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Topics in Terrorism:

Toward a Transatlantic Consensus on the Nature of the Threat

A Compendium of Papers Presented at a Conference on: "Topics in Terrorism", Held on 29 & 30 November 2004

Jason S. Purcell & Joshua D. Weintraub • Editors

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Foreword

The Atlantic Council conference series, *Topics in Terrorism: Toward a Transatlantic Consensus on the Nature of the Threat*, was born of the conviction that transatlantic cooperation in confronting international terrorism will be more effective to the extent that it is built on a foundation of shared concepts, frames of reference and fundamental understanding. As specific counter-terrorist measures will inevitably be worked out between governments, this series instead proposes to compare and explore different analyses of the nature – and likely future development – of the threat. Each conference, held in Europe, focuses on two or three select topics, from likely future terrorist weapons and targets to the "war of ideas", the burgeoning terrorism-drugs-organized crime nexus and other key concerns.

For each topic addressed, the Council commissioned one U.S. expert and one European expert to write thoughtful, scholarly papers and to give presentations of their conclusions. Those papers are reproduced here, along with conference and panel summaries, where possible.

The Council wishes to express its gratitude to the Headquarters of the North Atlantic Treaty Organization (NATO), our local partner organization for this conference. NATO's generous organizational and logistical contributions were a large part of this event's success. I would stress, however, that the views and analysis contained in the papers presented here are those of their authors alone; they do not necessarily represent an institutional position of the authors' employers, NATO, the Atlantic Council or any of the Council's sponsors.

I wish to express the Council's appreciation to John Sandrock, the Director of the Council's Program on International Security, who both spearheaded this effort and participated actively in it, as the moderator of three of the conference's four panels. Finally, I wish to thank Jason Purcell, the Assistant Director of the Program on International Security, and Josh Weintraub, a former intern for the Program, for their diligent and thoughtful work in reviewing, editing and formatting this compendium.

Christopher J. Makins

President

Atlantic Council of the United States

Executive Summary¹

John H. Sandrock

I. Introduction & Panel Topics

The Brussels Conference on "Topics in Terrorism: Toward a Transatlantic Consensus on the Nature of the Threat" was the first of three conferences whose principal purpose was to explore specific themes associated with the world-wide effort to cope with and counter the threat of terrorists. Held in three different European capitals (Brussels, Vienna, and Budapest), the conferences drew on divergent presenters and audiences. Each conference convened subject-matter experts from the United States and Europe with the express intent of considering various perspectives on some of the most difficult challenges facing the transatlantic community. While reaching a consensus on each of the major topics would certainly have been a desirable outcome, where a consensus proved elusive, a major objective was to gain a better understanding of the divergent views and the rationale that underpins those views.

Another major objective of the conference series was to engage a broad spectrum of those concerned with the formulation and execution of national and international security policy as well as representatives of non-governmental organizations and academia in a broadly based discussion of the issues. Therefore, each conference agenda reserved plenty of time for participants to question, present their own perspectives, and to enrich the consideration of various points.

The first conference, convened in Brussels with the assistance of the NATO Headquarters considered there major topics:

- Terrorists as an Opposing Armed Force
- Future terrorist weapons, and
- Future Terrorist Targets

Three panels of European and U.S. experts addressed the following topics and guidance questions:

Panel I: Terrorists as an Opposing Armed Force

- A. To what extent can terrorist groups be viewed as "opposing armed forces"? What are the prevailing views in the United States/Europe? How does characterizing terrorists as an opposing armed force impact the strategies chosen to confront them? What are the international legal implications?
- B. Are other characterizations more helpful in understanding or confronting the problem? What are the prevailing views in the United States/Europe? How do these

¹ This Executive Summary is meant to reflect the contents of this volume. It therefore includes both commentary by the author and illustrative excerpts from the papers reproduced herein.

- characterizations impact the strategies chosen to confront terrorists? What are the international legal implications?
- C. What factors are likely to determine how terrorist groups organize themselves in the future? What are the current trends? What events might reinforce or weaken these trends?
- D. What most worries you about the organization or perceived organization of terrorist groups? What are the West's biggest challenges?

Panel II: Future Terrorist Weapons

- A. What weapons do different terrorist groups currently have? What weapons are they developing? Please include discussion of conventional, chemical, biological, radiological and nuclear weapons. What conclusions may terrorist groups have drawn from the effectiveness of different attacks (i.e. the 2004 Madrid bombings, the 1995 *Aum Shinrikyo* Sarin attack)? What factors (i.e. technology, funding, transport, deployability, symbolism) are currently influencing terrorists' choice of weapon? Do these differ in the United States and Europe?
- B. How might developments in the private sector (for example, miniaturization) affect terrorists' options? Have increased homeland security efforts affected the availability or desirability of certain types of weapons?
- C. What factors are likely to determine what weapons terrorist groups seek and use in the future? What are the current trends? What events might reinforce or weaken these trends?
- D. What weapons worry you most (either because of lethality or ease of use/procurement)? What are the West's biggest challenges?

Panel III: Future Terrorist Targets

- A. Which targets are terrorists most likely to strike? Which are the most potentially attractive to terrorists, regardless of likelihood or feasibility? What factors or what combination of factors make these targets attractive (i.e. symbolic value, potential civilian casualties, sheer vulnerability)?
- B. Which countries in Europe, North America and elsewhere see themselves as most at risk for terrorist attack? Which see themselves as least at risk? Are these perceptions of risk reasonable? How does the perception of being targeted affect different states' behavior? How are states' policies and behaviors affected by the perception that certain types of cooperation with the United States make them more likely targets?
- C. Have different states' homeland security efforts made them safer? Have successful homeland security efforts in some countries or regions made other countries and regions more likely to be targeted?
- D. What targets are you most worried about (either because of lingering vulnerability or potential scope of destruction)? What are the West's biggest challenges?

The conference was at the expert level and was deliberately kept small in order to encourage the speakers to consider new and innovative approaches to their topics and also to generate a lively and in-depth discussion by all participants in an informal and unconstrained atmosphere. The focus of this conference, as well as other conferences organized as part of this series, was to consider various aspects of future terrorist threats based upon a thorough analysis of present conditions.

II. Facing a New Brand of Terrorism

In considering the above topics, panelists were reminded of one Arab analyst's recent comments. He argued that the attacks on September 11, 2001 represented a new kind of terrorism – one that has no political or social objectives. The "new" terrorists rarely demand ransom or specify a political target; rather, they aim to inflict fear on the widest possible scale. The fact that terrorists could use "high tech" means to inflict mass fear and destruction helped open the eyes of the world to the "other side" of globalization: the ways in which the free movement of capital, labor and ideas could be exploited for nefarious purposes. The new non-state entities associated with globalization – namely multi-national corporations, major non-governmental organizations, the Internet and others – may be forming a secondary or substitute international power structure. That power structure challenges the coercive-power monopoly of the nation-state and thus opens new horizons for world freedom and interaction, which in turn challenge our current concepts of international order.

In short, the "new terrorism" has shown that the nation-state is vulnerable to malevolent non-state actors, e.g. terrorist networks, organized crime syndicates and others. These new actors need no geographic base and they abide by none of the traditional "rules" of international relations. Therefore, they are not impacted by strategies of deterrence, retaliation or punishment.

Terrorists as an Opposing Armed Force

There is ample evidence now available that prior to and immediately after the September 11, 2001 attacks on the United States, *al-Qa'ida* and other terrorist groups possessed many of the elements of an opposing armed force. There was a hierarchical structure, a form of centralized command and control, and a sophisticated acquisition system. Several thousand recruits attended training camps that featured a curriculum and highly specialized training in a centralized location. Detailed planning preceded each action and targets were carefully chosen for maximum tactical and strategic impact.

In contrast, there have also been many smaller-scale terrorist actions that appear not to have been carefully coordinated or planned by a central authority. Whether or not these lesser incidents were part of a cohesive plan that included options for autonomous actions and local execution, or whether they are strictly independent acts, is less important than the fact that they contributed to the general feeling of insecurity of society at large and caused a massive defensive response — not only in the United States but also in the broader international community. In other words, whether small or large and whether or not guided and controlled by a central authority, the attacks had a synergistic impact that prompted a massive and comprehensive response involving all levels of security from the local policeman to the highest military and national political authorities.

In spite of the fact that many aspects of the terrorist threat appear to support the conclusion that terrorists may be considered an opposing armed force, a considerable perception gap remains between the United States and some of its European allies. Many in Europe consider preventing and combating internal terrorism a task for local police and security forces rather than for military action. They view the U.S. deployment of an enhanced air defense capability – and the use of regular military forces to augment local security forces in key locations – as unnecessary and excessive. Indeed, they have not used their own regular military in a similar fashion, nor have they agreed that indigenous regular military forces are necessary in a protective role on their home turf. On the other hand, they cite the fact that NATO has deployed military forces to Afghanistan as an example of a counter-terrorism action in which the use of regular military forces not only makes sense but is essential during, at least, a transitional period.

Future Terrorist Weapons

It is clear that the terrorist threat has evolved over the past several years as the impact of counter-terrorist action by the United States and others appears to have limited the opportunity for terrorists to engage large and significant "counter-value" targets. Nevertheless, there is general agreement that efforts to cope with terrorism cannot be relaxed and must, indeed, be strengthened and better coordinated – both within and among nations. There is also general recognition that the threat of a major attack remains.

Suicide Terrorism

Modern day suicide terrorism began in Lebanon in 1983, but it has not remained limited to the Middle East. Suicide terrorism as a tactic has migrated around the world: it is used in Sri Lanka by the Liberation Tigers of Tamil Eelam (or LTTE, which perfected the suicide belt), the Kurdistan Workers Party (PKK) in Turkey, Hamas, Palestinian Islamic Jihad (PIJ), the Popular Front for the Liberation of Palestine (PFLP), Al Aqsa Martyrs Brigade in Israel, *al-Qa'ida* around the world, numerous groups in Iraq and the Chechen rebels in Russia. The organizational goals of these groups are not necessarily linked to one another, yet across the entire spectrum, the use of human bombs has proven to be a powerful tactic in the hands of terrorists who are thus able to force concessions from occupying forces – even to the point of expelling them – wreak havoc with peace processes, gain international recognition in the media for both the sponsoring group and its cause, disrupt daily lives and create widespread dread and horror. Recognition of the effectiveness of this tactic in achieving terror organizations' short-term goals seems to be lending momentum to, and indeed fostering an exponential increase in the use of suicide attacks. Yet, despite this recent increase, suicide terror remains the least utilized – if most lethal – means of terrorism.

Human bombs are in essence "smart bombs" that go precisely to their target with the ability to detect surveillance and alter their course to maximize damage. Unlike other forms of terrorism, these require no escape plan for the perpetrators. Suicide terror, when successful, also leaves little trace of the perpetrator. He or she is no longer alive to be tracked down, incarcerated and interrogated. Only the handlers can be discovered – though even this is difficult once the suicide is accomplished.

The Threat of CBRN Weapons

Terrorist use of chemical, biological, radiological, and nuclear (CBRN) devices has come to be regarded as a key aspect of the contemporary international security agenda. The concern that terrorist use of a CBRN device could result in mass casualties, mass panic, or both has prompted the installation of new, high tech detection systems, special screening procedures, the formation of special response capabilities by local and national response forces, as well as efforts to control sources of knowledge and supply, transfer of dual-use equipment, and the strengthening of pertinent international conventions.

Such attacks as the bombing of community housing in Buenos Aires in 1994, the attack against the U.S. government building in Oklahoma in April 1995, the truck bomb used against the Central Bank in Colombo in 1996, the bombing of the U.S. embassies in Kenya and Tanzania in 1998 and the bombing of a Moscow apartment complex in 1999 revealed the extent of damage and loss of life that could be caused by terrorism. While these instances involved traditional methods of inflicting damage, the use of a nerve agent (sarin) in a Tokyo subway in March 1995, though relatively ineffective, has been viewed as representing a quantum change in methods. Other actual and potential future terrorist weapons run the gamut from the lone terrorist acting as an assassin to the confirmed effort by *al-Qa'ida* and others to obtain and use chemical, biological, radiological and even nuclear weapons (CBRN). Terrorist use of CBRN devices is now regarded as a key aspect of the contemporary international security agenda.

In considering future terrorist weapons the basic assumption is that explosives, small arms, and other light weapons (such as shoulder-launched anti-tank weapons) will remain in the terrorist arsenal. One may also assume that existing and new conventional weapons will be used in novel ways, whether against aircraft, ships or other targets. However, the potential use of CBRN weapons presents the most demanding challenge from the perspective of what is currently in, or is likely to come into, the hands of terrorist groups.

The threat of CBRN terrorism, inevitably, will change over time and thus what constituted the threat in 1996 is not what constituted it in 2001, and today's threat will likely evolve over the next decade. The risks and severe consequences of a CBRN attack are real -- policies have to be designed and implemented to reduce the risks, thwart attempted attacks, and manage the possible consequences if an attack occurs.

Future Terrorist Targets

Turning to the future targets that terrorists may consider vulnerable and in line with their objectives, the most commonly recognized are those physical things that we hold most dear: the symbols of our civilization that inspire and define our community. Because the quality of our lives is something we value, we also must defend what is now termed our "critical infrastructures". As with individual citizens, no single element can be declared expendable.

This does not mean that we must defend all equally, all the time. Those involved in the protection of critical infrastructure have been striving diligently to bring a professional approach to the concept of risk assessment to allow them to allocate scarce resources to the "most critical" of our critical infrastructures. Surely, the explosion of a major chemical

plant, resulting in the deaths of many thousands is somehow worse, more horrible, than a more minor attack and the deaths of tens or hundreds. So, from the perspective of the defense, the protective situation calls for something akin to triage, the prioritization of otherwise unacceptable outcomes.

What we choose to protect only limits the choices a terrorist might have, and, we hope, reduces potential consequences. The terrorist knows that even a limited attack, if successfully accomplished, will produce the anticipated effect of terror – exacerbating feelings of insecurity and vulnerability without regard to the relative significance of the target. Indeed, the argument could be made that an attack or a series of attacks on necessarily less well-protected facilities could have a greater effect than one larger attack. The chemical plant attack is largely driven by perceptions of consequences: the noxious green cloud enveloping and killing the peaceful village. It would be difficult to argue that anyone felt anything for the plant itself.

That is not the case with other parts of the physical target set, where a strike can affect even more deeply our perceptions of security and vulnerability. Some of the most vulnerable targets such as schools, as in the case of the tragedy in Beslan, Russia, are also the most difficult to protect. In such a case, scale is, essentially, irrelevant. A successful attack on the smallest pre-school would stir the same feelings of loss and insecurity that would attend an assault on a university campus.

III. Safeguarding an Unknown Future

In sum, military terms such as "counter-value" and "counter-force" appear to have little relevance when assessing whether or not terrorists may be considered as an opposing armed force, gauging future terrorist weapons of choice or attempting to ascertain the targets that may be attacked to achieve terrorism's objectives. And yet, available evidence suggests that terrorists have, and will continue to concentrate on, what they consider "counter-value" targets. These are soft targets, they are difficult to defend, and they offer the terrorist an abundance of choices.

What came crystal clear from the presentations and discussions at the conference is that there can be and will be no certain security. The best that may be achieved is to minimize both the risk and the consequences through a series of measures aimed at protecting people, protecting infrastructure, and addressing the "root causes" of terrorist violence.

Topics in Terrorism:

Toward a Transatlantic Consensus on the Nature of the Threat

Understanding Suicide Terrorism: Countering Human Bombs and Their Senders

Anne Speckhard, Ph.D.¹

Suicidal terrorism is one of the fastest growing and least understood threats to peace in modern-day democracies. Currently there is an extremely small empirical research database on which policymakers may base their understanding of suicidal terrorism, its genesis and prevention. Yet there has been an exponential growth in suicide terrorism in recent years. Peacekeeping and coalition forces in both Iraq and Afghanistan directly confront suicide terrorism as it has become a major factor undermining rebuilding efforts and attempts to bring peace to the region. Israel and Russia have been plagued with an increase in suicide terrorism, which has been a major security threat to both countries and their regions in recent years. Although yet untouched by suicide terrorism, Western Europe was the staging ground for many of the 9/11 bombers, and the United Kingdom has generated three suicide bombers (two acting in Israel, the third carrying a bomb in his shoe on an international flight).²

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NOTE: This paper was completed and edited prior to the Jul 7, 2005 suicide attacks in London.

The Nature of Suicide Terror

Modern day suicide terrorism began in Lebanon in 1983, but it has not remained limited to the Middle East. Suicide terrorism as a tactic has migrated around the world; it is used in Sri Lanka by the Liberation Tigers of Tamil Eelam (or LTTE, which perfected the suicide belt), the Kurdistan Workers Party (PKK) in Turkey, Hamas, Palestinian Islamic Jihad (PIJ), the Popular Front for the Liberation of Palestine (PFLP), Al Aqsa Martyrs Brigade in Israel, *al-Qa'ida* around the world, numerous groups in Iraq and the Chechen rebels in Russia. The organizational goals of these groups are not necessarily linked to one another, yet across the entire spectrum, the use of human bombs has proven to be a powerful tactic in the hands of terrorists who are thus able to force concessions from occupying forces – even to the point of expelling them – wreak havoc with peace processes, gain international recognition in the media for both the sponsoring group and its cause, disrupt daily lives and create widespread dread and horror. Recognition of the effectiveness of this tactic in achieving terror organizations' short-term goals seems to lend momentum to, and indeed foster an exponential increase in, the use of suicide attacks. Yet, despite this recent increase, suicide terror does remain the least utilized – if most lethal – means of terrorism.

Human bombs are in essence "smart bombs" that go precisely to their target with the ability to detect surveillance and alter their course to maximize damage. Unlike other forms of terrorism, these require no escape plan for the perpetrators. Suicide terror, when successful, also leaves little trace of the perpetrator. He or she is no longer alive to be tracked down, incarcerated and interrogated. Only the handlers can be discovered – though even this is difficult once the suicide is accomplished.

