that might be used effectively for massive attacks. Among nuclear weapons, attention should be paid mainly to fully formed nuclear weapons and not to so-called ‘dirty bombs’ (bombs that rely on conventional explosives but are made somewhat more devastating by being laced with radioactive materials), whose damage under most conditions would pale in comparison to that of completely developed nuclear devices.13

I cannot here delve into the reasons for the preceding statements. I hence merely provide references to experts who have made similar points.14 Let me note though that so far, all chemical and biological attacks have caused comparatively limited harm, while nuclear bombs have laid waste to sizable cities. The damage of non-nuclear agents is comparatively limited, although far from small, because most of these agents are difficult to produce, stabilize, and deliver on large targets.

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Another reason to draw the line between those weapons that pose a truly massive danger and those that do not is that – as we shall see – while it might well be feasible to prevent terrorists from gaining access to nuclear weapons and the material from which they can be made, it is extremely difficult to hinder their access to chemical materials and biological agents. The nuclear prevention tasks are clearly delineated and can be successfully brought to completion because there are a relatively small number of sources from which to obtain nuclear material. Conversely, chemicals that might be weaponised are widely used in numerous places and dangerous biological agents are easy to conceal and transport. Hence, seeking to address the danger of massive terrorism by removing WMD or bringing them under secure control is like trying to find lost ships by draining the seven seas. Such boundary busting conceptions are leading to the squandering of resources and attention, a lack of focus and even despair, as the task becomes bottomless and the time left to get to the bottom is short. It follows then that one should focus on preventing a nuclear attack and treat massive and nuclear terrorism as largely synonymous.

Failing and Rogue States, Non-state Actors, and the Limits of Deterrence

Many policy makers and strategists have had a hard time adapting the traditional, Cold War framework of international analysis to fit 21st century conditions. This is especially evident in the focus on rogue states, those that disregard international law and norms, as opposed to a focus on failed states, in which there is no effective government, and so-called ‘non state actors’, especially terrorists, act with considerable impunity.

Much of the attention that is paid to nuclear threats has been focused on the three members of the Axis of Evil: Iraq, Iran, and North Korea. However, nuclear attacks in this day and age are much more likely to be the work of terrorists.

The main reason for this change is that it is more difficult to deter suicide bombers than even rogue states, a point whose importance
is explored below. For now, let me just assert that the focus of the third front should be on the sources from which terrorists can acquire nuclear arms or the means needed to produce them, most of which are not in rogue states.

Terrorists can gain nuclear weapons from those who have them ready-made, or they can easily make them out of highly enriched uranium (HEU). HEU, fuel enriched to 90 per cent or more, which is widely used in nuclear research reactors, should be considered weapons grade uranium (WGU). In contrast, if only lightly enriched uranium (LEU), enriched less than 20 per cent or so, is available then further enrichment of it would require facilities, resources, and skills of a significantly higher order of magnitude. Moreover, because such enrichment requires sizable facilities, such activity is more difficult to conceal if conducted by terrorists than by a rogue state. Hence, to limit the danger of massive terrorism, the focus ought to be on the sources from which terrorists can obtain nuclear arms or WGU, which they are more likely to obtain in failing, rather than rogue, states.

There are several reasons why nuclear terrorism is more challenging than nuclear attacks from rogue states and thus deserves more attention and a greater dedication of resources than it currently receives. First of all, the list of rogue states is small, well-known, and their actions can be monitored with relative ease. The opposite holds true for terrorists: Their number is large, their identity is often unknown, and their actions are difficult to track. Second, rogue states are easier to deter from using their nuclear arms than are terrorists, especially those willing to commit suicide, a sacrifice for which more than a few have shown themselves ready. It is true that the leaders of some rogue states could act irrationally or simply miscalculate by disregarding that they and their regime would not survive if they targeted nuclear weapons against the United States or one of its allies – or if it became known that they provided terrorists with such arms. After all, the Japanese believed when

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15 Personal communication with Marvin Miller, August 6, 2004.
they attacked Pearl Harbour that they could best the United States. However, miscalculations of the magnitude that would lead a Kim Jong-II or the mullahs of Iran to use nuclear weapons are very rare. In contrast, if terrorists acquired the material to make nuclear weapons or even the weapons themselves, they would neither fear retaliation nor be deterred by a balance of terror. Indeed, terrorists often hold that if their attacks lead to retaliatory attacks on their homelands, support for their cause would only increase.

Moreover, because terrorists are not the army of any one state, it is often difficult to determine which nation to retaliate against and thus whom to deter and how. (This was all too evident when the United States learned after 9/11 that most of the terrorists involved in that attack were from Egypt and Saudi Arabia.) Ergo, there are several strong reasons to rank the danger of nuclear terrorism higher than the danger of nuclear strikes by rogue states. Yet since 9/11, U.S. foreign policy, its military, its intelligence agencies, and other resources have been focused on dealing with rogue nuclear states, both alleged and real, the Axis of Evil (North Korea, Iran, and Iraq) and not on several scores of sites from which terrorists can acquire nuclear material.

Most rogue states are totalitarian and have one leader or a small, elite group of governing officials; hence, there is only one leader to address and only one party with which to deal and counter. In contrast, failing states should be considered as if they have hundreds of actors acting more or less independently. By definition, the absence of an effective government allows various governmental agencies (such as secret services or branches of the armed forces), key individuals (generals, industrialists, scientists) and still others to deal with nuclear arms and materials on their own. Given the large number and great diversity of these actors, they are more difficult to keep track of, much less to contain, than is a rogue state. In short, failing states are more dangerous and deserve higher priority than rogue states, which – to reiterate – are currently the center of attention to the extent that attention is paid to nuclear arms at all.