Suicide terrorism is a complex individual, psycho-social and organizational phenomenon.³ To research it properly one must consider all aspects, asking: what motivates the individual to move into a self-sacrificial mode (to be willing to die in order to kill others); how do societies come to embrace this tactic; and what role(s) do organizational goals, methods, planning, recruitment, training/indoctrination and execution play vis-à-vis suicide terrorism? When we consider both the individual and organizational motivations, we cannot forget that both are embedded within a psycho-social context and that neither individual nor organizational inputs are likely to take off in any strong and consistent form without real

³ Nichole Argo, The Banality of Evil: Understanding and Defusing Today's Human Bombs (2003).

Mia Bloom, Dying to Kill: The Global Phenomenon of Suicide Terror (2005).

Mohammed Hafez, Manufacturing Human Bombs: Strategy, Culture and Conflict in the Making of Palestinian Suicide Bombers (Unpublished research paper, 2004).

Ariel Merari, Suicide Terrorism (Unpublished manuscript, 2003), p. 12.

Assaf Moghadam, "Palestinian Suicide Terrorism in the Second *Intifada*: Motivations and Organizational Aspects," *Studies in Conflict and Terrorism* 26.2 (February/March 2003).

Assaf Moghadam, Suicide Bombings in the Israeli-Palestinian Conflict: A Conceptual Framework (Project for the Research of Islamist Movements, Inter-Disciplinary Center, Herzliya, Israel: 2002), p. 15., http://www.e-prism.org/

Anne Speckhard, Soldiers for God: A Study of the Suicide Terrorists in the Moscow Hostage-Taking Siege. (Unpublished research proposal)

J. Post, E. Sprinzak, and L. Denny, "The Terrorists in Their Own Words: Interviews with 35 Incarcerated Middle Eastern Terrorists," *Terrorism and Political Violence* 15 (1) (Spring 2003), pp. 171-184.

Oliver McTernan, ed., The Roots of Terrorism: Contemporary Trends and Traditional Analysis. (Brussels: NATO Science Series 2004).

daily-life psycho-social issues causing the message and possibility of the "suicide option" to reverberate on both sides of the equation.

The Organizational Component

According to Ariel Merari⁴, to date no suicide bomber has acted entirely on his or her own – that is, assembling a bomb, picking a target and detonating without the aid and support of an organization. However, recent interviews by Nichole Argo⁵ update Merari's claim – providing data on at least one bomber who acted independent of organizational backing. In any event, it is a myth to believe that a lengthy and in-depth period of training and indoctrination is necessary. Some suicide terrorists receive training and carry out their attacks in less than two weeks' time and, not all suicide terrorists are recruited by the organizations that send them. Many individuals recruit themselves, approaching an organization and asking to be sent as human bombs.

From the point of view of the organization, it is clear that suicide bombing has a strong impact. It is a combination of an extremely lethal tactic – in terms of numbers wounded and killed – and devastating psychological effect. It has the potential to create widespread changes in mentality, awareness and lifestyle. For example, suicide terrorism has shown itself able to derail sensitive negotiations (such as the Oslo accords); strongly impact the political process (Madrid train bombings)⁶; disrupt military, humanitarian and rebuilding efforts (Afghanistan and Iraq); and draw world attention and concern to political issues (Chechnya). Moreover, it is appealing partially because it is "cheap", requiring only minimal equipment and loss of the bombers themselves.⁷ Whether it is effective in achieving any real political gains outside of the community in which it originates – i.e., whether it creates any real power base for those who employ suicide terrorism – is yet to be seen.

Thus, while it is still up for debate whether or not this tactic yields real gains vis-à-vis the *status quo*, we do know that its perpetrators and their communities often feel empowered by it. The expressive nature of the act – expressing one's desperation and making another feel one's pain – as well as its shared meaning as an act of defense on behalf of the community, bring both the organization and individual perpetrating it recognition and status within that community. This, despite all else, is a real gain to both parties.

The Psycho-Social Component

While the organizations that make use of human bombs often consciously and purposefully promulgate the ideologies supporting this tactic, it is crucial to note that, to be successful, their message must find a deeper resonance within both the individuals and the society that ultimately embrace these ideologies. It may be argued that without leadership promoting the utility and even morality of suicide terrorism as a tactic, widespread acceptance and use of it might never occur. Yet we must also acknowledge that this is not entirely a top-down

⁴ Ariel Merari, Suicide Terrorism (Unpublished manuscript, 2003) p. 12.

⁵ Nichole Argo, *Culture, Society and Martyrdom* (Unpublished research paper, 2004).

⁶ Some would argue that the Madrid bombings did not involve suicide terrorists as the attackers left their bombs and detonated them from afar. Yet, upon imminent arrest, the bombers did explode themselves.

⁷ See Rohan Gunaratna, *Inside Al Queda: Global Network of Terror* (Columbia University Press 2002).

phenomenon in the sense that social indoctrination into the ideologies in support of suicide terrorism need not always be intentionally engineered on behalf of an organization or religion. Such indoctrination can simply be a social phenomenon – the result of community and individual responses to the circumstances in which they find themselves.

Consider, for instance, the Palestinian experience. The idea of embracing martyrdom (*Shudada* – the death of innocents) had to gain prominence – from repeated unfortunate experiences – before Palestinian culture could embrace and even nurture the concept of self-martyrdom (*Istich'hadin*). Similarly, suicide terrorism had no place in Chechen society until, during the last two wars, the Chechens found themselves increasingly devastated by meaningless traumas. In response to this, many Chechens sought out, embraced and constructed – both individually and in groups – ideologies that empowered them, gave meaning(s) to their pain, expressed that pain and also allowed them to "fight back" against enemies much more powerful than themselves. Indeed, the phenomenon of suicide terrorism in Chechnya – as in all the places in which it has manifested itself since its modern-day appearance in Beirut – began as a psycho-social reaction to traumatic stress, the mentality of being besieged, social marginalization, alienation, and other perceived or real sufferings.

Organizations and ideologies find prominence in communities when they meet the psychosocial needs of the individuals and groups within those communities. As Maslow⁹ has theorized, individuals strive first and foremost to meet their most basic needs before working to meet other needs – up to and including the need for self-actualization, which includes a sense of dignity and meaning in life. When under duress, communities and individuals are drawn to groups and ideologies that:

- Respond to their needs;
- Are empowering;
- Allow for the defense of their community;
- Give them a sense of dignity;
- Provide a means of expression for their pain; and
- Present ways to realize a desire to "strike back".

The Individual Component

With respect to the individual, the motivations for carrying out a suicide attack appear multi-faceted and multi-leveled. These can be political/nationalistic, religious, ideological, economic, community, sociological, psychological, personal, or familial.¹⁰ Other factors that can potentially operate within the matrix of a suicide terrorist's motivations are:

• The individual's psycho-social history, including his or her indoctrination into, or embracing over time of, whatever religious and ideological justifications are given;

⁹ Abraham Maslow, *Motivation and Personality*, 2nd ed. (Harper & Row, 1970).

⁸ The author is indebted to Nichole Argo for pointing this out.

¹⁰ Assaf Moghadam, "Palestinian Suicide Terrorism in the Second Intifada: Motivations and Organizational Aspects," *Studies in Conflict and Terrorism* 26.2 (February/March 2003).

- The individual's personal and familial life experiences, including issues of personal and secondary traumatization (e.g., a history of incarceration, torture, trauma, etc.);
- Cultural identification with the concept of revenge and the need for it;
- Community affiliations;
- Identifications with the sponsoring group;
- Notions of sacrifice for the group; and,
- The use of psychological defenses, including the dissociative defense, which appears possibly necessary to carry out the act itself.

These are examined more fully herein.

II. Choosing to Become a Suicide Bomber: Trauma & Ideology

The Role of Personal Traumatization

It is clear that the ideologies promoted by the organizations supporting suicide terrorism often resonate with the experiences and psychosocial needs of many young people within their respective societies. Witness Hamas' claims to have thousands of self-recruited individual bombers (most of whom it allegedly has to turn away) or the fact that Chechen suicide terrorists also appear to be self-recruited.¹¹ In both Palestine and Chechnya, experiences of deep personal traumatization and bereavement create in some a vulnerability that leads them to seek out the ideological message of those promoting violent and jihadist methods. This message helps traumatized individuals to find a framework for dealing with their shattered world assumptions and to address their emotional suffering, survivor guilt, and sense of a foreshortened future.¹² But the psychological "first aid" offered by these organizations is short-lived. The traumatized individual searching for an "answer" is soon overwhelmed by psychic pain¹³. He or she then becomes a radicalized bomber willing to give his or her life for the cause.

Nasra Hassan, "An Arsenal of Believers: Talking to Human Bombs," The New Yorker (November 19, 2001). Anne Speckhard, Unpublished interview with Zacharia Zubeidi, leader of the Al-Aqsa Martyrs' Brigades in Jenin, who also claimed to have hundreds of volunteers for suicide missions (March 2005).

Speckhard & Akhmedova, "The Making of a Martyr: Chechen Suicide Terrorism," Studies in Conflict and Terrorism (2005, in press).

Anne Speckhard, "Soldiers for God: A Study of the Suicide Terrorists in the Moscow Hostage-Taking Siege," The Roots of Terrorism: Contemporary Trends and Traditional Analysis, Oliver McTernan, ed. (NATO Science Series, Brussels, 2004).

Speckhard & Akhmedova, "Mechanisms of Generating Suicide Terrorism: Trauma and Bereavement as Psychological Vulnerabilities in Human Security - The Chechen Case," in Jill Donnelly, ed. (NATO Science Series, Brussels, 2004).

Anne Speckhard, Nadejda Tarabrina, Valery Krasnov & Khapta Akhmedova, "Research Note: Observations of Suicidal Terrorists in Action," in Terrorism and Political Violence Vol. 16(2) (Summer 2004), pp. 305-27.

¹³ Psychic pain refers to deeply felt emotions that are painful to the individual. See Edwin S. Shneidman, *The* Suicidal Mind (Oxford University Press, 1996). Shneidman coined the term "psyche ache," arguing that the best predictor of an individual's propensity to suicide is the experience of emotional pain as overwhelming and inescapable.

¹¹ See:

¹² For the Chechen case see:

Still, whatever the ways in which the ideologies promoted by organizations supporting suicide terrorism may respond to the psychosocial needs of some, the rationality of the choice to become a suicide bomber must be considered. The bomber might consider quite rational the exchange of his/her earthly life for greater eternal rewards, posthumous "life" as a hero in the memory of his/her community, and a sense of peace and strength resulting from that community's estimation of him/her as one of its defenders.¹⁴

While the severity of the human rights abuses occurring in the Palestinian territories is difficult to compare with that of the abuses in Chechnya, Palestinian bombers are also motivated by a sense of personal traumatization.¹⁵ Many claim that they have personally felt their lives threatened by the Israeli Defense Forces; many were incarcerated and became involved with terror groups because of the impressions they gained and the friendships they made while in Israeli prisons; and a large number identify with, or are grappling with a stress overload from the daily humiliations and trials that face Palestinians at checkpoints and at work or because of unemployment and the difficulties and limitations of daily life.

However, traumatic stress (or stress overload) alone appears insufficient to cause an individual to consider suicide terrorism. Majorities in both the Palestinian and Chechen societies have been deeply traumatized, and yet most individuals in those societies are remarkably resilient – carrying on with daily life in the face of enduring emotional pain. It would thus appear that traumatic experiences – that is, life threatening, emotionally overwhelming experiences that are inescapable, cause deep psychic pain and for which there is little redress – can form the psychological basis within the individual (or society) that is receptive to, and even productive of, the ideologies and groups that promote the tactic of suicide terrorism.

The ideologies promoting suicide bombing must be present, in a sense, to marry the traumatization. Together, they form a union that provides the individual with a means of empowering him to strike back, to defend his community, to express his pain, and to be sure that the generalized enemy "other" also feels that pain. The individual needs to find meaning in his suffering, to end his own suffering in an honorable way – exiting the community while becoming a hero in it – and, ultimately, to enact justice, from his point of view, in a situation in which he, rightly or wrongly, perceives no other pathway to seek justice. All of this occurs in a manner that is justified by the group, by the wider community that supports the group, and often by aspects of the community's religion as well.¹⁶

Secondary Traumatization & Hidden Traumas

Identification with the traumas of others and secondary traumatization occurring by "witnessing", over the internet or television, vivid images of injustices enacted on others with whom one identifies as fictive kin¹⁷ (e.g., the brotherhood of Muslims) may also resonate with individual feelings of being disaffected. Trauma psychologists have known for

¹⁴ For a more exhaustive review of the rationality of choosing death by martyrdom for a believer, see Quintan Wiktorowicz, *Suicide Bombings: Do Beliefs Matter?* (Unpublished Paper, 2004.)

¹⁵ Anne Speckhard, From unpublished interviews with Palestinians.

¹⁶ Although this does raise the issue of those cases of *al-Qa'ida*-sponsored suicide terrorism that have sprung out of societies in which there is little apparent traumatization. That issue is addressed later in this paper.

¹⁷ See Scott Atran, "Genesis of Suicide Terrorism," Science Vol. 299 (7 March 2003), p. 534.

years that witnessing or learning of the deaths or traumas of others can in themselves engender powerful feelings of traumatization.

Indeed, terrorism researcher Nichole Argo¹⁸ reports the following statement by a Palestinian militant leader: "The difference between the first intifada and the second is television. Before, I knew when we were attacked here, or in a nearby camp, but the reality of the attacks everywhere else was not so clear. Now, I cannot get away from Israeli attacks – the TV brings them into my living room. When they are not in my camp, they are in Rafah, Gaza City, Ramallah, Jenin and you can't turn the TV off. How could you live with yourself? At the same time, you can't ignore the problem – what are you doing to protect your people? We live in an internal struggle. Whether you choose to fight or not, every day is this internal struggle." PFLP leader Khan Yunis, June 2004.

Furthermore, it is likely that the security services and societies trying to fight terrorism underestimate the negative psychological effects – including traumatization – that can occur in young people who are profiled as terrorists simply by race or creed, who are arrested or incarcerated or who undergo interrogation and breaking methods that many consider neither illegal nor torture, yet are often viewed as "torture lite".

Self-Sacrifice: The Interaction Among Social Awareness, Desire for Change and a Lack of Legitimate Outlets

Group dynamics, including that of self-sacrifice for the community, are likewise powerful individual motivators. In general, suicide bombers have been found to be socio-economically better off, and at least as well educated (though often better educated) than their peers. As a result, they are likely more socially-aware in general, and potentially more sensitive to the plights of their communities. Those, whose education would otherwise prompt them to contribute to their societies as leaders, frequently find themselves disaffected in their own communities and blocked from pursuing legitimate ways to fight injustice – a scenario that makes them potentially more vulnerable to being attracted to using the tactic of suicide terrorism. In essence, feelings of being equipped as a leader and yet unable to find legitimate ways to bring about change, coupled with sensitivity to the shared pain of one's community, may powerfully contribute to seeking other available outlets for expression.

Likewise, when a cult of martyrdom has sprung up in a society, these vulnerable yet talented individuals may feel that it is a burden *not* to act: that to fail to take on the martyr role – when no other means of affecting change seems available – is in itself a failure.²⁰ This phenomenon is more strongly in evidence the closer that traumatization hits one's family,

Scott Atran, "Mishandling Suicide Terrorism," *The Washington Quarterly* 27:3 (Summer 2004), pp. 67-90. Ariel Merari, *Suicide Terrorism* (2003).

Nichole Argo, "Combating Human Bombs: The Sacrificial and Community Aspect of Suicide Terrorism,"
 Paper presented at the NATO Advanced Research Workshop, "Ideologies of Terrorism: Understanding and Countering the Social, Psychological and Political Underpinnings of Terrorism" (Brussels: February 1, 2005).
 Scott Atran, "Mishandling Suicide Terrorism," The Washington Quarterly 27:3 (Summer 2004), pp. 67-90.

²⁰ See Nichole Argo, *The Banality of Evil: Understanding and Defusing Today's Human Bombs*, Unpublished Research Proposal, 2003. Hafez, Mohammed, *Manufacturing Human Bombs: Strategy, Culture and Conflict in the Making of Palestinian Suicide Bombers* (Unpublished Research Paper, 2004).

community or home, especially if the culture in question has embedded within itself a duty to avenge the loss of loved ones.

III. Factors that Facilitate the Decision to Become a Suicide Bomber

The Role of Religion

Religion is not a cause of suicide terrorism, but it can be a powerful mobilizer on behalf of this terror tactic. *Jihadist* Islamic ideologies promote the idea of self-sacrifice to benefit the larger community in exchange for otherworldly rewards – including forgiveness of sins, salvation and instant entry into "paradise". For a troubled, bereaved and guilt-ridden individual, the vision of these rewards can constitute strong motivation. The promise that, in paradise, one will be reunited with those who have gone before – especially other martyrs – is a particularly powerful draw to those caught in traumatic bereavement. Moreover, the promise that a martyr will be able to intercede on behalf of seventy relatives – securing, for them as well, entry into paradise – helps to assuage guilt and grief over leaving loved ones behind.

Survival guilt and a sense of a foreshortened future also make martyrdom an attractive option; one is freed of guilt by giving up a life that was not going to be long anyway. Because suicide is forbidden, but martyrdom is not, suicide terrorism presents a seemingly honorable way to escape psychic pain – it is an honored choice. And having a choice in regard to one's own death has proven alluring to many, especially the fugitive who believes that he or she is facing imminent capture, torture, death or imprisonment.²¹

Cult of Martyrdom & Popular Support for Suicide Terrorism

In the Palestinian territories, there currently exists a "cult of martyrdom." From a very young age, children are socialized into a group consciousness that honors "martyrs", including human bombers who have given their lives for the fight against what is perceived by Palestinians to be the unjust occupation of their lands. Young children are told stories of "martyrs." Many young people wear necklaces venerating particular "martyrs", posters decorate the walls of towns and rock and music videos extol the virtues of bombers. Each act of suicide terrorism is also marked by a last testament and video, which are prepared ahead of time by the "martyr", who can later reach great popularity when the video is played on television. Despite the very deep and real grief of the family and friends left behind, the funerals of "martyrs" are generally accompanied by much fanfare on the part of both the community and sponsoring organization. Often, the effect of this is confusing to outsiders as it can disrupt, delay, and even circumvent the family's ability to focus on its grief over the loss of a family member. It may also support a family's claims to outsiders, of joy over the

²¹ Anne Speckhard, Unpublished Interview with Zacharia Zubeidi, Leader of the Al-Aqsa Martyrs' Brigades in Jenin, who stated that he would rather die than be arrested and imprisoned again (March 2005).