Among failing states, Pakistan ranks high as a state from which terrorists are most likely to be able to obtain ready-made nuclear weapons either by toppling its government, by cooperating with certain dangerous elements of the government, or by corrupting the guardians of the bombs. Yet Pakistan is not on the Axis of Evil list. Indeed, the poor security of its nuclear weapons — and the fact that it proliferates by selling nuclear designs and technologies to other countries — is largely ignored because of its help in dealing with conventional terrorism. This was highlighted in 2003 when the United States ignored the fact that top Pakistani nuclear scientist Abdul Qadeer Khan was found to be the at the center of a major trans-national black market of nuclear materials and parts. The United States apparently overlooked this because it was instead focused on capturing bin Laden, and Pakistan had just launched a new drive to help in that matter. This is like letting a serial killer go because he promised to help catch an inebriated driver. All this calls for a radical shift in pre-emption priorities from small-scale to massive terrorism, and from rogue states to the sources from which terrorists might readily acquire nuclear materials or ready-made bombs. This shift must include a radical re-dedication of political capital in addition to resources. Of course, one would prefer to deal with all of the above, but to the extent to which priorities must be set, failing states should be ranked higher than rogue states.

The other major relevant failing state is Russia. An estimated 90 percent of all fissile material outside of the United States is in Russia, which also has a large number of small nuclear arms, including a number of unaccounted for suitcase-size nuclear weapons. Many of these materials and bombs are poorly guarded, which is particularly disturbing in light of the fact that Russia is a nation in which corruption is rampant and the central government’s
control of the provinces is weak, despite recent attempts to shore it up.

**The Approach by the United States and its Allies to Russia Suffers from Schizophrenia**

On the one hand, the United States treats Russia as a close and reliable ally and has paid much for transporting nuclear bombs (and the material from which nuclear bombs can be made) from a number of other nations to Russia, rather than to the West or to some other truly safe haven. Among the sites from which nuclear bombs were moved to Russia are Ukraine and Belarus. Among the sites from which HEU was shipped to Russia are Serbia, Romania, and Bulgaria. Russia is expected to blend down these materials so that they cease to be dangerous. Inspections are to ensure that this blending down does occur. Inspections, however, are inherently unreliable. Moreover, given how ineffectual and corrupt the Russian government is, it fully qualifies as a failing state (albeit not as failing as some other states and it has recently improved somewhat). And if one accepts the basic premise of deproliferation, then these bombs and materials should be moved to a truly reliable safe haven and blended down there.

The schizophrenic approach is further evidenced by the fact that while some nuclear material and many arms are moved to Russia with U.S. help, the United States treats Russia as an enemy and uses a good part of the sparse funds available under the Nunn Lugar programmes to pay for dismantling Russian missiles and submarine platforms and closing nuclear testing tunnels. A strategic decision must be made as to how reliable Russia is. If one agrees

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21 Fortunately, the United States buys weapons-grade uranium from Russia and does convert it into fuel that can be used by American power plants. This programme is called Megatons to Megawatts.

22 Reuters reports that Russia runs dozens of atomic reactors, uranium enrichment facilities and nuclear research reactors – some in the far flung corners of Siberia and
that Russia continues to qualify as a failing state, then there should be, whenever possible, a cessation of arms and material to Russia. I recognize that in many cases the United States and its allies had no choice; Ukraine and Belarus may well not have agreed to turn their nuclear bombs over to the United States. However, the HEU transport from Serbia, Romania, and Bulgaria to Russia could have instead been moved for conversion to, say, France.23 When possible, effective deproliferation requires the removal and neutralization of nuclear material by stable countries rather than relying on failing states to do so reliably themselves.

In addition to Pakistan and Russia, there exist a considerable number of other failing states such as Nigeria, Ghana, Ukraine and Kyrgyzstan, in addition to countries that might turn into failing states in short order, such as Egypt. These nations have scores of sites from which terrorists may purchase or otherwise acquire HEU because there are nuclear reactors set up for the purposes of producing energy, medical treatments, and various forms of research. For example, four metric tons of spent HEU of Russian origin were found in twenty reactors in seventeen different countries, and forty metric tons of HEU of U.S. origin are in more than forty locations around the world.24 In addition, 105 civilian research reactors all over the world are using HEU.25 Still other countries, including China and France, have provided various nations with reactors and HEU, and in 2004 China aided Nigeria in the construction of a nuclear reactor in the city of Zaria.26

It is an irony of history that many of the first reactors that now need to be defanged were placed in various countries around the world by

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23 The United States has shipped 300 pounds of plutonium to France, which has the technology needed to neutralize it. See Robert Block, ‘Plutonium to France Prompts Worries’ Wall Street Journal, August 25, 2004, A9.
the U.S. government under President Eisenhower. After the United States used nuclear bombs to end World War II in Japan, Eisenhower was under public pressure to show that the United States was not a malevolent force.\textsuperscript{27} His administration therefore offered to help various nations set up nuclear reactors for energy, medical treatment, and research. This plan, called Atoms for Peace, provided HEU to fuel these reactors. They are now a major source from which terrorists could acquire that which they need to make nuclear bombs. It is this material that must now be neutralized.

**A Strategic Shift from Controlled Maintenance to Deproliferation**

If we are to pre-empt a massive nuclear terrorist attack, which – one cannot reiterate enough – ought to be the first priority in the war against terrorism, then we must adopt a radical change in strategy.\textsuperscript{28} The sources from which terrorists could gain nuclear material (or bombs) should be eliminated rather than kept under one form of control or another, because such controls are inherently unreliable. This has been demonstrated most recently by the failure of inspectors to discover that South Korea was testing ways of making HEU until its government chose to disclose the fact.\textsuperscript{29} True, as a temporary measure, security should be upgraded at places that hold nuclear arms and fissile materials, especially in failing states. However, in the longer run these materials should be expropriated, blended down, or converted; and where feasible, nuclear arms should be removed one way or another.

I refer to the new approach as ‘deproliferation’, which contrasts with ‘controlled maintenance’, a form of arms control in which nations can keep nuclear reactors that use fissile material but are also expected

\textsuperscript{27} Susan Eisenhower, Presentation to the board of the Nuclear Threat Initiative, May 18, 2004, Washington, DC.

\textsuperscript{28} For an excellent, closely related set of ideas, see Ashton Carter, ‘Overhauling Counterproliferation,’ *Technology in Society*, 26 (2004): 257-269. See also the resources listed in footnote 1.

to secure them and have their non-military usages verified by inspections. Deproliferation entails replacing fissile material with other resources that cannot be used for bomb-making; and expropriating plutonium from failing states to safe havens and converting it to mixed-oxide fuel. Similarly, spent fuel must also be disposed of. It entails preventing new nations from obtaining nuclear bombs and the materials from which they can be made by using all means available to dislodge them from those who have them, especially failing states.

The controlled maintenance approach largely relies on the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), which classifies countries as nuclear-weapon states (NWS) or non-nuclear-weapon states (NNWS), and places specific restraints on each type. The NWS, identified as the United States, Russia, China, France, and the United Kingdom, must agree to pursue disarmament, while the NNWS must agree not to develop or attempt to acquire nuclear weapons. A UN agency, the International Atomic Energy Agency (IAEA), is entrusted with inspections to verify that 'safeguarded nuclear material and activities are not used for military purposes' 30

Note, though, that a nation can refuse to sign the treaty (as India, Israel, and Pakistan have done); legally withdraw from the treaty after notifying the IAEA – but keep its nuclear plants armed with HEU (as North Korea did); or readily mislead the inspectors (as Libya did and as many believe Iran is doing). Moreover, for inspectors to have a better idea of the nuclear activities of each of the seventy one states with significant nuclear programmes, these states each have to agree to conclude an additional protocol with the IAEA. Forty seven states do not yet have these protocols in force, and nineteen have not even signed such a protocol. 31 Indeed, absurdly, even today nations can still establish nuclear facilities using HEU with the full blessing of the United Nations, as Nigeria – a failing state – did most recently. This last fact, which received


practically no attention from policy makers, analysts, or the media, is a prime example of the mis-focus of the war against terrorism.

Under the NPT proliferation is, in effect, legal and it goes on today although the proliferation is not of nuclear arms to states that do not have them, but of material from which terrorists can make nuclear arms. Historically, the NPT was meant to regulate states – assuming that they have effective governments that can command their own territories. To deal with terrorists and failing states, a whole new approach is needed.

This pre-9/11 conception of controlled maintenance must be replaced by one of deproliferation, which ultimately aims to:

a) Upgrade security at facilities that store nuclear arms and fissile materials as a temporary measure rather than as part of a lasting solution. The reason I say temporary and in general emphasize upgraded security much less than do other analysts, although I recognize its importance, is because in my view, the best security is that which removes the items from the reach of those from whom they are to be secured. To put it in plain English, rather than upgrading security in facilities in failing states, fissile material, and when possible nuclear arms, should be expropriated, blended down, or converted. Security is inherently unreliable, especially in failing states.

b) Expropriate fissile materials to safe havens and blend them down in these havens rather than doing so on location. Replace all HEU with LEU, which in effect cannot be used in making bombs, or with other sources of energy. Furthermore, HEU replacement could be accomplished by providing incentives such as large scale foreign investment or foreign aid.

c) Prevent trans-national trade and transportation of nuclear bombs and the materials from which they can be made.

d) Compel both failing states and rogue states (and in the longer run still other states) that have nuclear bombs to destroy them. (This in turn may require, in some cases where there is a great imbalance in conventional forces, for
the international community to guarantee the country's borders.)

e) Prevent the construction of new facilities that use HEU, rather than condone such construction as legal and legitimate (as it is currently under the NPT).

It is best to think about controlled maintenance and deproliferation as pure concepts, what social scientists refer to as ‘ideal types’. In reality, these two approaches are mixed in the sense that even under the NPT (which is largely based on the controlled maintenance approach) some deproliferation took place (for instance in South Africa and Brazil) and, if the powers that be shift to deproliferation, some controlled maintenance will be unavoidable for a considerable period of time. Hence, the argument that a major strategic shift ought to occur refers to a shift in preferences, economic resources, and political capital from controlled maintenance to deproliferation, whilst recognizing that this will not occur overnight.

Moreover, deproliferation is by no means a visionary approach. Indeed, it has important albeit limited precedents both before 9/11 and after. Before briefly reviewing those, I must point to one more reason why the old arms control idea on which the NPT is based is anachronistic.

Can Deterrence Work?

Some advocates of the obsolete NPT approach fear, not without reason, that deproliferation may lead to confrontations between the powers that be and those nations that refuse to give up their nuclear arms or nuclear materials. These advocates suggest that one may rely on deterrence in the future, even among new nuclear powers, non-state actors, and terrorists. After all, it is argued that the United States and the USSR kept each other at bay for several decades. Pakistan and India may well deter each other; North Korea might be deterred by a nuclear China and Japan; and Iran will be

deterred by Israel. These countries should hence be admitted into the ‘nuclear club’ so long as they assume the same commitments as other NWS states under the NPT.

This approach has several serious flaws. First, it invites more nations to build the facilities they need to make or purchase nuclear arms and their means of delivery. The larger the number of these states, the greater the probability that sooner or later one of them will use these weapons due to miscalculations, unstable leaders, or unauthorized use.33 The United States and the USSR came close to nuclear blows several times, as did India and Pakistan, and Israel came dangerously close to using missiles armed with nuclear warheads during the Six Day War.34 Nuclear weapons also require resources that could be better dedicated to other purposes. Moreover, this approach reinforces the notion that nations must have nuclear arms to be big powers, as exemplified by the recent temptations of Brazil to violate its commitments to the NPT regime. (Its President complains that Brazil is armed with slingshots while other nations are armed with cannons.)35 Egypt, Indonesia, and Vietnam are also itching to join the nuclear ‘club’.36

Above all, the more nations that are in this dangerous business, the more sources there are for terrorists to gain nuclear weapons. After all, terrorists cannot obtain nuclear arms or materials from countries that do not have any. Hence, trying to bring more nations into compliance with the NPT – the current governing strategy – is of limited value. Trying to monitor dangerous materials is vastly more dangerous than preventing access to them in the first place.