Speckhard & Akhmedova, "The Making of a Martyr: Chechen Suicide Terrorism", *Studies in Conflict and Terrorism*, 2005 (in press).

²² Nichole Argo, *The Banality of Evil: Understanding and Defusing Today's Human Bombs* (Unpublished Research Proposal, 2003).

Mohammed Hafez, Manufacturing Human Bombs: Strategy, Culture and Conflict in the Making of Palestinian Suicide Bombers (Unpublished Research Paper, 2004).

loss of its loved one. This "cult of martyrdom", which has a strong underpinning in longstanding cultural roots (the honoring of martyrs), appears to have developed principally over the last decade.

Suicide terrorism first appeared in Chechnya in the year 2000. Although widespread popular support for suicide terrorism does not yet exist, the first pop song venerating a female bomber has now made its appearance and is very popular with Chechen youth. Moreover, at least two Chechen suicide attacks have included pre-prepared videos, one of which was aired over *Al-Jazeera* during the Dubrovka siege. It is possible that, over time and with continued societal traumatization, these and other means will be found to popularize support for suicide terrorism among the general public in Chechnya – a development that should be watched carefully and curbed, if possible.

Dissociation

Dissociative defenses²³ are commonly active in survivors of psychological traumas (those with acute and posttraumatic stress disorder) and in individuals who grow up under repetitively traumatic circumstances, such as those that characterize the lives of many suicide bombers. Dissociation – that is, the disruption of the normally integrated functions of consciousness, memory, identity or perception of the environment, as well as the ability to enter and make use of a dissociative trance state – is frequently observed in trauma survivors. Traumatized individuals, especially those who have suffered multiple and repeat traumas (particularly in childhood), often learn to utilize this defense to detach themselves from overwhelmingly horrifying, terrifying, or life-threatening circumstances.

The dissociative function – that is, the ability to enter into a trance-like state and separate oneself from dread or grief – seems to be both a facilitator of the act of suicide terrorism and a commonly spoken about characteristic of those who commit such acts. Almost universally, individuals who attempted to blow themselves up, but who, for a variety of reasons, were unable to do so, describe their psychological state (with their bombs strapped on) as one of "floating" or "bliss". Some report having "felt nothing", etc. Such descriptions are consistent with dissociative trance and feature prominently and repeatedly in accounts given by failed suicide terrorists to journalists and researchers.²⁴

Similar accounts are obtained most commonly in Israel where, at the peak of the second intifada, one Palestinian suicide bomber a day was stopped before detonating and

²³ According to the American Psychiatric Association, the essential feature of dissociative disorders is "a disruption in the usually integrated functions of consciousness, memory, identity or perception of the environment" (*Diagnostic and Statistical Manual of Mental Disorders (4th ed.)*, American Psychiatric Association, 1994). Author's Note: in the case of suicide terrorism, "dissociation" means that an emotional barrier is unconsciously erected, which walls off the negative emotions generated by choosing to die in this manner and can include compartmentalizing the event from one's ambitions or daily life. For example, one bomber, when planning his attack, is reported to have said that he could not carry a bomb until after his university exams – suggesting that while he acknowledged that he was going to his death, he was able to separate this reality from the other realities of his life.

²⁴ Nasra Hassan, "An Arsenal of Believers: Talking to Human Bombs", *The New Yorker*, Nov 19, 2001. Haas, Amira, "When Death is Normal", *Ha'aretz*, October 26, 2004. Speckhard & Akhmedova, "The Making of a Martyr: Chechen Suicide Terrorism", *Studies in Conflict and Terrorism*, 2005 (in press). Speckhard, Anne, Unpublished Interviews of Palestinian Militants, 2005.

subsequently incarcerated²⁵. This has created a pool of detainees whom researchers can ask about their experiences with bombs actually strapped to their bodies. For example, Arin, a twenty-four-year-old woman interviewed in an Israeli prison by the author, was arrested after she had worn her explosive belt for six hours but chose not to detonate. She recalls her mental state with the belt on: "I was not conscious. When I meet bad things, I, Arin, move away. I collect the bad things and work out of myself." She also recalls, "I felt very nervous. I felt my mind stopped. For six hours I cannot think. Just at the last moment. I looked at the people. I looked at the babies. I saw babies. I thought, 'If he dies, what should I tell God? What should I tell Him? If He wants to cut my life and take my soul okay, but I don't have the right.' "

In Arin's description, one can deduce a dissociative mode that was only disrupted during the last possible moments. Arin's self-reported motivation for violence began with constant humiliations at checkpoints and threatening encounters with security officials on the road and in her community. That motivation culminated in a desire to be a bomber when her boyfriend was killed – two months previous to her action. Arin is still so distressed by her boyfriend's death that she cannot discuss it, but states that, when he was killed, "...my mind was stopped. My life was stopped. My thought was, 'Everything is black." She describes going to ask for a bomb. "I wasn't asked. I asked to get the belt."

Here we see a person suffering from an overload of traumatic stress and psychic pain choosing to end her life by becoming a human bomb. However, this decision evokes less a "simple" suicide than an act of sacrificial giving – Arin intended to give her life on behalf of her community. "I gave my life just to say, 'no'!" she reports. After listing many threats and humiliations that she and her community had endured, culminating in her boyfriend's killing, Arin states, "I thought that my home will come in danger, that they [the Israelis] can come and fight us. I have nothing to do as a girl. I haven't any weapon. I have to save my world. I have to play my role. I thought this was the only way to play my role, to carry out my responsibility to my nation, my family." She describes her mental state during the four days she waited between requesting the mission and receiving the belt, "I was not talking to anyone, just in my imagination, looking at my aunts, saying goodbye to everything. I was not in a normal frame of mind. I felt disconnected from them and they felt it. They asked, 'What is going on with you?' and I said I was sick. I wrote a letter for them asking 'forgive me, and I'm really sorry - this is my life and I want to end in my own way.' [sic]." Fortunately, Arin's dissociative mode was somehow disrupted by seeing babies and she shifted suddenly back into her normal moral consciousness, which prevented her from going forward with the mission.

²⁵ According to Israeli security experts, this statistic was valid in 2003/2004. Since then, however, the number of failed suicide bombers arrested and incarcerated has drastically diminished. This does not necessarily imply that a far higher percentage of bombers have succeeded in their missions or that far fewer individuals have attempted to commit acts of suicide terrorism. Among the myriad factors that may have contributed to this decrease is the "security barrier", which some Israeli officials credit as having prevented many would-be suicide bombers from being able to enter Israel. See also: Isaac Ben-Israel, Oren Setter, and Asher Tishler, *R&D and the War on Terrorism: Generalizing the Israeli Experience* (Unpublished research paper, 2004).

Unconscious Activation of the Dissociative Defense

Likewise, observations suggesting dissociative defenses among Chechen suicide bombers have been made by the bombers' hostages and family members – those who observed the bombers just prior to, or while wearing, suicide bombs. For example, a Chechen respondent recalls that her cousin became withdrawn and depressed following the killing of her brother by Russians. Then, just before going on her suicide mission, this girl became euphoric, falsely announcing her need to travel to Moscow in order to prepare for marriage. The cousin recalls, "I believed her because she really was very much excited in those days, and a shine appeared in her eyes." Indeed, just as with other individuals who have committed to die thorough "normal" forms of suicide, her depression likely lifted as she began contemplating release from psychic pain. In this way, she appears to have unconsciously activated the dissociative defense necessary to carry out her suicide mission.

Given that it is so commonly observed and reported among human bombers, it appears that the dissociative defense is unconsciously activated by suicide terrorists to enable them to overcome the overwhelmingly negative emotions likely to be engendered by contemplating exploding oneself, as well as murdering others as part of that act. In turn, it is likely that this defense prompts a release of endorphins, given that the dissociative state is commonly observed and recalled as highly emotionally distanced, drugged, or euphoric.

Dissociative defenses have also been observed by researchers studying non-bombing or "normal" suicide. It seems that a fair number of suicidal persons videotape or audiotape their last moments, enabling researchers to observe them as they prepare to take their own lives. Many are reported to enter a highly dissociative trance state before pulling the trigger, hanging themselves, or otherwise taking their own lives.²⁷

Dissociation Fostered by Indoctrination

In many of the areas in which suicide terrorism occurs there is no need for sponsoring/sending groups to arrange any period of indoctrination as individuals come in droves volunteering to be human bombs. However, it is clear that those sponsoring groups that use (or in the past have used) indoctrination periods do so by inculcating hypnotic trance and/or dissociative modes. This is done by manipulating religious symbols, rituals, practices and/or ideologies that can induce a trance even in the course of their normal or intended usage. The rich tradition of ritual contained in nearly all mainstream religions is capable of inducing a trance and often does so as a means of coping with and even transcending the suffering endured in this life. Organizations that make use of such religion-based methods to induce a state that enables an individual to strap on explosives and detonate him- or herself among civilians gravely abuse those religious traditions.

²⁶ Anne Speckhard, N. Tarabrina, V. Krasnov, and N. Mufel, "Posttraumatic and acute stress responses in hostages held by suicidal terrorists in the takeover of a Moscow theater," *Traumatology*, Volume 11, Issue 1 (March, 2005).

Anne Speckhard, N. Tarabrina, V. Krasnov, and N. Mufel, (2005) "Stockholm Effects and Psychological Responses to Captivity in Hostages Held by Suicidal Terrorists" in S. Wessely & V. Krasnov, eds. *Psychological Responses to the new Terrorism: A NATO Russia Dialogue*, IOS Press.

The Making of a Martyr: Chechen Suicide Terrorism, Studies in Conflict and Terrorism (in press).

²⁷ Bruce Bonger, Suicide Terrorism, Paper presented for <u>Suicide Terrorism: Strategic Importance and Counterstrategies, NATO Advanced Research Workshop</u> – Lisbon, June 10-14, 2004.

By making use of religious ideology and practices to induce and strengthen dissociative and trance states, and by failing to address in any way other than encouraging suicide the traumas affecting the populations on which they draw, many sponsoring groups take advantage of, and reinforce, the dissociative tendencies of traumatized youth. Such groups make the barrier to becoming a suicide terrorist less overwhelming, and the chances of the bomber backing out due to fear, far less likely.

A Necessary Defense

That dissociation is likely a necessary – or at least a key – aspect of suicide terrorists' ability to move forward toward their own deaths was also borne out in an unusual study. In a Brussels University study of "normal" students from varied international backgrounds, researchers were able to induce this same defense simply by asking subjects to take part in a thought experiment, in which the students briefly took on the role of bombers who had been stopped just before detonating. Nearly all of the subjects described their fantasized "memory" of having the bomb strapped to their bodies in a highly dissociative manner. It is telling that even individuals with no intent to carry out such an act seemed to find it necessary to use a dissociative defense in order to confront imagining their own deaths through the strapping to their bodies (and eventual detonation) of lethal explosives.

When Zacharia Zubeidi, the leader of the Al-Aqsa Martyrs' Brigades in Jenin, spoke to the author²⁹ about the mental states of those he sends as bombers, he explained that even *he* has experienced this type of dissociative state. Recalling a stand-off in which he was surrounded by Israeli soldiers – and sure that he could not bear to return to the torments of imprisonment, which he calls "a piece of hell" – he decided it would better to die, shooting as many soldiers as he could. Describing his mental state at the time he was facing the decision to "martyr" himself, he recalls, "I took a look from the window. I decided I want to die. But when I got my weapon ready and jumped on them, I decided not to die. It was for a moment, a feeling like – death is a mercy. I felt like the feeling of being a martyr when I jumped on them, but it changed just when I opened the door. In one flash of any eye my feelings changed from asking to be martyred to cursing."

Zubeidi explains that his traumatic experience with imprisonment was so unbearable that he preferred death to arrest. "Prison, even if only a cage, with no torture – it takes all your achievements. In one moment it all disappears. You always keep remembering – the outside, the outside...you start to hallucinate." In freedom, Zubeidi still suffers traumatic flashbacks. He explains, "I get the whole tape rewound, the whole prison, flashbacks of the prison."

The Suicide Bomber: Locked into an Inflexible Dissociative Mode?

Like many trauma survivors, Zubeidi often involuntarily moves into a dissociative mode. Yet he argues that he is still flexible in his response to stress and that this is the difference between himself and those he sends as martyrs. He argues, "They are completely different than us [fighters]. They have only one decision. We have many options. The thought of running away is always available. We can [also] go and shoot." In contrast, he describes the

²⁸ Anne Speckhard, Ken Reidy, Val Vanrompay & Beatrice Jacuch, "Taking on the Persona of a Suicide Bomber: A Thought Experiment" Unpublished research paper, 2005.

²⁹ Anne Speckhard, Unpublished interviews of Palestinian militants March 2005.

intended martyrs as locked into an inflexible dissociative mode, caused by traumatic stress and leading to one seemingly clear decision. "Of course they get flashbacks all the time and for them death is a mercy."

While a "normal" person will move between fight and flight responses in reaction to stress – employing dissociative defenses only when a threat becomes overwhelmingly horrific, terrifying and life-threatening – the individuals sent by Zubeidi to commit acts of suicide terrorism would seem, from his own observations, to be caught inflexibly and over long periods of time in a dissociative mode. Explaining his own mode in comparison to theirs he says, "For the martyr, all the cells in his mind are dead except for one." According to Zubeidi, these individuals are in too much pain to find another way to cope and thus become totally fixated on carrying out what they view as an act of community defense, an expression of pain and an enactment of justice in response to "all that he has seen". Explaining their inflexibility, he states, "When I feel this way, I stay there one or two hours, but [for] that one, [the intended bomber,] after all that he has observed there is only that one thing [i.e., to end his or her life on behalf of the community]."

Acts of Defense and the Expressive Quality of Suicide Terrorism

When one considers that human bombs tend to be people who:

- Have reached their individual breaking point from traumatic stress;
- Have become filled with grief, trauma and guilt over surviving when others have not;
- Are convinced of the futility and shortness of living; and
- Are locked into a dissociative mode, which gives them the feeling of being "already dead",

It is possible to understand their perception of death as "a mercy" (to use the words of Zacharia Zubeidi). Furthermore, because the religious teachings of so many of these human bombs expressly forbid suicide – and because the bombers, even in the throws of a dissociative state, are often able to separate themselves enough from their psychic pain to avoid suicide – this act can come to be seen by the individual as sacrificial rather than suicidal.

Even so, there are certainly parallels between choosing to become a human bomb and choosing to commit "normal" suicide. The traumatized individual who chooses to become a bomber has lost his ability to see other options, as the dissociative defense increasingly causes him to remain numb and distanced from the many possibilities he might otherwise understand to be available to him. This is similar to the cognitive restriction frequently observed in people choosing to commit "normal" suicide in that these come to view taking their own lives as their only viable option for dealing with their psychic pain.

Likewise, when one's society has embraced an ideology that permits – and even promotes – suicide bombing, then death in this manner can become a door through which one walks to escape psychic pain; circumvent consideration of all other options that, because of traumatic dissociation, appear essentially closed-off in the first place; and act heroically in defense of one's community. Human bombs generally believe that they are defending their

communities by acting in this way. They tend to cite serious grievances as their motivations for acting and they value highly the mere fact that they *are* acting. The choice to become a suicide bomber thus appears, for them, to be a great move out of traumatic depression into action, which is highly significant in and of itself.

In becoming suicide bombers, the terrorists use their last bit of psychic energy to act, and in so doing express their own pain and that of their community while making their enemy "other" experience and feel that pain, too. Especially in cases where the enemy "other" is perceived to be conducting his "war" at a distance – from helicopters, using smart bombs or guided missiles and with a minimal loss of soldiers' lives – taking a bomb into the heart of the enemy's territory can seem a way of "evening the stakes" and can fill a desire to make the "other" feel one's pain.³⁰

IV. Gender Differences: Women & Suicide Terror

Gender differences can certainly be observed between men and women suicide bombers, and these are important to understand. That being said, however, we have found that gender is rarely the central factor in the individual or organizational motivation for choosing to become or send a bomber.

The Organizational Component

Certainly, Palestinian terror organizations began to open this option to women as it became more and more difficult to send male bombers across increasingly secure checkpoints. Women could more easily hide explosives by feigning pregnancy, and respect for the cultural mores of modesty at first prevented vigorous searches of women (though with the increase in female bombers this has changed). Additionally, the initial instances of suicide bombing carried out by females held tremendous shock value.

There is limited evidence that some sending organizations view women as expendable and that they find it expedient to exploit the particular vulnerabilities of women in certain societies. There have been suggestions that the PKK used women as bombers more often than in some other capacities because the terror cells needed to relocate fairly frequently and women were observed to be slower at hiking and less useful for carrying equipment over long distances.

The Debate Over Societal Coercion

Direct Pressures

In rare cases, there is evidence that both men and women have been exploited by senders who use blackmail or outright coercion. Members of the sending organization may coerce potential bombers by threatening to reveal a sexual secret or drug habit, etc., which, if exposed, would cause the individual to be killed, threatened with death or severely socially ostracized. Blackmail is generally a more powerful tactic when used against women in

³⁰ Nichole Argo, (2003) The banality of evil: Understanding and defusing today's human bombs. Unpublished research proposal.

conservative societies because women are often constrained to live with more numerous and rigid moral strictures than are men.

Furthermore, rumors abound of more direct instances of coercion, especially in regard to the so-called Chechen "Black Widows". Zarema Mujukhoeva, the only Chechen bomber to abandon her suicide mission and someone who, unlike all the others, agreed to do so in the first place for money, claimed after arrest that the "Black Widows" are forced to carry out their missions by a phantom figure she called "Black Fatima". According to Mujukhoeva, "Black Fatima" follows the bombers to make sure they detonate – and triggers the detonation by remote if they do not. If this story has any truth to it, one wonders how Mujukhoeva could have lived to tell her story, given that she put her fully charged, bomb-filled backpack down on the streets of Moscow while trying to abandon her mission. Why would "Black Fatima" not have detonated Mujukhoeva's bomb by remote? It seems more likely that this is merely a rumor that originated with Mujukhoeva (wanting to deny all responsibility for her criminal actions and later admitting to many lies), that was then amplified by a Russian press unable to grasp the reality of the motivations leading Chechen women into suicide terrorism – women who are not coerced, but are in fact willing volunteers. Leading to the motivations are in fact willing volunteers.