I turn next to show that deproliferation is quite possible; and indeed increasingly used. However, it is not yet viewed as a basic shift from the controlled maintenance approach; rather it is treated on a case-by-case basis and has not yet become a truly viable and attractive alternative. Moreover, so far, deproliferation endeavours have been treated like third class citizens, given small budgets, and constricted by numerous requirements imposed by Congress. The total expenditures of the variety of initiatives involved in the Nunn-Lugar Cooperative Threat Reduction Program amounts to about $1 billion annually, which is five times less than the funds dedicated to the protection of one industry, airlines, from small-scale terrorism.37 The G-8 announced that its members would dedicate $20 billion to deproliferation, and this sounds like a substantial amount.38 However, $10 billion of these funds are to be pledged by other nations. Pledges of this nature are not necessarily forthcoming and when they are made they are often not honoured. Moreover, the United States is said to plan to commit $10 billion over ten years, which Congress may well fail to appropriate. As mentioned, only $1 billion a year was anyhow allocated to the Nunn-Lugar projects and for the fiscal year 2005, the Bush administration’s proposed budget calls for cutting these already meagre funds.39

In May 2004, U.S. Secretary of Energy Spencer Abraham announced a new initiative to retrieve fresh fuel of Russian origin and spent fuel of U.S. and Russian origin from research reactors around the world. The Global Threat Reduction Initiative also seeks

to convert reactors that use HEU into LEU around the world. The media characterized this announcement as a significant deproliferation step. This drive is best viewed in terms of the overall U.S. defense budget of about $423 billion. Thus the amount allocated to this drive, $20 million over 18 months (not all of it new money), seems like small potatoes. All said and done, the commitment of resources does not come close to reflecting the spirit of the pronouncements and above all, it falls far short of what is badly called for.

Deproliferation programmes, such as they are, are largely run by the U.S. Energy Department, which has much less clout than the Department of Defense, the Pentagon, or even the State Department. The programmes are further hobbled by a conflict between House GOP members who distrust the Nunn-Lugar programmes (which they see as a boondoggle, because they believe that Russian scientists and the arms industry are taking the United States for a ride) and key Senators who support the programmes, especially Richard Lugar (R-IN), Pete Domenici (R-NM), and Carl Levin (D-MI). The Nunn-Lugar projects are limited by U.S. law to the former Soviet Republics. They do not focus only on nuclear weapons but also on missiles, biological weapons and labs, and so on, and they are small in scope compared to what is needed.

As already indicated, these programmes have also suffered from strategic confusion. This is reflected in the fact that they treat Russia on the one hand as an ally, but on the other hand as an enemy. The United States is using a good part of the spare funds available to destroy Russian (and American) long-range missiles, which may be for the greater good, but given the tight deproliferation budgets it is the wrong priority. It smacks of a fire department removing

40 To read a transcript of Secretary Abraham’s remarks, visit http://www.doe.gov/engine/content.do?PUBLIC_ID=15949&BT_CODE=PRESSSPEECH ES&TT_CODE=PRESSSPEECH. Accessed 9/13/04.
combustible materials from attics and staircases while ignoring the fact that Molotov cocktails are lined up on the roof. At the current pace, deproliferation will take more than a decade – that is, if no new HEU reactors are opened, which is far from agreed upon. Terrorists are unlikely to be kept at bay that long.

As mentioned previously, the commitment of resources does not reflect the letter of the pronouncements and falls short of what is needed. The same holds for the political will. Even superpowers have limited leverage over other nations. Hence at any point in time they must choose to what purpose they should apply their persuasive (or soft) power, diplomacy, economic sanctions, and military assets. In recent years the United States has used up much of its leverage trying to shore up support for going after terrorists rather than nuclear arms (especially in Pakistan); for going after rogue nations rather than dealing with failing states; and for invading a nation without nuclear weapons while emboldening those that do have them. Especially with regards to Russia, all other political goals should be given a lower priority than neutralising the sources from which terrorists may obtain nuclear weapons or the material from which they can readily be made.

**Next Steps to Advance Deproliferation**

Several of my colleagues have produced outstanding works containing rich details that, in effect, describe the next steps that must be taken if deproliferation will become the order of the day.\(^43\) Also, Senator Lugar suggested in 2004 what must be done next; several of the measures he mentioned fit snugly into a deproliferation strategy.\(^44\) All these measures, if taken together (or even just a considerable number of them), would amount to a major shift in priority and strategy of the kind favoured in this article. Instead of repeating these numerous and detailed recommendations here, I focus next on several points that, in my judgment, deserve special additional attention.

43 These works are listed in footnote 1.
The Need for a Deproliferation Triage

Triage is a term usually used to determine to whom medical resources should be dedicated before others when there are a large number of casualties and insufficient resources to treat everyone all at once. I apply this term to deproliferation as a way of determining which sources of threat should receive our most urgent attention, which come second and third in line, and which are beyond the pale and thus we need to learn to live with them.

I already ranked failing states as more dangerous than rogue states, and explained why among the failing states Russia and Pakistan require more urgent treatment than do others. More attention has been paid to the danger of rogue states, which is like giving medical treatment to those suffering from long-term diseases before treating those who are bleeding profusely. Next on the ranking scale, much lower than Russia and Pakistan, are other failing states with roughly 200 nuclear reactors, pools and ‘vaults’ that house HEU, plutonium, or spent fuel. There seems not to be even a complete list of these sites, let alone proper supervision. It would be a great boon to humankind if all these could be converted tomorrow into other fuels or blended down; yet the political and economic obstacles to such a drive are so huge that it cannot be even seriously discussed. Hence, here too the deproliferation triage, which defines the sites that should be tackled first, is needed.

When this subject is broached, one runs into several objections. Some hold that forming a list of the most dangerous sites would help the terrorists by informing them of the places they could most readily obtain that which their sordid trade requires. Others hold that such designation would offend the nations in which such sites are located and make them even less cooperative. Still others say that any such a list amounts to a declaration of defeat because all these dangerous reactors ought to be converted without delay.

In practice only a few sites are rendered harmless each year. Those that are chosen are picked on the basis of obsolescent strategies or random opportunities as opposed to a coherent post-9/11 strategy.
This is similar to the way victims are often selected in a helter-skelter way after there is a massive disaster and no triage is applied.

Before I turn to suggest criteria that ought to be considered in selecting what sites should be accorded high priority, I should reiterate that listing them does not reflect any objection on my side to defanging them all but rather it reflects a sad realization that this is not in the cards. I hold that one should not fear public discussion of the criteria to be used; terrorists have ready access to information about where various vulnerable nuclear sites are located — it is posted on the Internet.45 As to shaming those at the top of the most problematic list, a change in name should do. Let's call them the 'ten sites most deserving of our tender loving care' or 'opportunities for international cooperation' or whatever else some skilled spin masters can come up with; yet such public relations concerns should not prevent the deproliferation triage from taking place.

The first step in selecting what sites to focus on is to reduce the list of sites that should be tackled in the first rounds, as those sites that are in places such as Holland, Australia, or Germany can be safely placed on the lowest tier of the priority list. There are those who argue that even these countries, especially the United States, should convert first in order to 'send a signal' and be a role model. I have no trouble with these arguments as long as the resources used are not diverted from funds needed to pay for the conversion of a reactor in, say, Ukraine or Indonesia. Moreover, it is doubtful whether such 'signals' play an important role in the decision of countries such as Kazakhstan whether or not to convert their reactors and allow the removal of HEU.

If we must choose which of the worst 20 sites – the top of the list – to tackle first, then the leading criterion should not be low cost nor low political resistance (which is what the phrase 'low hanging fruit'

implies in this context) but rather the ease with which terrorists may obtain nuclear arms (first and foremost) and second HEU.

As far as rogue states are concerned, it is common to treat Iran and North Korea as if they were of one kind. As I see it, while maximum efforts should be made to encourage, incentivise and pressure North Korea to give up its nuclear arms programme, it might be too late to prevent it from joining the nuclear ‘club’. Thus it will have to be deterred from using its arms and from spreading them. Not only does it already possess several nuclear arms but it has artillery equipped with chemical shells that could kill hundreds of thousands of South Koreans. It is true that with every new member of the club, other nations will be seeking to join. Hence a clear declaration, reinforced by action, is needed in order to ensure that North Korea is the last new member.

In contrast, Iran can still be defanged. It possesses no nuclear weapons and has limited conventional capabilities. It is a mistake though to call for an Iraqi-style ‘regime change’. Occupying this large country whose citizens, even the reformers (as I learned by visiting them), are fiercely patriotic, would be a costly mistake. The notion that one could find a viable opposition group that would use American arms against their own government is at best a long shot. Nor can one expect the support of the international community given that whatever will there was for such pre-emptive action was largely squandered on the invasion of Iraq. However, this does not mean that the facilities cannot be neutralized. (Because Iran situated its nuclear facilities in populated areas, people who live there should be given warning to leave the areas before they are attacked; and because these targets have been hardened, special bombs might well be needed to neutralise these sites.)

All other sites in nations whose governments are neither failing nor rogue states (for example Vietnam) should be granted a lower priority yet still higher than that of the United States and its allies like Sweden and Germany.

46 Although because Iran has started enriching tons of uranium, the window of opportunity for action may be closing fast. See Craig S. Smith, ‘Iran Moves toward Enriching Uranium’ New York Times, September 22, 2004.
Economic and political costs would serve as the last criterion; that is, they would guide selection among nations with similar ranking but they would not apply among different tiers. Thus it seems to make sense to spend a great amount of resources and political capital on the most dangerous places rather than pick off even a dozen or more sites that pose little danger.

**HEU, Plutonium, and Spent Fuel**

In deliberations of this kind, plutonium and spent fuels are often thrown together with HEU. For instance, in his recommendations on how to strengthen the NPT, Ashton Carter points to the simultaneous need to prevent new countries from building uranium enrichment and plutonium reprocessing facilities.\(^47\) Similarly, Secretary Abraham’s Global Threat Reduction Initiative treats HEU and spent fuel as if they were basically of equal danger and hence it matters not which is treated first.\(^48\) I suggest that as far as terrorists are concerned, plutonium poses less of a threat than HEU, and spent fuel poses less of a threat than either. Therefore, converting HEU should be given first priority, plutonium second and spent fuel third.

Plutonium is often referred to as the most hazardous material known. True, plutonium is a major source for nuclear arms production by states. Hence its removal to safe havens is highly desirable. However, precisely because it is so much more hazardous than HEU, transporting and processing it requires special equipment and skills, making it a much less attractive material for terrorists (as opposed to HEU). Moreover, even for states it is significantly easier to make nuclear bombs out of HEU than plutonium. Hence, removal of HEU should typically be given priority over removal or blending down of plutonium. (I write typically because there are exceptions to the rule. For instance, a plant in

\(^{47}\) Ashton B. Carter, ‘How to Counter WMD’ *Foreign Affairs* 83, no. 5 (September/October 2004): 80.

Aktau, Kazakhstan, not far from Iran, contains a large amount of plutonium.

Spent fuel is particularly difficult to handle and it is extremely unlikely that it could be used to make nuclear bombs.\textsuperscript{49} It can be employed to make so-called ‘dirty bombs’ in which radioactive material is combined with conventional explosives. Some experts hold that such dirty bombs are just as worrisome as nuclear ones because, after all, the purpose of both is to terrorize. First, as I see it, the amount of terror that a dirty bomb can generate will depend on how well the public understands its relatively limited effect before an attack. Second, the terrorizing effect of a nuclear bomb that would kill 100 times more people than a dirty bomb would be much larger. Third, a nuclear bomb would take out many more major resources than a dirty bomb could. Thus, if one was dropped in Boston it could devastate some of the nation’s leading universities, renowned hospitals, major financial institutions, and national monuments – a disaster that no dirty bomb could wreak under most conditions.

Hence if we must choose, neutralising the material needed to make nuclear arms should gain much higher priority than spent fuel.

Opinions may differ greatly about the criteria here laid out. However at the very least it seems evident that triage is needed and hence there should be some kind of deliberation about what criteria it should be based on.