Indirect Pressures

Pursuant to her interviews with family members of female Palestinian bombers, Barbara Victor³³ argued that strict and narrow role assignments in a tightly controlled society made the choice of martyrdom seem more attractive to those women who were unable or unwilling to fulfill their prescribed social roles (due to infertility, discovery of an illicit sexual relationship or pregnancy, etc.). Certainly, this was true of female Tamil Tiger suicide bombers who were raped at checkpoints by their enemies and thus rendered unable to return to the "normal" roles of becoming wives and mothers. Although this set of circumstances applied only to a minority of female Tamil bombers, the result was to leave those women who were affected the choice of becoming prostitutes, militants or bombers. For other reasons (e.g., cancer, infertility, etc.) we found the same problem of inability to fulfill "normal" roles operating among female Chechen bombers, though this motivator was always entirely secondary to that of deep personal traumatization.³⁵

Indeed, recent interviews with "would be" female Palestinian bombers imprisoned in Israel suggest that the inability to fulfill "normal" roles is little more than a marginal motivator. One respondent laughed when asked about Victor's theories, arguing that they are implausible. "For this you want to explode yourself? For infertility? This is stupidity. For

³¹ The only person actually killed by the bomb was the security officer who tried to defuse it.

³² Speckhard & Akhmedova 2005 The Making of a Martyr: Chechen Suicide Terrorism, Studies in Conflict and Terrorism (in press).

³³ Barbara Victor, Army of Roses: Inside the World of Palestinian Women Suicide Bombers, Rodale Books, 2003.

³⁴ See Mia Bloom (2005) Dying to Kill: the Global Phenomenon of Suicide Terror. Francois Gere, personal communication Feb 2005 likewise remarks that Tamil propaganda often exaggerated the frequency of these cases of females raped at checkpoints, but the majority of their bombers appeared not to be coming from such cases.

³⁵ Speckhard & Akhmedova 2005 The Making of a Martyr: Chechen Suicide Terrorism, Studies in Conflict and Terrorism (in press).

having had illicit sexual relations? You will die for this? No. I can speak to God and He will forgive me." She went on to say that people often search for such explanations, especially with regard to female bombers, and explained, "Every girl can decide for herself...if you want to die and you know you want to die. This is what is going on with exploding ourselves." ³⁶

Limited Options for Responding to Traumatic Stress

Even so, a serious and relevant difference between men and women suicide bombers is that men who are seeking to fight back against a powerful enemy - or who are trying to take flight from the same - have many more options than do their female counterparts in conservative societies. Militant organizations in conservative societies are often unwilling to arm women to fight in battles or even to allow women to "martyr" themselves in shoot-outs or other scenarios in which they are likely to be killed. Similarly, there is some evidence that girls are more likely to employ the dissociative defense in response to traumatic experiences than are boys, who often manifest the impact of traumatic stress through conduct disorders and hyperactivity. Hence, the restricted options and roles presented to women in conservative societies, if these do indeed impact the decisions of female suicide bombers, most likely do so in a more focused rather than in a more generalized way. By limiting women's possible responses to traumatic stress (and, in particular, giving them few ways in which to either fight back against or flee the sources of that stress) conservative societies might prompt some women to get stuck in a dissociative mode, which in turn makes them more amenable than they would be otherwise to the option of becoming a human bomb.

Zacharia Zubeidi, the leader of the Al-Aqsa Martyrs' Brigades in Jenin, seems to share this view. He reports, "Girls come begging for such operations [human bombings] much more than boys. Twice as many girls ask." When asked why he thought this was so, he answered, "Emotions of girls are higher than boys. Their feelings are much deeper than boys'. God created girls more sensitive." Then, reflecting a bit more, he added, "We decided no girls. No one took them since the *intifada* began, so this pool increased. A guy can let a little of what's inside out by going to shoot on an operation – shoot and come back. A girl has few choices. She cannot go and shoot. Every girl has just one way – a [bombing] operation." Indeed, we met a young Palestinian woman who told us that she had asked for a mission but was repeatedly denied. Yet her desire for a mission continued to grow – along with her sense of powerlessness – each time another of her friends martyred himself or was killed by Israelis.³⁷

Certainly, a woman who chooses to become a bomber briefly attains a sense of power in life – and taking on the traditionally male role of warrior is a great equalizer. But both of these feelings are quite short-lived given the short career path that characterizes this role. Hence, these are likely only secondary motivations following traumatic stress. Likewise, in some societies a woman can attain "rock star status" only after death; a status that is very difficult for a woman to attain in life in most traditional societies.

³⁶ Anne Speckhard unpublished Palestinian interviews March 2005.

³⁷ Anne Speckhard Palestinian interviews March 2005.

V. Europe and Suicide Terrorism

Though it has thus far been relatively free of suicide terrorism, Europe is no stranger to this phenomenon.³⁸ Germany and Spain served as staging grounds for 9/11, with Mohammed Atta's cell originating in Germany and many relevant financial transactions made in Spain. Similarly, three suicide bombers have originated in the United Kingdom, two of whom carried out their attacks in Israel, while the third would have taken down an entire planeload of passengers had he not been stopped³⁹. Furthermore, at least two groups have been caught using what could be characterized as "weapons of mass destruction" – that is, planning to carry out ricin attacks in London and Paris.

Important to note is that, in Paris, the so-called Chechen cell was made up of North Africans who so strongly identified with the traumas of their Chechen "brothers" that they risked their own lives plotting to poison staff at the Russian embassy. This is chilling evidence of the possibility that growing numbers of disaffected and socially alienated Muslims living in Europe will identify with the traumas of their "fictive kin" living outside the continent, and therefore act as terrorists within Europe on behalf of these others. The Madrid bombings might be seen as supporting this idea.

One of the current concerns in Europe is that of widespread radicalization of the Muslim youth living there. A growing number of European cities have high concentrations of Muslim youth, many of whom are poorly integrated into local society. Brussels, for example, is 20 percent Moroccan. Given the impressive cyber infrastructure in Europe and in the United States, it is not hard to imagine that *al-Qa'eda* – which is no longer a coherent organization but more of a movement – could radicalize large numbers of disaffected and socially alienated young Muslims and then mobilize them to support suicide terrorism by disseminating its ideas over the Internet to target groups living on either side of the Atlantic. This would represent the first step in a nascent movement to mobilize individuals who might be willing to carry bombs outside of the already active zones of conflict. If this threat were to be realized on a large scale, it would likely create even more radical changes in the way that Europeans and Americans currently go about and enjoy their lives.

VI. Motivational Sets for Human Bombs

Nationalism, Community Defense, Self Expression, and Trauma/Revenge-Based Motivations

As stated earlier, there appear to be two primary groups of motivations (or "motivational sets") for suicide terrorism. The first can be observed within societies that view themselves – rightly or wrongly – as under occupation or involved in a war. In many ways the affected individuals, sponsoring organizations, and societies have the mentality of insurgents. Their corporate motivations are often nationalistic and their personal motivations are trauma- and revenge-driven. They often rely on dissociation as a defense. As such, bombers with the "insurgent" mentality generally see themselves as acting in defense of their communities,

³⁸ NOTE: This paper was written and edited for publication prior to the July 2005 suicide attacks in London.

³⁹ Richard Reid was the shoe bomber who almost downed a plane in flight to the United States.

acting in an expressive manner and doing so in a way that causes pain to their enemy "other" in order to make that other feel "our pain".

These bombers have frequently, but not always, adopted a religious ideology that allows them to act as cosmic warriors – disposing of the normal boundaries for the use of violence, seeing that violence as part of an all or nothing battle, and demonizing their enemies. In this group, we find nearly identical psychological processes that lead both men and women to become human bombers. Leaders and organizations play a role by promoting suicide bombing as a viable and morally approved choice. Societies and individuals enduring too much traumatic stress and suffering from too much psychic pain then respond to such messages, contribute to them and act accordingly.

Alienation, Marginalization, Loss of Identity, Desire for Meaningfulness and Adventure, Secondary Traumatization, and a Desire for Redemption

The second group of motivations (or the second "motivational set") is entirely different from the first and can be observed within societies strongly affected by the problems of immigration, migration and/or a clash of cultures. Among the individual suicide bombers whose motivations seem to lie in this second set are Mohammed Atta and his 9/11 cell originating in Hamburg, Germany (and finding much of its support in Europe); the 9/11 bombers who came from Saudi Arabia; the two nightclub bombers originating in the United Kingdom who acted in Israel; Richard Reid, the would-be shoe bomber from the United Kingdom, who was a Muslim convert and who nearly took down a passenger plane heading for the United States; the Casablanca bombers in Morocco; the Moroccan train station bombers in Madrid⁴⁰; and lastly those who have gone to Iraq from peaceful parts of Europe or the Arab world in order to carry out suicide bombing attacks. In this group to date we find few women.⁴¹

The motivations in this second group appear to us to be comprised of a lethal cocktail of:

- A sense of societal alienation and marginalization, for those temporarily (or even over generations) residing outside their original cultures;
- A loss of one's sense of self and/or loss of positive identity (both of which intersect with group dynamics, questions of loyalty, and a feeling of belonging to the group);
- A desire for adventure:

⁴⁰ The Madrid bombers did not set out as human bombs, leaving their explosives at the station and detonating from afar, but when nearly apprehended they detonated explosives ending their lives rather than surrender.

⁴¹ We reason that this second motivational set is far less likely to be active in women for a number of reasons. First, women who have grown up in conservative cultures may be so used to playing "secondary roles", that the "secondary role" of immigrant seems broadly similar to the ones they played in their home society. As such, female immigrants may not perceive as large a drop in status in their host society as male immigrants do. Second, female immigrants often find themselves at home, closely guarded by their families. They may thus be shielded from their host cultures and so prevented from integrating readily into those cultures. This, in turn, might prevent immigrant women from feeling a sense of internal "corruption". Lastly, we believe that those who travel from Arab and European countries to carry out bombings in Iraq are more likely to be men than women because Muslim women who might otherwise wish to take part in the insurgent attacks are far less likely to be allowed to travel freely. Still, it should be noted that some female Chechen bombers – albeit always with caretakers – have indeed traveled long distances to carry out attacks.

- A desire for meaning in life;
- Secondary traumatization (e.g., identifying with the traumas and injustices visited upon Muslims in Chechnya or the Palestinian territories) and indirect traumatization from viewing images of the hardships of these populations on television and over the internet; and,
- A desire for redemption from personal corruption.

A sense of marginalization and alienation, the search for adventure and the desire to establish for oneself a positive identity are all strong motivators. However, the last two motivations listed here – strong identification with the traumas of others (which is easily accomplished nowadays through the use of video footage, graphic images on the television and internet, etc.) and a history of perceived corruption by one's host society – are perhaps the most important. This is because, in combination with the first four, secondary traumatization and a sense of personal corruption combine to create a strong need for redemption. A typical example might be that of a Muslim immigrant who has let himself go "wild" in the West – drinking, using drugs, chasing women – and who then decides to respond to this perceived corruption by returning to Islam, eventually embracing an ultraconservative and militant form of the religion.

In so doing, many immigrants are motivated by a feeling of real sorrow over the sufferings of others, even as they refuse to come to terms with the "bad boy" part of themselves that once partially embraced the very culture they consider to have inflicted that suffering. Instead, as they split themselves off from their host culture, they come to project onto Western society the "bad boy" tendencies that they are seeking to disown, concluding, eventually, that the West must be either punished or destroyed. 42 Moreover, in joining a close-knit group of militants, an individual in the above scenario can replace his negative self-image with a positive, adventurous, and heroic self-image – one that is in turn reinforced by belonging to the group. Feelings of loyalty and other elements of group dynamics so fill the individual's need for belonging and positive self image that he may become willing to bear the ultimate cost of being part of that group: sacrificing his "good"/"redeemed" self for the group's ultimate goal.⁴³ In this way, a seemingly "normal", integrated Muslim man can suddenly transform himself into a virulent human bomb - giving rise to horrified Western reactions at the notion of Muslims living and/or educated in Europe and the United States choosing to turn against their host societies and carry out attacks such as those of 9/11.

⁴² See Lloyd deMause, The Emotional Life of Nations New York: Karnac Books, 2002,

⁴³ See Marc Sageman *Understanding Terror Networks* University of Pennsylvania Press, 2004. Post, J., Sprinzak, E. & Denny, L. (2003), "The Terrorists in Their Own Words: Interviews with 35 Incarcerated Middle Eastern Terrorists," *Terrorism and Political Violence 15* (1), Spring, pp. 171-184.

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VII. Better Understanding the Threat & Addressing Root Causes

Supporting Key Research and Making Use of Our Existing Knowledge

Those who wish to fight suicide terrorism and combat popular support for it need to understand the phenomena as they exists today, in the many settings in which they occur. The first step toward doing so is to support solid research aimed at learning as much as possible about organizational and individual motivations – and the communities that support them – as well as the modes of interaction or intersection among these. In achieving such understanding, it becomes possible to begin to design interventions based on solid empirical evidence, which might then help to curb this very lethal and exponentially growing global threat.

Likewise, it is important to put into use what we already know. Suicide terrorism is not the result of poverty or illiteracy alone.⁴⁴ Simply reading the statements of terror groups makes clear that many attempt to address failed political processes and that a number of them are legitimately concerned with social injustices – some of which are easier than others to begin to address. Survey data collected by researcher Khalil Shiqaqi show that popular support for suicide terrorism among Palestinians can be seen to increase or decrease depending upon how threatened the society feels or how confident it is in the political process at any given time.⁴⁵

Providing Alternative Views and Outlets

It is also clear that suicide terrorists make use of willingly manipulated mass media. It might be wise to investigate the possibility of voluntary self-censorship on the part of the most sensational reporting organizations. Israel already does this successfully, whereas Russia's President Vladimir Putin has threatened to achieve similar ends by state decree – a move that could well prompt the Chechen terrorists to attack more often Moscow or other major cities where complete state control of the media would be nearly impossible.

More fundamentally, the terrorist ideologies that so successfully address feelings of social alienation, victimization, and trauma – and that manipulate the dissociative states that occur among many Muslim youths as a result of traumatization – must also find competition from societies that are willing and able to address, in constructive ways, these same issues of trauma, alienation, and the need for social justice. Organized or informal groups, both within and outside affected societies, must begin to offer roles and hope to young people, so that they will not turn to suicide terrorism for want of alternative ways to change their lives and communities.

Religious leaders must begin to stand up to the manipulation of Islam by *jihadist* militants, and those who speak out ought to be supported (if quietly) by the West. However, not many are likely to want this role so long as the West continues to be seen by large numbers

⁴⁴ Scott Atran, "Mishandling suicide terrorism" The Washington Quarterly 27:3 pp 67-90 Summer 2004 pg. 1; Ariel Merari, Suicide Terrorism, 2003. Unpublished Manuscript, pg 1, 5.

⁴⁵ Khalil Shiqaqi "The Views of Palestinian Society" in Suicide Terrorism in Countering Suicide Terrorism, International Policy Institute for Counter Terrorism, 2002. pg 155-164.

of their supporters as tainted by the abuses at *Abu Ghraib*, seemingly extralegal detentions or practices considered "torture lite" in places such as Guantanamo Bay, and continued reports of soldiers failing to act honorably in Iraq and elsewhere. By extension, it can be argued that preserving cherished "Western" freedoms will require finding a means to deal with the conflict zones that inflame *jihadist* mentalities in ways that uphold democratic ideals. This is no easy task, but it is necessary to prevent the spread of suicide terror as a tactic. Already, the ideas and culture of suicide terrorism have made significant inroads among many groups and can be seen to have migrated successfully from conflict area to conflict area. This is unlikely to stop if the West does not begin to address the root causes of suicide terrorism – including the ideologies as well as the individual's psycho-social motivations.

A Balanced Approach

This is not to say that intelligence operations aimed at infiltrating terror groups or military operations aimed at decapitating their leadership cannot make a difference. Israel has shown dramatic short-term success in this regard, although it could be argued that this success is bought at the cost of motivating future terrorists to action. As U.S. Secretary of Defense Donald Rumsfeld lamented in 2004, it is not good enough simply to kill terrorists if these are able replace their ranks faster than they can be killed.

Especially within conflict zones, individual psychology and traumatic experiences play a huge role in the individual's decision to become a bomber. Other key factors include the failure of the political process to address individual grievances and sponsoring organizations' willingness to exploit such failure. Community support for suicide terrorism increases when threats to its well-being are perceived as high and political processes are viewed as failing to meet those threats.

The prevention and gradual diminishment of the threat posed by suicide terrorism thus requires that we address root causes. Governments must be encouraged and pressured to reform, so as to open avenues for economic growth and increased opportunities for the frustrated, disillusioned and often well-educated youth who constitute the most volatile sector of the societies from which suicide terrorism is coming. All sectors of society – both at home and abroad – must be given a voice and all ethnic, gender, and religious groups must be attended to with respect so that these do not find solace in the ideologies and activities of radical groups. Human rights abuses, whether at home or abroad, must neither be tolerated nor seen to be tolerated, even in the name of fighting terrorism. To do so abandons democratic values and exchanges freedom for security, which, in the end, brings neither.

Treating Terrorist Groups as Armed Bands: The Strategic Implications

Joseph McMillan 1

If you were to ask an alumnus of any advanced military educational institution almost anywhere in the world, "What do you call the extension of politics by violent means?", the answer would be instantaneous: "War"! Yet even since 9/11, it has been only slowly and over considerable intellectual resistance that the logical corollary of this maxim has gained acceptance: that terrorism must be a form of warfare. After all, what is terrorism if not one way of pursuing political objectives – broadly defined – by violent means?

Put that way, it seems obvious that terrorist groups should be considered as "opposing armed forces". However, addressing the question more seriously requires that we ask ourselves how else terrorist groups might be viewed. One alternative that reflects the way such groups have traditionally been viewed in the United States is to treat them as criminal organizations.