\textbf{Institution Building: The Global Safety Authority}

Before I can proceed to show where deproliferation fits into the developing new global architecture, I briefly need to depict the way the global architecture is currently structured and the direction in which it seems to be evolving. Ever since I was a student in the early

1950s, I have been told that world government is a dream of dewy-eyed idealists, a vision that no serious person would pursue. Nevertheless, one has sprung into existence in the wake of 9/11, although it is hardly the one that the United World Federalists, Immanuel Kant, or Bertrand Russell had envisioned. It was born out of the blood of the victims of terror, the terrorists themselves, and those often referred to in a rather detached way as ‘collateral damage’. It is coercive, although it does not lack in legitimacy given that the war against terror, unlike the invasion of Iraq, has the support of the United Nations, NATO, and most other nations.

This global governmental agency has taken the form of what I call a Global Safety Authority (GSA), which is run by the United States and its allies, but encompasses most nations of the world.\(^{50}\)

The GSA’s main division is the Antiterrorism Department. It was formed shortly after September 11, 2001, when the United States invited all the nations of the world to join it in forming a coalition to combat terrorism. Numerous nations joined. As a result the intelligence and police services of scores of nations work together quite seamlessly. Special Forces, CIA agents, and the U.S. military cover the world. (They recently extended their work in Africa, the new training ground of Al Qaeda.) Phone calls and e-mails all over the world are scanned by computers in the United States, the United Kingdom, or Australia – and the information gleaned is shared worldwide.\(^{51}\) It amounts to a global police department that pays no mind to

\(^{50}\) For more discussion, see Amitai Etzioni, From Empire to Community: A New Approach to International Relations (New York: Palgrave, 2004), chapter 6.

\(^{51}\) See the report on the Echelon system by the European Parliament, which states, ‘That a global system for intercepting communications exists, operating by means of cooperation proportionate to their capabilities among the USA, the UK, Canada, Australia and New Zealand under the UKUSA Agreement, is no longer in doubt. It may be assumed, in view of the evidence and the consistent pattern of statements from a very wide range of individuals and organizations, including American sources, that the system or parts of it were, at least for some time, code-named ECHELON. What is important is that its purpose is to intercept private and commercial communications, and not military communications.’ Temporary Committee on the ECHELON Interception System, Report on the Existence of a Global System for the Interception of Private and Commercial Communications, A5-0264/2001 PAR1, July 11, 2001, 133. Available at: http://www.europarl.eu.int/tempcom/echelon/pdf/rapport_echelon_en.pdf. Accessed: 8/6/03. See also the news report on the article, Kim
national borders, although its work is largely limited to fighting terrorism.

The scope of the antiterrorism division can be measured in two ways. One is fairly mechanical – simply comparing the number of nations involved to the number of those that did not sign on. By this measure, almost all the nations of the world, including those that previously supported terrorists, such as Sudan, Syria, Iran, and Yemen, have agreed to participate and have made actual contributions to the division’s work. For instance, Sudan has provided the United States with intelligence about terrorists.\textsuperscript{52} Iran reportedly has recalled 700 intelligence agents and advisers from Lebanon, Sudan, and Bosnia, where they were accused of aiding terrorist groups.\textsuperscript{53} Yemen previously refused to cooperate with the United States in the investigation of the bombing of the USS Cole, but since the September 11 terrorist attack it has ‘opened its files’, providing the United States with documents that shed new light on the bombing.\textsuperscript{54} Former Soviet states, such as Kazakhstan and Tajikistan, granted the United States fly-over rights and Kyrgyzstan and Uzbekistan allowed American military bases to be located within their territories.\textsuperscript{55}

Fifty nations, including Egypt, Saudi Arabia, and Jordan, often working closely with the CIA, have arrested suspected terrorists at the behest of the United States;\textsuperscript{56} Turkey has supplied troops for the fight against the Taliban; Pakistan handed over Yassir al Jaziri, an aide to Osama bin Laden, to the United States.\textsuperscript{57} NATO, for the first


time in its fifty years of existence, agreed to act outside of Europe in order to fight terrorism in Afghanistan. The United Nations legitimated the war against terrorism through two resolutions it passed in support of the need to combat terrorist threats.\textsuperscript{58}

Members of the global antiterrorism division of the GSA have also made several significant and especially rapid and synchronized changes to domestic laws and policies in their own countries. These measures concern the balance between social order – specifically public safety and health (regarding protection from bioterrorism) – and autonomy, or individual rights. The European Union introduced a community-wide arrest warrant.\textsuperscript{59} Germany tightened its surveillance and immigration laws.\textsuperscript{60} Britain expanded its antiterrorism act.\textsuperscript{61} Japan has passed new legislation that will allow its Self-Defense Forces to assist the United States.\textsuperscript{62} France adopted a law that provides the police with greater search powers,\textsuperscript{63} and the Indian government passed an ordinance that granted the police sweeping new powers.\textsuperscript{64} These changes have occurred in a fairly coordinated fashion in many nations more or less simultaneously.

U.S. ships patrol the seven seas. The intelligence services of scores of nations and their antiterrorist forces, police, and border agents are working closely and directly with various U.S. agencies, often without processing their contacts through their respective state agencies.

\textsuperscript{62} ‘Japan Need Not Be in a Hurry to Show Its Will to Send SDF,’ \textit{Asahi News Service}, October 31, 2001.
departments (as is customary in other international contacts). 65 Terrorists caught in one country are shipped to another before national courts can review extradition. Suspects who do not cooperate are turned over for interrogation to police forces in countries where the governments are less respectful of human rights than are those of Western countries. 66 All said and done, the U.S.-led antiterrorism division acts, in effect, as a worldwide governmental agency, as if it were some kind of global Interpol, with limited respect for national borders and sovereignty.

**Deproliferation Should be Considered as Another Division of the GSA**

Far from leaving this vital matter merely in the hands of the UN agency, IAEA, and one that seeks to enforce the obsolescent NPT – the United States and its allies should lead a drive to implement a deproliferation strategy along the lines already outlined.

Deproliferation has two important qualities: It is more supportive of trans-national institution building than the 2003 invasion of Iraq as well as quite muscular (adding hard power to soft power, on a supranational level). Both points require some elaboration.