I. Terrorists as Criminals?

A Historically Sensible Comparison

Before the attacks of September 11, 2001, as the National Commission on Terrorist Attacks (the "9/11 Commission") pointed out, the U.S. government's basic approach for dealing with terrorists was as a law enforcement problem. At the time, this did not seem inappropriate. Since terrorism, by its nature, involves the unlawful use of violence (under both international and domestic law), it is a natural reflex to consider it initially as a judicial issue and, historically, such an approach had had considerable merit. It had worked reasonably well in dealing with the types of terrorism with which Americans were most immediately familiar. Until recently, most terrorist acts in the United States, from the anarchist assassination of President McKinley in 1901 to the abortion clinic bombings of the 1990s, were limited in scope and carried out by indigenous organizations and individuals. The damage done by terrorist acts was generally not much greater, and in many cases less, than the damage done by ordinary criminal activity.

The kidnapping and bank-robbing left-wing terrorists of the 1970s, for example, fell into this category, as did the more recent spate of abortion clinic bombings. These acts could be dealt with through the normal law enforcement mechanisms, even though the groups involved may have technically met the criteria for armed bands. Even in instances when terrorist attacks did massive damage, such as the 1995 bombing of the Murrah Federal

¹ The views expressed are the author's own and do not reflect those of the National Defense University or the Department of Defense.

Office Building in Oklahoma City, the criminal justice system seemed to be the most appropriate instrument for responding.

One reason to prefer the criminal justice approach is that governments are supposed to be able to maintain public order without the constant use of force. A government can damage its legitimacy if it uses force excessively or in ways that the populace sees as outside the generally accepted "rules of the game". In the United States, those rules of the game, at least when dealing with U.S. citizens, include respect for the protections guaranteed by the Bill of Rights and specifically the right to a fair trial. In fact, like guerrillas pursuing a protracted war strategy, terrorist groups often try to goad governments into attacking them in ways that can turn potential terrorist sympathizers into actual terrorist sympathizers.

Shortcomings of the Criminal Justice Approach

The problem, as perceived in retrospect in the United States, is that this legalistic approach — whatever its past utility — is inadequate to the task of countering modern terrorism that is being organized and carried out by much larger, more capable and more dangerous groups operating from outside the United States. These organizations, particularly *al-Qa'eda* and its affiliates, operate on an entirely different scale than "traditional" terrorists. In the first place, their motivations are profoundly different. They no longer "…want a lot of people watching and a lot of people listening and not a lot of people dead," as Brian Jenkins once said; they want a lot of people dead. In the second place, globalization combined with modern technology has given them the range and lethality to act on their aspirations to commit mass murder. In short, terrorism on the scale of September 11, 2001 or March 11, 2004 overwhelms the capabilities of even the most highly developed criminal investigative and judicial systems.

That *al-Qa'eda* was a threat of a different order of magnitude should have been clear from the bombings of the U.S. embassies in East Africa in 1998, the attack on the USS Cole in 2000, and the discovery by U.S. intelligence of even more ambitious plots in the Far East and Jordan that were never carried out. But, the lesson was not absorbed, according to the report of the 9/11 Commission:

The most important failure [leading up to the attacks] was one of imagination. We do not believe leaders understood the gravity of the threat. The terrorist danger from Bin Ladin and al Qaeda was not a major topic for policy debate among the public, the media, or in the Congress. Indeed, it barely came up during the 2000 presidential campaign. Al Qaeda's new brand of terrorism presented challenges to U.S. governmental institutions that they were not well-designed to meet. Though top officials all told us that they understood the danger, we believe there was uncertainty among them as to whether this was just a new and especially venomous version of the ordinary terrorist threat the United States had lived with for decades, or it was indeed radically new, posing a threat beyond any yet experienced.²

The perceptual problem ran deeper than a simple miscalculation of the threat, however. U.S. federal laws on terrorism that placed responsibility for dealing with the issue on the law

² National Commission on Terrorist Attacks upon the United States, The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks upon the United States (Washington: GPO, 2004)

enforcement community had the effect of preempting other solutions to the problem. "The Attorney General shall have primary investigative responsibility for all Federal crimes of terrorism," says the principal criminal statute on terrorism. So it was universally expected – and widely applauded – that the Federal Bureau of Investigation (FBI) immediately asserted the Attorney General's jurisdiction following each of the four most serious foreign terrorist attacks against U.S. targets leading up to 9/11: the bombings of the Khobar Towers military housing complex in Saudi Arabia in 1996, the U.S. embassies in Nairobi and Dar es Salaam in 1998, and the USS Cole in Aden harbor in October 2000.

The mindset that terrorism was principally a judicial issue shaped the actions of all segments of the government, not just the FBI. When the Clinton Administration considered seeking the extradition of Osama Bin Laden from Sudan in 1996, the Justice Department opposed the move on the grounds that there was no indictment on which Bin Laden could be held in the United States.⁴ In reporting to the new Administration what it had learned about the bombing of the Cole, Central Intelligence Agency (CIA) analysts characterized their assessment as "preliminary" because they were concerned that expressing judgments of culpability without being able to satisfy a legal standard of proof might prejudice a future criminal prosecution. This apparent tentativeness in stating what the CIA actually believed to be quite strong proof was found by the 9/11 Commission to be partly to blame for the White House's decision not to take action in retaliation for the Cole bombing.

The weaknesses of the criminal justice system as the primary instrument for confronting an exceptionally lethal, well-organized terrorist organization of global reach now seem apparent. In the first place, the criminal justice system is designed to deal with individuals. It is structured around proving beyond a reasonable doubt that a specific individual was responsible for a specific act. It operates punitively after the fact, not preventively before the fact. Effective action often takes years as a case is assembled and legal custody of the accused is secured. Finally, the criminal justice system's two wellsprings of deterrence – social stigma and punishment – do not work well in preventing attacks by armed bands who consider themselves to be at war with a society (and therefore do not fear social stigma) and who expect in any case to die in the course of carrying out their attacks (and therefore do not fear punishment).

In fairness, thinking had begun in the U.S. government by at least the mid-1980s about handling the threat of terrorism as more than a criminal problem. In particular, planners started considering the development of capabilities for offensive counterterrorism using military forces. In June 1995, President Clinton issued Presidential Decision Directive (PDD) 39, declaring that the United States saw "...terrorism as a potential threat to national security as well as a criminal act and [would] apply all appropriate means to combat it." In prescribing steps to be taken in response to this threat, however, the PDD still focused on the familiar remedies, saying that the United States would "...pursue vigorously efforts to deter and preempt, apprehend and prosecute, or assist other governments to prosecute, individuals who perpetrate or plan to perpetrate such attacks." Moreover, having recognized terrorism as a national security problem in PDD 39, the same Administration's

⁴ 9/11 Commission Staff Statement No. 5, "Diplomacy."

³ 10 U.S. Code 2332b(f).

⁵ 9/11 Commission, Staff Statement No. 5, "Diplomacy."

PDD on counterterrorism (PDD 62 of May 22, 1998) assigned only one mission to the Department of Defense: protection of Americans overseas. While the *al-Qa'eda* attacks on the embassies in Dar es Salaam and Nairobi less than three months later led to a series of punitive military responses, it took the shock of 9/11 to cause a serious adjustment in the way U.S. policy-makers conceived of the problem.

II. The Concept of Terrorist Groups as Armed Bands

As already suggested, the trend in the United States since 9/11 has increasingly been to view terrorists more as armed enemies and less as criminals – in other words, to treat them primarily as an opposing armed force, albeit an unlawful one. The word "primarily" is important, because the two approaches are not mutually exclusive. In fact, Abraham D. Sofaer and Paul R. Williams have aptly described terrorism as "unconventional warfare conducted by unprivileged combatants with the assistance of criminal co-conspirators designed primarily to terrorize and kill civilians." The question is whether that approach is appropriate and justified. In answering that question, two criteria have to be considered. The first is definitional: is the term "armed force" applicable to terrorist groups in general or only to one terrorist group in particular? The second is utilitarian: is treating terrorist groups as armed forces strategically useful?

At the purely taxonomic level, a terrorist group meets the definition of an armed force: it is a force, and it is armed. Various dictionaries define a "force" in this context as "a body of armed men", "any body of persons combined for joint action" or "a group organized or available for a certain purpose". In fact, any terrorist group capable of mounting a significant threat goes well beyond this minimal standard. Far from being simply a hodge-podge of people with weapons, these groups have support systems, organizational structures, and communications networks. Moreover, they have command and control mechanisms that guide and direct their operations to a greater or lesser degree. The only thing that keeps them from being full-fledged "armed forces" is that they are not, in legal terms, military – they do not carry their arms openly, wear the distinctive markings of a military force, or operate according to the laws of armed conflict. Because they are not truly military in character, it is probably preferable to refer to them as "armed bands" rather than an "armed force". The distinction is important not only to differentiate "them" from "us" but also to distinguish terrorists from those who are, under the law of armed conflict, lawful rebels or insurgents.

More important than dictionary definitions, however, is the fact that terrorism is, as was touched upon briefly at the outset, essentially a form of warfare, and specifically a subspecies of what military planners have come to call "asymmetric warfare". In other words, it is a method by which the weaker side in a conflict can damage the stronger side, while preventing the stronger side from bringing its strengths to bear. Given that military theorists have been absorbed for a number of years with the problem of asymmetric warfare, it may be surprising that it took so long for terrorism to be seen in that context. The reason may

⁶ 9/11 Commission, Staff Statement No. 6, "The Military."

⁷ Abraham D. Sofaer and Paul R. Williams, "Doing Justice in Wartime," *Policy Review* 111 (2002) 4. Sofaer and Williams apply this characterization specifically to the war waged by *al-Qa'eda*, but it is equally appropriate in describing other cases of terrorism as well.

be that, because terrorism's *modus operandi* is psychological rather than military, it is initially difficult to recognize it as warfare at all. If terrorist groups with their current organization, weapons and objectives were to launch a campaign of attacks against military, rather than civilian targets, we would have no difficulty thinking of them as armed bands or forces. To argue that such groups are not armed bands – or armed forces – simply because they attack noncombatant targets by unlawful means, would be logically similar to a suggestion that the Gestapo's quasi military formations should not have been fought as an armed force.

The idea of treating terrorists as armed bands is particularly important to confronting the radical Islamist terrorists who constitute today's gravest danger – al-Qa'eda and its allies and affiliates. Al-Qa'eda's leaders clearly saw themselves as being in a state of war with the United States well before 9/11, even if the United States did not realize it. Osama Bin Laden had issued a formal "Declaration of War against the Americans Occupying the Land of the Two Holy Places" five years earlier, followed up by a collective "Statement Urging Jihad against Jews and Crusaders" in 1998. Al-Qa'eda obviously functioned as an armed force in Afghanistan. It provided thousands of trained, armed fighters in support of the Taliban in its war against the Northern Alliance and later in opposing the U.S.-led invasion in 2001. It also reportedly provides such fighters for the anti-Russian guerrilla war in Al-Qa'eda has - or had - the highly articulated organizational structure characteristic of armed forces. As the 9/11 commission pointed out, at the time of the attacks on New York and Washington, al-Qa'eda possessed all the elements of leadership, personnel management, training, command and control, intelligence, logistics, and financial management necessary to conduct carefully synchronized operations halfway around the world.

As suggested above, in deciding whether to treat a particular terrorist group as a criminal gang or an armed band, it is important to take account not only of its objectives and internal characteristics, but also of the damage it is able to do. Globalization is widely recognized as having fueled many of the resentments on which terrorism feeds. At the same time, it has also provided terrorist groups with the capability to act on those resentments with unprecedented efficiency and lethality. Just as globalization has led to the rise of subnational actors in the economic arena, it has also led to their rise in the security arena. Capabilities that were once available only to governments are now within reach of private groups as well. Like other sub-national actors in a globalized world, terrorist groups enjoy full access to open borders, instant communications, efficient international financial systems and modern information technology and organizational methods, and have demonstrated that they can use these to great advantage. Al-Qa'eda and its allies are not the first people to lash out against the incursions of an alien culture, nor the first to use indiscriminate violence in an attempt to inflict the maximum possible damage on their enemies. They are, however, the first to have the ability to strike on a global scale with such catastrophic effect.

Finally, there is a sound legal basis for treating terrorist groups as hostile armed bands, particularly among the decisions of the United Nations and regional security organizations following 9/11. The day after the attacks, the Security Council stated in Resolution 1368 that any act of international terrorism is "...a threat to international peace and security." This, in itself, suggests that the problem is beyond the realm of simple crime. Furthermore, NATO and the Organization of American States both found the attacks on the World Trade Center and the Pentagon to have been "armed attacks" within the meanings of their

respective charters. "Armed attack" is a term of art in international law. It is against "armed attacks" that members of the United Nations are said to have the "inherent right of self-defense" under the Charter. While an armed attack may also be a criminal act, there is a clear distinction between the two concepts. This is also reflected in the preamble to the U.S. Constitution, which lists "establish justice" and "provide for the common defense" as separate justifications for framing the United States federal government.

Strategic and Operational Advantages

In this context, thinking of terrorist groups as hostile armed bands has a number of implications, both strategic and legal, for how governments act to counter them. Most obviously, it makes available to leaders a more complete range of capabilities, including the use of armed forces, to counter the terrorist threat. This does not mean that a country that has been attacked by terrorists is somehow barred from using non-military means against the terrorists and it certainly should not be read to imply that such a country would be bound to use the military instrument vis-à-vis every terrorist group. The government of an attacked or threatened country is always at liberty to use other means of protecting its citizens and maintaining order, including the criminal justice system, if it judges those better suited to dealing with any particular threat. The point is simply that treating terrorists primarily as criminals tends to rule out remedies beyond the realm of the criminal justice system, while treating them as hostile armed bands opens up to the decision-maker a much broader spectrum of responses.

Failing to treat terrorist groups as hostile armed bands has the effect of conceding to the terrorists the competitive advantage afforded by their asymmetric strategy. As the side challenging the *status quo*, terrorists have the clear operational initiative. It is the terrorist leader who decides when, where, and what to attack from among an almost unlimited variety of targets. Conversely, the state against which terrorists are operating can never defend every potential target everywhere at all times, especially if it is constrained by constitutional and legal rules (which the terrorists, of course, feel free to disregard). Magnifying the target state's dilemma is the vastly increased range and lethality of terrorist groups – a subject touched upon earlier in this paper. Meanwhile, as long as an enemy group retains the initiative, its credibility with actual or potential supporters grows, while the morale of the target society declines.

The resolution of the terrorist challenge therefore depends upon seizing the initiative, something that is impossible if the state combating terrorism is restricted to a reactive posture. Terrorist forces must be discovered, disrupted, and destroyed before they can strike, and the environment in which they recruit and sustain themselves must be altered to prevent their continued survival. To accomplish this combination of suppression and prevention, the state combating a terrorist threat must treat its adversary, at least conceptually, as being analogous to any other enemy force.

The tools, methods, and rules available to the military strategist offer a much more effective way of seizing the strategic initiative than those employed by public prosecutors. From the perspective of strategy and plans, the core competencies of military strategy offer a number of clear advantages. Military strategists tend to see threats as operating entities or networks,

rather than as lists of individuals. Good military strategists conceive of war as a series of sequential or simultaneous campaigns, each of which comprises a number of mutually reinforcing tactical actions and all of which ultimately lead to the achievement of a policy objective. Where prosecutors often measure success in terms of indictments brought or convictions won, military strategists at their best, measure success in terms of the effects that operations have on enemy capabilities as a whole.

We can illustrate the point with an example from conventional war. If one were responding to the Japanese attack on Pearl Harbor from the standpoint of a prosecutor, the fundamental focus would be on the questions of exactly who ordered the attack, who carried it out, and how those facts could be proven beyond a reasonable doubt. The objective of the exercise would be to punish the specific guilty individuals. From the standpoint of a military commander, however, personal culpability would be a matter of indifference. Instead, one would ask where other Japanese forces were, how they were supported, what factors were critical to the Japanese prosecution of the war, and how those factors could best be attacked. The point would not be to capture or kill individuals to mete out punishment but rather to damage the capabilities of the enemy and to defeat his strategy.

Legal Advantages

The Domestic Context

From a domestic legal perspective, treating terrorist groups as enemy armed bands does not require decision-makers to comply with the rules of evidence required in a criminal proceeding. This does not mean that one attacks a target without strong evidence that it is linked to the enemy organization, but that the standard of proof is less onerous – sources can be kept secret, hearsay evidence is admissible, and the previous record of the hostile organization can be taken into account in weighing the decision to act. Under the concept of fighting an armed enemy, members of the terrorist organization who have as yet committed no indictable offense may be attacked and killed or captured without them first having to have broken some provision of domestic law. Indeed, as pointed out by the staff of the 9/11 Commission: "Senior legal advisers in the Clinton administration agreed that, under the law of armed conflict, killing a person who posed an imminent threat to the United States was an act of self-defense, not an assassination." Similarly, the facilities and property of an armed enemy may be confiscated or destroyed without elaborate legal proceedings.

Although the U.S. government has chosen not to proceed very far along this path, treating foreign terrorist groups operating in the United States as hostile bands – who have entered the country surreptitiously for the purpose of carrying out armed attacks – theoretically opens the legal possibility of using the U.S. military against them on home soil. Under the Posse Comitatus Act of 1878 and related laws and regulations, the U.S. armed forces cannot be used "to execute the laws" except under tightly circumscribed conditions. If actions against terrorist groups do not take the form of "executing the laws", but rather that of the suppression of armed bands by military means, the legal barrier to the use of the armed forces would seem to vanish.

⁸ 9/11 Commission, Staff Statement No. 7, "Intelligence Policy."

Finally, if terrorist groups are combated through military means, one of the principal obstacles to cooperation between intelligence and investigative agencies is negated; investigative information no longer has to be kept confidential for fear of compromising the prosecution's legal case.