Initially, the Bush Administration announced that it was going to deal with rogue states that were said to threaten the United States and its allies, especially with nuclear weapons, through pre-emptive strikes, using the U.S. military and acting unilaterally if U.S. allies and the United Nations did not care to support such action. The 2003 invasion of Iraq largely followed this model. For several reasons that need not be explored here, many of which reflect pragmatism rather than a neo-con change of heart, the Bush Administration’s dealings

65 Even before the advent of the antiterrorism coalition, governments collaborated on these matters. Ken Guggenheim, ‘Mexican Appointee Raises Concerns Among U.S. Conservatives,’ Associated Press, November 23, 2000

66 In September 2002 American officials arrested Canadian citizen Maher Arar and exported him to Syria, where he was reportedly tortured for a year before being released to his home. Peter Calamai, ‘Detained Canadian Released from Jail in Syria,’ Toronto Star, October 6, 2003, A10.
with Iran and North Korea in 2004 have been considerably more multilateral, less militaristic, and hence more favourable to transnational institution building than the 2003 Bush doctrine called for. Iran is approached by a coalition that includes the EU and Russia and strenuous and extensive efforts are being made to resolve the matter without use of military force. North Korea is tackled by a coalition that includes five nations other than the United States, and great efforts are made to achieve a trade off rather than an armed confrontation. In both cases, the UN blessing is actively sought. All this does not mean that if all else fails, no force will be used, even unilaterally. However, there is a world of difference between a unilateral pre-emptive American strike, opposed by allies and by the United Nations, as the first order of the day – and the use of force at the end of the day, when all other measures have failed, with the support and participation of allies and the United Nations. (The ways to advance the deproliferation of other sites varies a great deal from site to site and cannot be studied within the scope of this paper.)

In this way, the deproliferation drive can extend the GSA and move it towards a more robust trans-national authority rather than a mainly American organ. Before I can indicate why I consider the deproliferation drive as adding muscle to trans-national institutions, a brief comment on the relationship between soft and hard power is called for.

**Soft and Hard: The Use of Legitimate Force**

It is hard to believe that if the Taliban and its allies were to take over the government of Pakistan, the United States and its allies would simply stand by and allow them to appropriate that nation’s nuclear arms. The same may well hold for any failing state that has HEU and for which there is reliable intelligence that it is making nuclear material available to terrorists. (I grant that given the grave failure of intelligence in the last years, it would be difficult to justify another intervention, but this does not mean that there are no situations in which it would become necessary and justified.)
Recently much has been made of the need to engage in legitimate action, which is often interpreted as consulting and working with allies and the United Nations. (It is a good part of what Joe Nye Jr. calls ‘soft power’, which has become a widely used term.) Sometimes disregarded in this context is the need occasionally to undergird soft power with hard power. The United Nations often acts as a key legitimator in the international arena, but it does not and cannot command the hard power required to back up its resolutions and declarations. If the United States (in Haiti, Somalia, and Liberia), France (in Ivory Coast), Britain (in Sierra Leone), Russia and NATO (in Kosovo), or Australia (in East Timor) did not provide the muscle, then UN resolutions would have been of very limited consequence.

The more one grants that deproliferation is essential, indeed vital, the more one is willing to accept that in these matters UN resolutions (once they shift from a controlled maintenance approach to endorsing deproliferation) will have to be backed up by hard power when all else fails. Or, to put it differently, one must grant that often soft and hard power need to be mixed. Deproliferation is a transnational drive that can justify the application of a power mix that contains some hard power.

This muscularity is evident in the action undertaken by the Proliferation Security Initiative (PSI). In addition to the United States, the PSI has ten ‘core participants’ and counting, including Australia, France, Japan, Portugal, and Spain. These nations – and many others who are members of this coalition of the willing – agreed to share intelligence and to stop all nuclear arms and materials shipments that pass through their territory, ports, airspace, or on ships flying their flags, as well as to stop and board ships on the high seas that are suspected of carrying WMD related materials.

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During the summer of 2003, the countries involved began joint military exercises to prepare for a wider implementation of these robust deproliferation steps. Some interceptions have already occurred, including the boarding of a ship deployed from a North Korean port and the seizure of a cargo ship travelling to Sudan.70 The Bush administration gave credit to the PSI for Libya’s decision to abandon its nuclear ambitions, after a ship loaded with nuclear components headed its way was intercepted.71

The State Department is careful to refer to the PSI as an ‘activity’ and not as an organization, which would imply creating a new security architecture outside the United Nations and the NPT. However, whatever it is called, this is exactly what it amounts to. The PSI is a key example of how the building of new trans-national institutions and enhancing security contribute to one another. The more that nations find that deproliferation serves their interest and the more that they view such action as legitimate, the stronger the trans-national institutions these nations are constructing will become – as measured in budgets, command of military resources, and intelligence priorities – and the more these institutions are able to contribute to deproliferation.

Boarding ships in international waters (and other modes of trans-national shipments of nuclear arms and materials) is essential for deproliferation. However it is incompatible with existing international law, at least as it is widely understood. As one expert put it, it is not slavery or piracy, referring to two international treaties that previously allowed nations to board ships on the high seas. As I see it, the United States, its allies, and other parties that have a vital interest in deproliferation should inspire changes in international law so that nuclear shipments can be treated like piracy (or worse).

Fortunately, the United Nations seems to be moving in the needed direction. Security Council Resolution 1540 of 2004 calls for member

states to criminalise WMD proliferation, secure sensitive materials in their own borders, and enact export controls. There are at least some hints that nations are considering deproliferation instead of just controlled maintenance.

The fact that the United Nations and the powers that be may come to see eye-to-eye on deproliferation and other security issues suggests that although a new and growing global government was born out of force, and although the GSA is not currently accountable to a global representative body or electorate, it need not remain so. Historically, many nations that were forged by force – including the United Kingdom, Germany, and Italy – gradually developed democratic regimes.

I need here to reiterate a point from which this exploration began: We must act within history. It might well be a better world if the formation of a narrow world government had not been safety-driven but rather concerned with fighting poverty, pandemics, and illiteracy. The fact is that 9/11 generated a new global architecture focused on security. There is no way to roll this film back and ask the directors to compose a nobler one. We can, though, edit the next scenes.