The International Context

In international legal terms, viewing terrorist groups as armed bands also yields several positive results. In the first place – and as already discussed – it makes terrorist groups who conduct armed attacks legitimate objects for the exercise of self-defense by military or other means. It also has the effect of invoking the traditional international legal principle by which "states are under a duty to prevent and suppress such subversive activity against foreign Governments as assumes the form of armed hostile expeditions..." Furthermore, if terrorist strikes are "armed attacks", as NATO and the Organization of American States (OAS) found them to be, and if terrorist bands are a "threat to international peace and security", as the United Nations Security Council found them to be, then military operations designed to combat groups that carry out such attacks are not actions against other countries" "territorial integrity and political independence" but a valid exercise of the right of self-defense. ¹⁰

The strategy for combating terrorism being pursued by the Bush Administration is implicitly informed by the understanding that the adversary functions as one or more hostile armed bands. Thus, the first goal in the *National Strategy for Combating Terrorism* (2003) is "defeat terrorists and their organizations [emphasis added]." One of the specific objectives under that goal is to "destroy terrorists and their organizations," so as to "eliminate capabilities that allow terrorists to exist and operate [emphasis added]." The strategy contends that "we cannot wait for terrorists to attack and then respond" and that "the best way to defeat terrorism is to isolate and localize its activities and then destroy it through intensive, sustained action." This is not the language of investigation, evidence, trial, conviction and punishment. At this point, it is not even the language of tit-for-tat retaliation. It is the language of a war strategy.

Risks and Limitations

Resolving the Status of Captured Terrorists

While using the concept of terrorist groups as hostile armed bands has enormous utility in framing strategy and broadening the array of lawful measures available to counter them, it is not without its risks and disadvantages.

Of these disadvantages, the one that has probably caused the most resistance to viewing terrorists as "armed forces" is the effect such a view is perceived as having on the legal status of captured terrorists. The U.S. Administration's efforts to place such captives into a category apart from those comprehending accused criminals (with Constitutionally guaranteed rights) or prisoners of war (with Geneva Convention-guaranteed protections) is too well known to require rehearsal here. Suffice it to say that the quandary is a serious one.

⁹ L. Oppenheim, International Law: A Treatise, 8th ed. (London: Longmans, Green, 1955) I:292-93.

¹⁰ Joseph McMillan, "Apocalyptic Terrorism: The Case for Preventive Action," *Strategic Forum* No. 212 (November 2004).

Still, such considerations need not limit the use of the concept outlined here as a tool of strategic analysis and operational planning; as the U.S. Supreme Court suggested in an 1897 case involving a U.S. ship engaged in providing support to insurgents in South America, a distinction can easily be made "...between recognition of belligerency and recognition of a condition of revolt; between recognition of the existence of war in a material sense, and of war in a legal sense." It is possible to act upon the reality that terrorist groups function as armed forces without conceding that they have the legal standing of armed forces.

Playing into the Terrorists' "Warrior" Image

A related disadvantage to treating terrorist groups as analogous to enemy armed forces is that it can play into the warrior image that the terrorists seek to cultivate within their own societies and around the world. One reason that *al-Qa'eda* relies so heavily in its propaganda on images from early Islamic history is that these reinforce Osama Bin Laden's mythic stature as a Muslim hero – a *ghazi* – in the line of the early conquerors. Unfortunately, this carefully nurtured image is widely accepted in much of the Islamic community.

Seeking to be identified as soldiers is not peculiar to *al-Qa'eda*. As Bruce Hoffman has pointed out, "terrorists...deliberately cloak themselves in the terminology of military jargon," partly as an argument for being treated as prisoners of war if captured, but more importantly as a way of justifying their actions – equating them with the military actions of the states against which they are fighting.¹² Here again, this risk should not restrict us from thinking of *al-Qa'eda* as an armed force in our strategic analysis, even if we have to be careful about how that analysis carries forward into our public rhetoric.

Refining the Use of Military Options

A second broad category of risk associated with viewing terrorist groups as analogous to enemy armed forces is that it can lead decision-makers to emphasize exclusively military options for combating them, rather than looking to the full range of instruments of national power. In principle, the U.S. Administration is fully aware of the need to think outside the purely military "box". The *National Strategy for Combating Terrorism* is quite clear, for instance, that the United States and its allies must also apply diplomatic, intelligence, investigative, prosecutorial, economic, financial, informational and developmental resources to "deny sponsorship, support, and sanctuary to terrorists" and to "diminish the underlying conditions that terrorists seek to exploit." And in a now famous memorandum from Secretary of Defense Donald Rumsfeld to his staff, he made clear his understanding that a purely military approach risks creating new terrorists faster than the existing ones could be eliminated. Nevertheless, it has been only slowly that the U.S. government has gotten itself organized and oriented toward this more comprehensive conception of war against these armed bands, and much remains to be done before it can truly be said that all fronts are being covered.

Simply acknowledging that terrorism is inherently a tactic of war and that terrorist groups are armed bands conducting unlawful warfare does not sweep away the conceptual obstacles and pitfalls to fighting these groups effectively, even at a purely military level. Modern military theorists often take for granted that breaking the enemy's will is preferable to destroying his

¹¹ The Three Friends (166 U.S. 1)

¹² Bruce Hoffman, Inside Terrorism (New York: Columbia UP, 1998) 33-34.

capabilities because the former is generally held to be less costly and more likely to lead to an enduring post-war peace. This approach has significant merit when operating against a conventional state. However, when attacking terrorist leaders, structures and operatives, the same principles of cost-effectiveness dictate a primary focus on capabilities rather than intentions. This is because operating against intentions requires a sufficient understanding of the enemy's motivations and a high level of confidence in our ability to affect his calculus (and will). With terrorist operatives we usually have neither of these.

On the contrary, two of the most intractable problems in dealing with the contemporary terrorist threat are our inability to understand what motivates someone to become a suicide bomber and the difficulty of structuring a set of negative consequences that could lead him or her to abandon a course of intentional martyrdom. Of course, not all terrorist organizations and operatives share a commitment to martyrdom. Nevertheless, planners must constantly keep in mind the differences between fighting an actual state with the population, territory and infrastructure of a state, and the much more elusive enemy that is a terrorist insurgency.

III. The Future Terrorist Threat: Adaptability Combined with Information Technology

The most serious terrorist threats today are presented by decentralized, loosely affiliated networks, not by easily identifiable and geographically locatable formal structures. This was already true at the time of 9/11, and, as former CIA Director George Tenet reported to Congress in the summer of 2004, it has become increasingly the case since the U.S. military's massive disruption of *al-Qa'eda* operations in Afghanistan as part of Operation Enduring Freedom. As Tenet said, *al-Qa'eda* itself seems to be less an organization than a movement: a source of motivation for the like-minded everywhere in the world, rather than a clearly defined organization providing equipment, training and command and control. In the U.S. view, the commuter train bombings in Madrid in 2004 were the clearest manifestation of this trend. They were apparently not carried out at the behest of Osama Bin Laden or Ayman al-Zawahiri, but were nevertheless inspired by *al-Qa'eda*'s methods and rhetoric.

This trend away from clearly defined organizations has been facilitated by the information revolution. As was recognized soon after 9/11, modern information technology has greatly facilitated terrorist groups' ability to operate in multiple locations simultaneously. Given the extensive amount of information that is readily available on the World Wide Web and the ease and speed of communications over the internet, operations can be planned, coordinated, commanded and controlled from any computer with a modem and a phone line. Al-Qa'eda operatives have proven quite adept at using anonymous access to the internet and sophisticated means of covert electronic communication. Indeed, the information revolution is a major facilitator of almost anything a terrorist group would want to do, from collecting intelligence to propagating its ideological message to recruiting, indoctrinating, and training new personnel.

In other words, if the pressure brought to bear on terrorist groups by the international community in the wake of 9/11 has forced those groups to change their style of organization and operation, the information revolution has made it possible for them to make the

necessary changes and to continue operating with considerable – if somewhat diminished – effectiveness. Terrorist groups have long relied on Leninist-style cell structures to ensure operational security while modern communications allow these structures to become even more impersonal and anonymous. Moreover, some groups have taken advantage of these technologies to flatten their organizational structures. They now find themselves able to operate securely without burdensome and complex levels of middle management. Using well-chosen technological media, top leaders can communicate with field operatives with the same isolation and security formerly provided by layers of intermediaries.

Thus far, however, these groups have only scratched the surface of the possibilities presented by the information revolution. Thorough indoctrination in what soldiers would call the "commander's intent", coupled with the most sporadic of communications, could yield an unprecedented degree of fluidity and unpredictability in terrorist operations. An apocalyptic terrorist agenda, that has the objective to inflict maximum damage and chaos (rather than to conduct a carefully structured campaign aimed at extracting political concessions), would be particularly suited to such a loose, unstructured organizational approach. Often there is no obvious organizational center of gravity and no clear state sponsor presenting an obvious target for military action. The lack of a centralized terrorist command and control structure renders irrelevant much recent military operational theory that focuses on attacking the enemy's decision-making capabilities. Meanwhile, the nature of the informal, shifting ties among different terrorist groups reduces the utility of attacking those ties in the ways that one might attack the key nodes that connect the members of a traditional alliance. Full realization by terrorist groups of the potential presented by modern information technology would be a major challenge to planners of counterterrorist strategies.

In conclusion, while the insights and operational advantages that come from thinking of terrorist groups as hostile armed forces – or armed bands – are enormously useful, a comprehensive strategy to defeat Islamist-inspired terrorism on a global scale cannot be based on this concept alone. We began this discussion with the observation that terrorism is simply an unlawful means of applying violence in pursuit of a political agenda. In the view of many U.S. analysts (and as reflected in U.S. policy pronouncements) that political agenda in the case of *al-Qa'eda* and its ideological allies is nothing less than a transnational insurgency aimed not only at the conservative regimes of the Middle East but at the entire international state system. Whatever its objectives, however, it is clearly an insurgency being carried out by terrorist means. As with any insurgency, combating the insurgent forces – in this case armed terrorist bands – is not sufficient to defeat the insurgency in the long run. But combating those forces *is* necessary, and to combat them successfully we must apply the methods, analytical and operational, appropriate to fighting an armed force.

Future Terrorist Weapons

Jill Dekker-Bellamy

In 1972, when the Biological and Toxin Weapons Convention was opened for signature, a primary concern was state research and development of offensive biological weapons. Since that time, the threat of terrorist or "rogue" state use of unconventional weapons has changed significantly. Advances in bio-technology and in conventional weapons – such as Intercontinental Ballistic Missiles (ICBMs) that are capable of carrying CBRN payloads – along with the proliferation of missile technology, have increased the risk of unconventional weapons use. At the same time, there is a serious risk of "sub-state" terrorist acquisition and use of less technologically advanced weapons or of CBRN in material form (versus more advanced strategic weapons). Of course, neither rogue states nor terrorists heed the provisions of international treaties.

The distinction between sub-state groups with few state associations or assets and state-sponsored terrorist cells – those empowered by governments – is important in divining the types of weapons that terrorists are likely to employ in the future.

I. Sub-State Terrorist Groups and the CBRN Threat: The Chechen Example

The terrorists in Chechnya are loosely supported by a number of foreign and international terror groups, but they have fewer sophisticated capabilities than those groups. Still, the Chechen terrorists have been able to achieve horrific results. The September 2004 tragedy in Beslan – similar to that of 9/11 – is of special concern because these terrorists, who, several years ago, were responsible for planting a radiological dispersal device (RDD) containing cesium 137 in a Moscow park, have shown themselves willing to cross threshold after threshold of ethical and moral depravity in order to carry out mass-casualty attacks. Although the typical RDD is relatively unsophisticated, it is still capable both of inflicting collateral damage and of instilling a general sense of terror within the affected population.

The terror network that carried out the Beslan attack is run by Shamil Basayev, a Chechen. Members of Basayev's network also carried out the Moscow Dubrovka theatre siege in October 2002, in which 175 people were ultimately killed. In 1999, Basayev's group detonated a canister of toxic agents in a village near Grozny.

Since that time, there has been a steady increase in the number of reports indicating that Chechens have been carrying out surveillance of sensitive Russian facilities, presumably in order to attack them or to find ways to access them – and thus acquire dangerous materials. Basayev has expressed an interest in biological weapons. This should be of grave concern to the international community, given that, depending on the pathogen, much of the world would be at risk of feeling the effects of a successful biological attack, no matter where it

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¹ Bale, Jeffrey M., "The Chechen Resistance and Radiological Terrorism", Center for Non-proliferation Studies, April 2004. URL: http://www.nti.org/e_research/e3_47b.html

may be carried out. The risk becomes even higher if the biological attack is perpetrated within a country with limited public health resources and no infrastructure for detecting or containing an act of biological terrorism. Moreover, Basayev's apparent interest in biological weapons may suggest that other terror groups are also taking a more active interest in CBRN materials acquisition. Led by Basayev, the Riyadus-Salikhin Battalion issued a warning on November 20, 2002 that it would henceforth target various European bodies along with NATO because of their allegedly hypocritical pro-Russian stances.²

Given the extensive structures of the former Soviet Union's *Biopreparat* pharmaceutical and bio-defense programs, the security of laboratories within Russia and within other states that played host to key containment facilities – such as Kazakhstan, Uzbekistan and Georgia – is critical to international security. Equally vital are those programs that:

- Convert laboratories originally designed to produce dangerous materials for use in nonthreatening bio-technology sectors; and
- Redirect highly trained biological weapons scientists into productive roles.

Because terrorists are likely to be extremely creative and flexible as they choose, design, and employ all manner of weapon in the future, national counter-measures must be equally agile and inventive. Heavily basing our estimates on past events has already proven disastrous. Therefore, we must carefully consider the past, but also think "outside the box", when attempting to address the question of future weapons use by terrorist groups.

II. State Threats and Future Terrorist Weapons: The North Korean Example

Assessing the threat of future terrorist weapons is not as straightforward as it may seem. This is partially because rogue states that are known proliferators of advanced missile technologies may make such technology more accessible to sub-state terrorists.

Rogue states that are both intent on developing a CBRN capability and armed with strategic weapons and advanced delivery systems pose an increasing threat to the international community as a whole. A good example of the complex nature of the rogue regime threat is North Korea (the Democratic People's Republic of Korea, DPRK). North Korea's proliferation of missile technology is a serious concern and Western intelligence agencies that now believe that the country may have been able to weaponize smallpox and plague, in particular. Current estimates suggest that the DPRK's biological warfare programs are focused almost exclusively on these two specific agents and that what the country has weaponized it has also deployed.

The DPRK's programs are alarming because the country's posture is difficult to track; because it possesses sophisticated long-range strategic weapons; and because, again, a strike against any nation or group of nations by a rogue state with weaponized Category A agents is likely to put the international community as a whole at immediate risk within a few hours of such a

² Bale, Jeffrey M., "The Chechen Resistance and Radiological Terrorism", Center for Non-proliferation Studies, April 2004. URL: http://www.nti.org/e_research/e3_47b.html

strike. As noted by United States Congressman Benjamin A. Gilman (R-NY), Chairman of the House International Relations Committee and head of a special advisory panel on North Korea, "It is now believed that two types of North Korean Intercontinental Ballistic Missiles can strike the continental United States with weapons of mass destruction." He continued, "For the first time in our history, we are within missile range of an arguably irrational rogue regime. Regrettably, we cannot defend against that threat."

III. Facing the Threat

Those who present reduced threat scenarios, arguing that some combination of insufficient technology sophistication, acquisition difficulties, and the inherent challenge of successfully deploying unconventional weapons will help prevent sub-state terrorists from causing serious harm, should carefully consider the following factors.

Some factors arguing for a more "serious" risk assessment include:

- The stated intent of terrorists to use CBRN.
- The recovery of documents from former *al-Qa'eda* training camps that, at the very minimum, indicate intent to acquire and use unconventional weapons.
- The potential of a rogue state to supply the range of technology and knowledge needed to advance sub-state objectives and unsophisticated programs.
- Terrorists' advocacy of and engagement in mass casualty and catastrophic attacks.

There is strong evidence that terrorist s are interested in acquiring and using unconventional weapons while some states continue to pursue CBRN programs and are non-compliant with international treaties such as the Chemical Weapons Convention, the Biological and Toxin Weapons Convention and the Nuclear Non-Proliferation Treaty. Indeed, there is no evidence to suggest either a decline in terrorist interest in CBRN capabilities or increased adherence by rogue states to various treaties that would limit their use of weapons of mass destruction (WMD).³ Thus, the potential for unconventional weapons use by terrorists and/or rogue states – either in a material or a fully weaponized form – does not appear likely to go into sudden decline.

Given this conclusion, transatlantic cooperation is an essential tool for reducing the danger such weapons – and potential terrorist possession of them – pose to the world. The technological superiority of the United States and its outstanding defense capabilities are certainly one side of the equation while the European Union has vast expertise to offer in terms of preventive diplomacy and constructive engagement.

³ Indeed, the United States Army Medical Research Institute of Infectious Diseases at Fort Detrick has accumulated "credible evidence" that a number of terrorist groups and/or nations have obtained – or are trying to obtain – clandestine stocks of smallpox and that they are actively trying to produce weaponized armaments based upon the virus. However, confidence about the available smallpox evidence varies somewhat among the 14 U.S. intelligence agencies and departments.

While terrorists may rely primarily on conventional weapons and munitions to perpetrate future attacks, nations must now fully prepare for:

- The potential of an increase in the scope and scale of terrorist attacks,
- The use of unconventional weapons (or the deployment of conventional weapons in new and unexpected ways),
- The use of select agents as a tool for provoking widespread fear and/or gaining economic leverage rather than to exact high death tolls, and,
- The broadening of the range of potential targets.

In light of this, perhaps the key challenge is not to determine the exact type of weapons terrorists plan to employ, but to concentrate national efforts on the integration of their capabilities to deter and protect against a highly skilled, often highly-educated and creative enemy with no moral or ethical inhibitions to CBRN use.

Future Terrorist Weapons

Darryl Howlett and Jez Littlewood

I. Introduction

Terrorist use of WMD or CBRN devices is now regarded as a key aspect of the contemporary international security agenda. Events in the 1990's that resulted in mass casualties, such as the bombing of community housing in Buenos Aires in 1994; the attack against the U.S. government building in Oklahoma in April 1995; the truck bomb against the Central Bank in Colombo, Sri Lanka in 1996; the bombing of the U.S. embassies in Kenya and Tanzania in 1998; and the bombing of a Moscow apartment complex in 1999, revealed the extent of damage and loss of life that could be caused by terrorism.¹ While these instances involved traditional methods of inflicting damage, the use of a nerve agent (sarin) in an underground train network in central Tokyo in March 1995 has been viewed as representing a quantum change in methods. Concerns about this change in method have intensified since the tragic events of September 11, 2001 (9/11), when the Twin Towers of the World Trade Center were destroyed and the Pentagon was severely damaged by a coordinated attack using civilian aircraft as the method of destruction. The attack not only produced mass casualties; it also changed assumptions about terrorist use of CBRN capabilities.²

In considering future terrorist weapons, analysts must presume that explosives, small arms and other light weapons, such as shoulder-launched anti-tank weapons, will remain in the terrorist arsenal. In addition, existing and new conventional weapons will be used in novel ways, whether against aircraft, ships or other targets. In this paper the sole focus is CBRN weapons from the perspective of what is currently in the hands of terrorist groups, what terrorist groups are likely considering and/or developing at the CBRN level, and how likely they are to use such weapons.

II. The Threat of CBRN Terrorism

The threat of CBRN terrorism, inevitably, will change over time and thus what constituted the threat in 1996 is not what constituted it in 2001, and the threat will likely be different a decade hence. Similarly, the assumption that a devastating CBRN attack is inevitable may prove to be incorrect. Nonetheless, such an attack may happen and policies and procedures have to be designed and implemented to reduce the risks, thwart attempted attacks, and manage the possible consequences.

The first assumption that informs this analysis is that the possibility cannot be ruled out that a group with resources and global reach, such as *al-Qa'eda*, will use CBRN as a means to kill (or attempt to kill) a large number of people. One qualification is that while it is not impossible to cause thousands, even hundreds of thousands, of casualties, such a catastrophe

Chris Quillen, 'Mass Casualty Bombings Chronology' Studies in Conflict & Terrorism 25:5 (September-October 2002) pp. 293-302

² Paul Wilkinson, 'Implications of attacks of 9/11 for the future of terrorism' Mary Buckley and Rick Fawn (Editors) Global Responses to Terrorism (London, Routledge, 2003) p. 34.

should not be construed as either inevitable or easy to achieve. Nor is it impossible to devise strategies to counter the possibility; indeed, much has already been accomplished in this context.

The second assumption is the need for a balanced perspective concerning contemporary international terrorism and its actual capabilities in the CBRN area. This is because certain types of CBRN weapons are most likely still beyond the wherewithal of even the most sophisticated transnational non-state actors. Measures such as international agreements, national control procedures and export controls, coupled with the need for relevant scientific and engineering skills to manufacture deliverable and useable weapons, continue to impede non-state actors from acquiring high-end CBRN weaponry. At the lower-end of the CBRN spectrum, however, the sources of supply are more numerous, difficult to control and can be obtained from the internet and elsewhere.

Technology and globalization are key drivers in this area. While the latter has had a transforming effect on transnational terrorist networks over the past decade, the former continues to raise issues such as those associated with dual-use technologies. For example, new forms of weaponry might emerge on the back of the biotechnology and information technology revolutions, which some view as having a significant impact on terrorism.³

Regardless of the weapons of choice, the threat of international terrorism is likely to require the following: responses over a long period of time; the involvement of both the public and private sectors; the continuing enhancement of international agreements, ranging from disease monitoring and control to more traditional arms control and disarmament; the employment of traditional means for prevention, detection, defense and consequence management as well as the implementation of new measures; the development of specific initiatives designed to address particular situations or weapons types; and the pursuit of cooperation at all levels (bilateral, regional and global). A principal conclusion of this research is that policy responses should seek to encompass all phases of a potential use or threat of use of CBRN: the pre-attack, attack, and the post-attack phases.

In this analysis of the threat posed by CBRN, some of the conceptual and methodological aspects associated with CBRN and international terrorism are assessed. Following this, the actual threat posed by CBRN weapons is subjected to a scoping exercise. This is undertaken as a means to explore the possibility that these factors may be important in determining which weapons terrorist groups are likely to seek and use in the next few years. In the conclusion of this analysis, the types of weapons that pose the greatest problems and biggest challenges are considered. In addition, the conclusion suggests that immediate and short-term planning to counter and respond to the threat has to be based on the contemporary picture.

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³ See for example, Christopher F. Chyba and Alex L. Greniger, 'Biotechnology and Bioterrorism: An Unprecedented World' *Survival* 46:2 (summer 2004) pp. 143-162.

CBRN: Some Conceptual and Methodological Issues

Many writers have viewed the events of 9/11 as a defining moment in international security. Few doubt that 9/11 threw traditional assumptions about terrorist motivations and methods into doubt. No longer was it considered unlikely that international terrorists would shrink from the use of WMD if they were in possession of such weapons. In particular, it was felt that 9/11 heralded a new era because it was an attack that, *inter alia*: led to the death of the direct perpetrators; involved a new delivery method in a coordinated assault on civilian and military targets; suggested that asymmetric forms of conflict would be the wave of the future; killed more than three thousand people rather than tens or hundreds, including many first responders; involved an international network based in a 'failing state'; used new forms of information and communication technologies for planning and execution; and was seen to have no short- or medium-term political motives. Taken separately, none of these elements was necessarily new. But taken together, they were seen as a portent of international terrorism where existing verities were no longer operative.

The scale of 9/11 inevitably led to a focus on the question: "What if the terrorists had access to CBRN?" A substantial body of literature on terrorism and CBRN weapons existed before 9/11. Within this corpus of knowledge, it was apparent that there was an assumption that terrorists would use CBRN if they could, based on the evidence that *Aum Shinrikyo* had made attempts to disseminate biological material, and had also used chemical weapons in Japan. This cult represented no obvious political cause and apparently had investigated several options for inflicting mass destruction. Concerns over CBRN terrorism were enhanced when the military intervention in Afghanistan produced evidence that *al-Qa'eda* had been investigating the possibilities of nuclear, radiological and biological attacks in its training camps and research facilities, and might have had links to individuals involved in state-based nuclear weapon programs.⁴

There is, however, a lack of hard data on the probabilities of a CBRN event and what the consequences would be from such an event. As in the state-to-state case, CBRN attacks will produce both different levels of threat and different results, some of which may not necessarily be greater than previous attacks, let alone 9/11. Assessing the precise motivations underlying such attacks and the capabilities that might be used is also fraught with complexity. One early study conducted by the International Task Force on Prevention of Nuclear Terrorism concluded that it was possible for a dedicated terrorist group to build a crude nuclear device provided it had sufficient quantities of chemical high-explosives and weapons-usable fissile materials. More significantly perhaps, in terms of thinking about the risks involved, it was felt that such a group would be more interested in causing panic and social disruption by making a credible nuclear threat, rather than by actually detonating a nuclear device and causing mass death and destruction.⁵

⁴ Julian Borger, 'Al-Qaida videos show poison gas tests' *The Guardian* 20 August 2002 p. 11; Haig Simonian & Mark Huband, 'Risk of *al-Qa'eda* strike "has reached new dimension" *Financial Times* 6 November 2002, p. 8; Barton Gellman, 'Al Qaeda Near Biological, Chemical Arms Production' *Washington Post* 23 March 2003 A01; Edith M. Lederer, 'U.N. Report Warns of al-Qaida WMD Risk' Associated Press, 15 November 2003 (09.44)

⁵ Paul Leventhal and Yonah Alexander, 'Preventing Nuclear Terrorism' (Lexington, Mass. and Toronto, Lexington Books, 1987)

Today, the assumptions underpinning such assessments have been challenged by the advent of new forms of international terrorism. The question this raises is: "To what extent are the patterns exhibited by changes in motivation also mirrored by changes in access to weapons?" The key aspect is that any terrorist group emulating this acquisition scenario would still need to have sufficient financial resources, a haven in which to develop the weapon, access to a cadre of scientific personnel and, crucially, possession of the necessary fissile material.⁶

Adding to the complexity is the proposition that terrorist use of CBRN could involve both direct and focused use against a specific target and attacks on military and civil facilities that would generate CBRN-type effects. Thus, contemporary concerns are not only about artifacts that are portable and recognizably 'weapons', but also fixed facilities that if attacked by aircraft or explosives or other means could produce similar local or regional effects. Whether or not this latter scenario would actually constitute WMD-terrorism is a moot point, but in the current international security climate it is likely to be portrayed as a WMD-attack by terrorists.

This raises the question of whether the concept of WMD is still relevant as a means for understanding the complexity and dynamics of life in the early decades of the 21st century. Several terms have entered the lexicon of proliferation language, especially since 9/11. These have included 'mass casualty terrorism', 'weapons of mass disruption' and 'weapons of mass effect'. Additionally, as already indicated in this paper, in recent years the term CBRN has appeared and, for many analysts, this represents a more appropriate basis for characterizing the spectrum of weapon types (highlighting their differences) that needs to be dealt with.

The concept of WMD stems from debates within the United Nations immediately after the organization was founded. In 1948, the United Nations Commission for Conventional Armaments introduced a categorical distinction between what were termed 'weapons of mass destruction' and 'conventional ordnance'.⁷ As the Commission outlined the category, WMD included, "...atomic explosive weapons, radioactive material weapons, lethal chemical and biological weapons, and any weapons developed in the future which have characteristics comparable in destructive effect to those of the atomic bomb or other weapons mentioned above." This categorical definition subsequently formed the consensual basis for negotiation of international agreements such as the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT); but the interpretation of WMD has changed over time because the distinction between 'lethal' and 'non-lethal' (or more accurately, incapacitating) biological and chemical weapons disappeared in the 1972 Biological Weapons Convention (BWC) and the 1993 Chemical Weapons Convention (CWC).

Some analysts now consider that the term WMD should be revisited because each weapon type has different effects (lethality), has different methods of production, and generates different

⁶ Jessica Stern, 'Getting and Using Weapons' Russell D. Howard and Reid L. Sawyer (Editors), Terrorism and Counterterrorism (Guilford, McGraw-Hill/Dushkin, 2000) pp. 158-171

⁷ John Simpson, 'The UN's Role in Disarmament: Retrospect' Contemporary Security Policy, 15:1 April 1994, pp. 55-67.

⁸ United Nations, Document UN S/C.3/SC.3/7/Rev.1 1947

challenges for international security.⁹ The term CBRN incorporates both the means of production and acquisition as well as the spectrum of effects that each weapon-type produces. At the same time, analysts should not lose sight of the important characteristics associated with the WMD concept, as this has formed a basis for international policy responses for over 50 years. Moreover, it may still provide the consensual platform for future responses to international terrorism. The analysis that follows thus begins with the most destructive end of the spectrum by discussing nuclear weapons, and moves towards the other end where chemical weapons are situated.

Nuclear Weapons

The term 'nuclear weapon' is used to describe two types of devices: atomic (fission) and thermonuclear (hydrogen). It is most unlikely that a terrorist group would seek to manufacture a thermonuclear device, while the probability that they could acquire one by theft from one of the seven (or eight) states known to possess such weapons is extremely remote. Even if they did, reconfiguring it to explode at a time and place of their choosing, or successfully triggering a thermonuclear explosion by external means such as exploding conventional explosives alongside it, would be difficult. Consequently, only international terrorist acquisition or manufacture of atomic devices is considered in this paper.

Two materials that are difficult to obtain – uranium highly enriched in its isotope 235 and/or plutonium with a high content of its isotope 239 – are necessary either alone or in combination to generate a fission explosion. While the knowledge of certain aspects of nuclear weapon manufacture has become more commonplace, some consider that developing a reliable, fully deliverable weapon is still beyond the reach of even the most sophisticated group. The fissile material involved has to be manufactured through processes that are relatively complex. Similarly, developing the non-nuclear assembly involves material and technologies, which, although more readily available, are restricted in their uses and thus, their manufacture and distribution is controlled internationally.

One consequence of this is that for any terrorist group to acquire a nuclear weapon there would be two generic routes: theft, capture or purchase of a nuclear weapon produced by a state; or theft or purchase of the necessary fissile materials and their configuration into the shapes required for a basic nuclear device. In a recent study, the range of possibilities that might be available were identified as: theft and detonation of an intact nuclear weapon, theft or purchase of fissile material leading to an improvised nuclear device (IND) or crude nuclear weapon, attacks and/or sabotage of nuclear facilities and unauthorized acquisition of radioactive materials contributing to a Radiological Dispersal Device. With regard to deployable nuclear weapons, unless assisted, any theft, capture, or purchase would have to overcome not only the security at the installation where the weapon is stored but also the

⁹ Wolfgang K.H Panofsky, 'Dismantling The Concept of "Weapons of Mass Destruction" *Arms Control Today*, 28:3, April 1998, pp. 3-8. Christopher F. Chyba and Alex L. Greniger, 'Biotechnology and Bioterrorism: An Unprecedented World' *Survival* 46:2 (summer 2004) pp. 143-162.

Alexander Kelle and Annette Schaper, 'Terrorism using biological and nuclear weapons' PRIF Research Report No. 64, p. 18

¹¹ Charles D. Ferguson, William C. Potter with Amy Sands, Leonard S. Spector, and Fred L. Wihling, *The Four Faces of Nuclear Terrorism* (Monterey, Center for Nonproliferation Studies, 2004) p. 3

locks and codes that prevent unauthorized use.¹² Thus, the scenario that some consider to be more realistic, but not inevitable, would be the acquisition of a weapon from either North Korea or Pakistan, or possibly through theft from the Russian Federation.¹³

In addition, in a submission to the WMD Commission (Blix Commission), it was suggested that an appropriate means for understanding terrorist use of a nuclear device was via a 'chain of causation' model. Based on a Harvard University study of March 2003, the analysts considered that this 'chain' incorporated a sequential progression involving: motivational objectives; a decision to engage in nuclear terrorism; acquisition of the necessary materials through gift, purchase, theft, or diversion; an ability to transport and deliver the weapon to the target; and an ability to carry out the attack.¹⁴

The sources of nuclear materials that could be used to manufacture a rudimentary device – in contrast to a fully operational nuclear weapon – range much wider. It remains unclear, for example, whether unrecorded caches of fissile material exist in the states of the former Soviet Union, or whether it would be possible to steal such material from locations in the Russian Federation itself. A key aspect in making judgments in this area remains the availability of reliable data. As a study by the Monterrey Institute for International Studies observed:

Attempts to discern patterns and trends in illicit nuclear trafficking are complicated by at least three data limitations. First, the number of confirmed cases is relatively small. Second, there is a high probability that the actual number of cases is much larger and that the sample we have discerned is unrepresentative of the larger universe of incidents. Third, the quality and scope of available information is very uneven and often is contradictory.¹⁵

While the study concluded by noting that more information was becoming available, it accepted that assessments would still be limited. Nevertheless, the International Atomic Energy Agency's (IAEA's) *Illicit Trafficking Database* (ITDB) lists 540 illicit trafficking incidents "...reported or otherwise confirmed...between 1993 and December 2003....182 incidents involved nuclear material, 335 incidents involved radioactive material other than nuclear material, and 23 incidents involved both nuclear and other radioactive materials." ¹⁶

A means of delivering the device would also need to be found. A terrorist group is not likely to be able to use a ballistic missile as the method of delivery. Rather, any device would have to be brought in by sea, a navigable river or a conventional air or land route. In the latter cases, the artifact would still be very heavy and of a significant size. This assessment could change if the reports that the former Soviet Union produced more compact nuclear weapons

¹² Jessica Stern, 'Getting and Using Weapons' Russell D. Howard and Reid L. Sawyer (Editors), *Terrorism and Counterterrorism* (Guilford, McGraw-Hill/Dushkin, 2000) p. 164

Amitai Etzioni, 'Pre-empting Nuclear Terrorism in a New Global Order' The Foreign Policy Centre (October 2004) http://fpc.org.uk/fsblob/314.pdf

¹⁴ Charles D. Ferguson and William C. Potter, 'Improvised Nuclear Devices and Nuclear Terrorism' Paper No. 2 Weapons of Mass Destruction Commission. http://www.wmdcommission.org/

¹⁵ William C. Potter and Elena Sokova, `Illicit Nuclear Trafficking in the NIS: What's New? What's True?', *The Nonproliferation Review*, Summer 2002, p. 16.

International Atomic Energy Agency, 'IAEA Illicit Trafficking Database (ITDB) 1993-2003' http://www.iaea.org/NewsCenter/Features/RadSources/PDF/itdb_31122003.pdf

were confirmed, and if not all such weapons had subsequently been accounted for. If such weapons were available to international terrorist groups, then it must be presumed that this would allow for greater ease of delivery.

One observation stemming from recent analyses of the issues is that, "...nuclear terrorism experts generally agree that the nuclear terror acts with the highest consequences are the least likely to occur because they are the most difficult to accomplish."¹⁷ In addition, it was noted that an IND represents the most challenging type of nuclear terrorism to perpetrate because it requires extensive financial and technological resources, as well as a secure facility to develop and produce the weapon itself - even before it is transported to the target.¹⁸ There is, however, recognition that certain types of weapon design may be attainable:

In principle, it remains possible for a highly motivated and financially well-endowed terror organisation to acquire the technical abilities necessary to manufacture an ignition mechanism for a nuclear explosive device. Most informed observers are of the view that a gun-type device could be developed by terrorists. However, this would require enormous efforts. Various specialists would have to acquire the necessary knowledge and skills in university study abroad....The organisation would need shelter for several years, where they can work undisturbed and carry out the necessary experiments.19

As a consequence, it is felt that only an international group with global resources and strong motivation could undertake an operation of this kind. Thus:

Al-Qa'eda is likely the only network with all the requisite characteristics...to pursue nuclear terrorism of the most extreme form, either by acquiring or developing a nuclear weapon. While other terrorist groups might show an interest in nuclear terrorism, their interest will most likely be in less extreme forms of nuclear terrorism, and their abilities to operationalize such an interest may be limited.²⁰

Consensus emerges on the key factor being access to fissile material, most notably access to highly enriched uranium (HEU). A recent assessment characterized the implications of this:

Preventing nuclear terrorism will require a comprehensive strategy: one that denies access to weapons and materials at their source, defends every route by which a weapon could be delivered, and addresses motives as well as means....The centerpiece of a serious campaign to prevent nuclear terrorism – a strategy based on three no's (no loose nukes, no new nascent nukes, and no new nuclear weapons states) – should be denying terrorists access to weapons and their components.²¹

Notwithstanding any discussion of what would be required to implement such a comprehensive strategy, the principal lesson is a pertinent one: preventing access to HEU,

¹⁷ Charles D. Ferguson, William C. Potter with Amy Sands, Leonard S. Spector, and Fred L. Wihling, *The Four* Faces of Nuclear Terrorism (Monterey, Center for Nonproliferation Studies, 2004) p. 5

¹⁸ *Ibid*, p.35

¹⁹ Alexander Kelle and Annette Schaper, 'Terrorism using biological and nuclear weapons' PRIF Research Report No. 64 p. 19

²⁰ Charles D. Ferguson, William C. Potter with Amy Sands, Leonard S. Spector, and Fred L. Wihling, 'The Four Faces of Nuclear Terrorism' (Monterey, Center for Nonproliferation Studies, 2004) p. 37

²¹ Graham Allison, 'How to Stop Nuclear Terror' Foreign Affairs 83:1 (January/February 2004) pp. 68-69

Plutonium and the materials required for a radiological device is the key to stemming nuclear terrorism.