But why would the major powers behind the GSA, especially the United States, submit – even in the long run – to a global parliament, say in the form of a much restructured United Nations, or a new Global Council composed of representatives of democratic governments? ‘Submit’ is a strong term. However, seeking approval and taking into account the views of such a body is far from a visionary notion. In a world where an increasing number of people follow the news and are politically active, the perceived legitimacy of one’s actions has become surprisingly important. As the U.S. experience in Iraq in 2003-2004 has demonstrated, acting without UN approval cost the United States dearly in realpolitik terms such as military support from allies, the sharing of financial burdens, and public support at home. In one year, the Bush administration was forced to move from declaring that the United Nations was on the verge of irrelevancy to repeatedly seeking a UN endorsement for its presence in Iraq in order to legitimate the delay of elections, and to work out the transition to a self-governing nation.
True, one cannot expect in the near future that the world be run like a democratic state. (Note that even in such regimes, the executive is often much stronger than the legislature.) However, as more of the governments of UN member states are democratised – a much predicted trend – the voice of the General Assembly will be more compelling. And if the Security Council were to become more representative of today’s global power structure, its resolutions would hold more weight. Thus, the United Nations may well become an even more important source for legitimacy than it currently is.

The net result might well be nothing more than an antagonistic partnership. The United Nations would continue to chastise various powers for not following its lead closely enough, and the powers that be would complain that the United Nations is still ignoring crucial facts on the ground. However, at the same time, both would recognise that they complement one another. Without the powers invested in the GSA, the United Nations is toothless. And without UN prescriptions, the GSA’s uses of force will be considered illegitimate bites. That is, both sides may well take each other more into account while still trying to follow their own lights, thus jointly fashioning a better world government than each would separately.

Among the various situations in which the powers that be may be tempted to use force, and for which the United Nations and the global attentive public might find legitimate, few, if any, are more likely to carry the day than deproliferation – if first all other means of advancing it are exhausted before force is applied. (This being one of the criteria of just war according to St. Augustine and others who studied the matter.) Deproliferation meets a triple test that I outlined in a previous publication. First, it provides a conversion of

interests. The nations involved, their neighbours, and the global community will all suffer if one nation uses a nuclear bomb against another. And if the terrorists succeed in taking out a major city, the reaction of the powers that be would be so severe that all except those who are hardcore supporters of that particular group of terrorists would seek to avoid the inevitable massive casualties on both sides. Second, deproliferation has face legitimacy in that few doubt that the world would be better off if nuclear bombs and the material to make them were rolled back. President John F. Kennedy held that the genie cannot be put back into the bottle from which it came, that the knowledge to make nuclear bombs cannot be forgotten. However, the experience with Libya suggests that the instruments needed to make them can be removed – and that such action will be considered highly legitimate.

Third, close trans-national cooperation and the development of supportive trans-national norms and laws are a major source of community building, the third criterion. Deproliferation both contributes to and benefits from such developments. The more that nations give up on nuclear ambitions and wherewithal, the stronger the trans-national taboo against nuclear weapons will become, and the stronger the taboo the less proliferation there will be, which adds to the safety of one and all.

What Is Fair? Must the Big Powers also Deproliferate?

One of the most common objections raised by nations that are pressured not to acquire nuclear arms, to give up those they do command, or to convert their HEU to LEU, is that the big powers, especially the United States and Russia, are not doing the same. Indeed this conception is reflected in the NPT, in which the big powers promised to 'pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early

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date and to nuclear disarmament. Others have argued recently, when the United States began to develop a special nuclear weapon that might be used to destroy WMD hidden in deep bunkers or mountain sides, that it is ‘hypocritical’ for the United States to extend its nuclear arsenal while asking others to disgorge theirs. For similar reasons the United States is urged to convert its civilian reactors to LEU.

Since the early 1960s, I have been writing, testifying before Congress, running about making speeches, and demonstrating – in Trafalgar Square and Columbus Circle – in favour of nuclear arms reductions by the United States and the USSR. Nor do I have any trouble realising that by some Rawlsian or still other fairness doctrine, those now with nuclear arms cannot morally demand that others give them up yet still keep theirs. However, one must face the bitter international reality that some nations and some ‘non-state actors’ (terrorists especially) pose a much greater danger than do others, and some nations have a greater capability to pressure them to desist than do others. In this context, it makes sense to roll back the dangers involved, even if those who are going to do so are themselves far from pure. Reference, one must recall, is to preventing nuclear war and massive terrorism.

Take India and Pakistan. As already indicated, these two nations have come close to nuclear blows on several occasions. Their command and control systems are far from perfect, which means that accidental war or action by some rogue generals cannot be ruled out. The result of such a war would be devastating. If the conflict between these two nations over Kashmir could be settled, and the new border were guaranteed by the international community, say by posting international trigger wire troops there, and as a result both nations decided to give up their nuclear weapons, their citizens would be much safer. The world would also

be a beneficiary, as terrorists would have two fewer places from which to get nuclear arms. Other nations, especially China, would feel less compelled to build up their nuclear arms. Would it be better if the United States and Russia reduced their nuclear arms at the same time? It would. But should one refrain from encouraging India and Pakistan to save themselves from a nuclear holocaust if the United States and Russia do not play fair? The answer seems to be a screaming no. The same holds true for North Korea, as well as the creation of a nuclear free zone in the Middle East (if Israel's borders could be guaranteed. The reason I refer to border guarantees both in reference to Pakistan and Israel is because both nations face much larger conventional armies than they can marshal. Hence if they are even to consider such a move, they must feel that there will be some other way besides nuclear weapons to deter their neighbours from overrunning them).

In the near future, the big powers will be more likely to encourage others not to join the nuclear 'club' (an unfortunate name) and to prevent terrorists from gaining access to nuclear bombs and materials, than they are likely to reduce their own arms. However unfair this may seem, in international relations the rule applied elsewhere – that one should not allow the quest for the best to deter us from doing good – applies with extra strength, as even the good is so elusive. Reducing the threat of nuclear war and nuclear terrorism, any place, any time, is an unmitigated good. To reduce the number and potency of nuclear arms – and the material from which they can be readily made – is a social good of the highest order. It should not be delayed in pursuit of finding fairer ways of proceeding.

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