Other analysts concur on this point. For example, Charles Ferguson and William Potter advocate four steps to reduce such threats: (1) adopt an HEU-first policy, whereby securing HEU takes precedence over attempting to secure weapons-grade plutonium; (2) secure Russia's most vulnerable nuclear weapons; (3) focus on South and Central Asia as the zone where Islamic militant groups are active and access to nuclear materials – in parts of Pakistan, Kazakhstan and Uzbekistan – is highest; and (4) promote stringent global security standards for the physical protection of nuclear material. Similarly, Matthew Bunn and George Bunn consider that there is an urgent need for a multilateral initiative that has as its long-term goal the protection and accounting for of weapons-usable nuclear materials that is as rigorously applied ...as the nuclear weapons states protect and account for nuclear weapons themselves."

Radiological Weapons or Radiological Dispersal Devices

Radiological weapons and RDDs are intended as a means for denying the use of territory or for spreading radioactive materials over as wide an area as possible, thereby causing contamination and human casualties. These devices usually involve conventional high explosives in combination with radioactive material. Both elements necessary for this category of ordnance are more accessible than those necessary for nuclear weapons; conventional explosives like Semtex can be obtained relatively easily, while sources of radioactive material can be found in a variety of industrial, medical and power-generating locations.²⁴

Radiological weapons can also be disseminated by both active and passive means. The material could originate from a nuclear reactor in the form of used fuel rods or the waste produced; from medical uses in hospitals (such as for cancer treatment); from agricultural uses (such as for pest control or the preservation of fresh food); and from industrial sources (such as for examining welds and for oil well logging). Many radioactive sources exist in both the advanced, industrial parts of the world and in the areas that are less economically advanced. The number of potential sources and their wide distribution also make it difficult to prevent unauthorized or terrorist acquisition. In some countries, particularly those that once formed part of the Soviet Union, there is a problem of 'orphaned sources', where records of the nature and localities of the radioactive materials created and distributed prior to 1991 have ceased to exist or are not readily accessible. Such materials were either used to generate power in remote locations or to irradiate food for long-term preservation. And because radiological sources of this nature may be accessible, relatively small, and safe, they can also be of greater portability when placed in a shielded container.

²² Charles D. Ferguson and William C. Potter, 'Improvised Nuclear Devices and Nuclear Terrorism' Paper No. 2 Weapons of Mass Destruction Commission. Available at: http://www.wmdcommission.org/

Matthew Bunn and George Bunn, 'Reducing the Threat of Nuclear Theft and Sabotage' IAEA- SM-367/4/08, p. 15 http://www.iaea.org/NewsCenter/Features/Nuclear_Terrorism/bunn02.pdf

²⁴ See: Annette Schaper, 'Nuclear terrorism: risk analysis after 11 September 2001' *Disarmament Forum* 2003:2 p.13. Tonya L. Putnam, 'Communicating Nuclear Risk: Informing the Public about the Risks and Realities of Nuclear Terrorism' Workshop Report May, 20, 2002. October 2002. pp. 7-10 http://iis-db.stanford.edu/pubs/20063/NuclearRisk.pdf

Used fuel is found in several locations worldwide but is less easily accessible than many of the materials discussed above, as it is usually located in underwater storage ponds. This source of material is larger in composition, weighs more than other sources and is likely to be more radioactive, making it difficult to shield when removed from a pond. On the other hand, this source of radiological material may be less well guarded than those used in nuclear weapons and it is often stored either at power stations or research reactors – or moved to a central location for storage and reprocessing.

Three general types of radiological dispersion situations or RDDs can be envisaged. One is the active dispersion of such material by wrapping it around a conventional explosive whose blast effects would then distribute the material. A second is to use some type of passive distribution device (e.g., a car) to spread the material around a locality or via a ventilation system. This would probably be injurious to the health of the individuals involved, and thus border on being a suicide activity. The third would be to attempt to breach the containment of a nuclear power station, a used nuclear fuel cooling pond or a highly active waste storage facility using explosives or kinetic energy. The latter scenario, although likely to generate a long-term effect (as the Chernobyl experience indicated), would be a very difficult operation to execute. It would require either very skilled piloting of a large aircraft (acting as a fuel-air explosive) to make an accurate impact on the designated target or a large force using significant amounts of plastic explosive.

An additional concern in this context is the potential for sabotage of research reactors. In 2003 specialists in this area concluded that:

Terrorists could do considerable damage through a sabotage attack on a research reactor of medium or larger size, and that these reactors are generally not as well protected from outside attackers as nuclear power reactors. The consequences of a successful sabotage attack could be significant radioactive release and contamination of an area near the reactor site. Since many research reactors, unlike most power reactors, are located within or close to populated areas, they may present a greater threat of disruption to the public from a sabotage attack than do most power reactors.²⁵

A caveat may also apply in the case of the first scenario outlined above. Any group seeking an RDD capability would find technical impediments to construction and to the eventual dissemination of radioactivity to a target. This is due to the nature of the radioactive substance and its heat-generating propensities, the type of physical environment where the RDD is released and the climatic conditions at the time. Cities, especially, are considered to present difficulties to potential attackers because the buildings would absorb certain amounts of the radiation. One scenario using an RDD led to the conclusion that "…[f]urther than a few blocks from the detonation site, the blast exposure dose would not exceed the level of everyday environmental background exposure."

Tonya L. Putnam, 'Communicating Nuclear Risk: Informing the Public about the Risks and Realities of Nuclear Terrorism' Workshop Report May, 20, 2002. October 2002. p.7 http://iis-db.stanford.edu/pubs/20063/NuclearRisk.pdf See also, Jessica Stern, 'Getting and Using Weapons' Russell D.

²⁵ George Bunn, Chaim Braun, Alexander Glaser, Edward Lyman, Fritz Steinhausler, 'Research Reactor Vulnerability to Sabotage by Terrorists' *Science and Global Security* 11 (2003) p.103.

The physical impact of an RDD would be a product of the radioactivity of the material being dispersed, the quantity of material involved and the concentration of the material achieved by the distributing device. As such, unless large quantities of highly radioactive material were involved, it seems likely that a lack of concentration of the material would limit the immediate deaths and leave the medium- and long-term casualties from cancers and other causes uncertain.

Yet if a device, or more passive means of delivery, were used in such a way as to deliver radiological material to high-value economic or governmental sites in state capitals or major cities, the impact would be much greater than the use of explosives alone. Significant social, economic, and political consequences could result. Thus, this type of RDD use might best be characterized as creating a mass disruptive, rather than mass destructive, impact. The first use of an RDD could also stimulate interest in this activity among terrorist groups with more political aims if mass disruption, but not major loss of life, were to result.²⁷

Biological Weapons

A biological weapon is essentially the deliberate use of disease and includes *any* biological agent – whether bacteria, virus, fungi or other (e.g., prion) – although only some pathogens are of real utility in terms of biological warfare and/or bioterrorism.²⁸ Bioterrorism should not, however, be understood as only encompassing human or zoonotic pathogens; it must include anti-animal and anti-plant pathogens. The latter elements have generally been brought together under the term 'agricultural terrorism', given that the likely targets are related to crops and animal husbandry. The best example of the potential impact of this type of terrorism is the 2001 Foot and Mouth virus (FMV) outbreak in the United Kingdom, which was a natural occurrence of FMV.²⁹ Bioterrorism must also take account of the distinctions between 'lethal' and 'non-lethal' pathogens.

Sources of the pathogens exist across the world in culture collections, laboratories, civil and military facilities, and naturally in the environment. The possibility of access to the pathogens is therefore theoretically high, but this must be tempered with the degree of knowledge required to exploit a pathogen to achieve the desired objective. Although there are general concerns, that cannot be ignored, about the potentially devastating consequences of bioterrorism, a number of caveats need to be considered. First, the theoretical potential of biological agents as weapons has been based on extensive studies of the *military quantity* and *military quality* of a pathogen, usually delivered via an aerosol. The outcome here is likely

Howard and Reid L. Sawyer (Editors), Terrorism and Counterterrorism (Guilford, McGraw-Hill/Dushkin, 2000) pp. 162-3.

²⁷ For a discussion see: Charles D. Ferguson, Tahseen Kazi and Judith Perera, 'Commercial Radioactive Sources: Surveying the Security Risks', *Center for Nonproliferation* Studies, Occasional Paper No.11 (January 2003); Charles D. Ferguson, William C. Potter with Amy Sands, Leonard S. Spector, and Fred L. Wihling, 'The Four Faces of Nuclear Terrorism' (Monterey, Center for Nonproliferation Studies, 2004).

²⁸ In the UK the 'Category A' agents, those deemed of particular risk, are: Anthrax, Smallpox, Botulism, Plague, Tularaemia, and viral haemorrhagic fevers (VHF) such as Lassa, Marburg and Ebola. http://hpa.org.uk/infections/topics_az/deliberate_release/categoryaagentsmatrix.asp

²⁹ Virginia Gewin, 'Agricultural Shock' *Nature* 421 9 January 2003, pp106-108; Mark Townsend, 'Bioterrorists may mount foot and mouth attack' *Observer* 5 January 2003, p. 8

to be in the thousands, and possibly hundreds of thousands, of casualties, though meteorological and environmental conditions would affect the overall effectiveness of the weapon. Second, there is no large-scale, deliberate use of biological weapons documented in history that has produced hundreds of thousands of casualties. There are, however, a number of naturally occurring outbreaks of disease that have produced such numbers of casualties. Third, effective dissemination of a biological weapon to cause mass casualties (in terms of thousands) would most likely be via an aerosol, and that poses a number of significant technical problems. Fourth, dissemination itself is no guarantee of 'success' because not everyone exposed will become infected, all infected will not necessarily progress to the disease, and not all those with the disease will necessarily die from it. These four factors are not to be interpreted as discounting the threat posed by bioterrorism; they do suggest, however, that scenarios involving military quantities of a military quality pathogen may be poor indicators of future events and trends.³⁰

Delivery via non-airborne means, such as water supplies or the food supply, presents a greater number of historical examples and has recently come back into focus. While instances of contamination of food and water had certainly occurred prior to the advent of the current terrorist threat, the risk posed by contamination in this new context has to be put into perspective. Attacking the food supply at the point of delivery to the general population limits the numbers at risk or that can be targeted. Examples of this would be the *Rajneeshee* cult attack on salad bars in 1984 with *salmonella typhimurium* that resulted in 751 casualties, or extortion attempts against supermarkets and companies. Attacking the food supply at the point of preparation (i.e., the processing and manufacturing plant), would require the perpetrator(s) to circumvent existing food safety and management procedures within the facility. While not impossible, carrying out such an attack on a large scale without anyone noticing – or without the contamination being picked up by quality control and safety checks – is difficult. The food industry is highly-regulated and food safety management is of significant importance, not least in terms of product branding and public confidence.

A similar qualification is required when considering threats to the water supply. Mandatory water treatment procedures would locate many contaminants as part of the day-to-day safety checks. In addition, legislation designed to ensure water safety – buttressed by public expectations of a safe water supply – acts as a major sentinel in this area. Under existing regulations governing the supply of drinking water, contamination is part of everyday risk management. Moreover, the sheer scale of an attacker's task, in terms of the millions of gallons of water involved and thus, the amount of contaminant required to overcome the natural dilution effect, should not be underestimated. So, while there are a number of new challenges posed by the terrorist threat, many basic procedures through which to prevent, detect, and respond to an attack are already in place.³¹

³⁰ Milton Leitenberg, *The Problem of Biological Weapons* (Stockholm, Swedish National Defence College, 2004) p. 120; Clive Cookson, 'Scientists play down risk of bioterrorism' *Financial Times* 30 January 2003, p. 6; 'CIA: Small al-Qaida Attacks More Likely' Associated Press, 3 June 2003 (12.23)

³¹ Valerie Seefried, 'Keeping our drinking water safe' Homeland Security & Resilience Monitor 2:9 (December 2003/January 2004) pp. 12-15. See also Annex 5 'Precautions Against the sabotage of drinking-water, food, and other products' World Health Organization, Public health response to biological and chemical weapons: WHO guidance (WHO, Geneva, 2004) pp. 294-319

Chemical Weapons

The West has been dealing with the threat posed by chemical weapons for many years from the military perspective, but investigation of the use of toxic chemicals has been a regular law enforcement issue for an even greater length of time.³² Additionally, other emergency services have dealt with numerous chemical incidents caused either by accidents or deliberate contamination. It is important to note that here we are talking about all chemical agents, because under the 1993 Chemical Weapons Convention 'toxic chemical' means:

Any chemical which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals. This includes all such chemicals, regardless of their origin or of their method of production, and regardless of whether they are produced in facilities, in munitions or elsewhere.

The main point is that *any* chemical – and not simply those referred to as classic chemical weapons – may pose a threat. Moreover, the use of chemicals to achieve death or harm to humans is in no way a 'new' or a 'mass destruction' issue. For example, the chemical agent "...that has thus far figured most commonly in deliberate releases in the United States has been not some deadly nerve gas, but butyric acid, which is a malodorant." However, concerns over chemical terrorism have increased because of two well-known sets of attacks: those perpetrated by *Aum Shinrikyo* in Japan, notably on the Tokyo subway system in 1995, and those employing anthrax, which took place in the United States in October and November of 2001. Fears of chemical attack were also enhanced when the military intervention in Afghanistan produced evidence of an *al-Qa'eda* interest in CBRN.

Despite the considerable amount of money spent by *Aum Shinrikyo* and the freedom granted to the group – under then existing Japanese legislation – to research, develop and produce chemical weapons on Japanese territory, the quality of the sarin produced was deemed to have been poor (at least in Tokyo). That 'freedom' has in effect been removed, and any group attempting today to produce the kind of chemical weapon capability *Aum Shinrikyo* attempted to develop, in a Western state, would find more barriers in its way. Additionally, shifting quantities of dangerous chemicals across continents is not a simple task.

Attacks on industrial chemical plants pose a different type of threat, whether by sabotage or direct attack using explosives or other means. Although health-related and fire emergency services are already geared up to respond to chemical plant incidents and chemical accidents, the risk in this area is much greater. Toxic industrial chemicals and toxin industrial materials were ranked by NATO's International Task Force-25 (ITF-25) in 1998 in a hazard index. On the high hazard list are chemicals such as chlorine, formaldehyde, hydrogen cyanide, and nitric acid. On the medium hazard list, methyl isocyanate was the chemical responsible for at least 2,500 deaths in December 1984 in Bhopal, India. Many chemical plants and the chemicals within them are not fully protected against potential terrorist attacks. In the United States, for example, one report stated that:

³² Katherine Watson, Poisoned Lives: English Poisoners and Their Victims (London, Hambledon & London, 2003)

World Health Organization, 'Public health response to biological and chemical weapons: Who guidance' (Who, Geneva, 2004) p.19.

³⁴ Gustav Lindstrom, 'Protecting the European Homeland: The CBR dimension' *Chaillot Paper no. 69* (July 2004) EU Institute for Security Studies, p. 22.

Across the country, each of 123 plants could endanger more than 1 million people if a terrorist attack released toxic clouds. Another 700 plants could threaten 100,000 people each. Another 3,000 plants could threaten 10,000 people each.³⁵

The basis of that report has subsequently been revised by the United States, but the original data is indicative of the scale of the problem. As with biological weapons, attacking the food supply at point of preparation would require the perpetrator(s) to circumvent existing food safety and management procedures within the plant. Attacks on agriculture with chemical weapons are a possibility but their effect would be limited in terms of human casualties if that was the aim. Again, as with biological weapons threats to the water supply, the sheer scale of the task in terms of the millions of gallons of water involved vis-à-vis the amount of contaminant required, and the natural dilution effect should not be underestimated.³⁶

Scoping the Threat

Basing the immediate future on assessments of the past is fraught with difficulty, but in the area of CBRN it is also necessary. Although there is no linear progression of lethality and terrorist use of CBRN on which accurate predictions or threat assessments can be made, there is value in taking account of the past when assessing the current and future threat. Placing current events in context, however, is a necessary precautionary measure. Studies up to the end of 2002 suggest that there is little increase in the actual number of CBRN incidents.³⁷

The authors of the WMD Terrorism chronology recognize that the data set is too small to draw any significant conclusions, but the observations from the data in the full report are interesting. For example:³⁸

- Incidents involving CBRN materials in 2002 have dropped worldwide, primarily as a result of the dramatic reduction in the number of anthrax hoaxes;
- In terms of CBRN use, the locus has shifted away from the United States and Canada to become more diffused worldwide; and
- Biological agents are still the preferred material of hoax perpetrators, chemical
 materials are the "agent of choice" for actual usage and "household" chemicals with
 a low probability of inflicting massive casualties are found in the majority of
 recorded incidents.

The evidence of terrorist interest in CBRN weapons certainly exists, but, as a selection of chemical and nuclear incidents after 9/11 according to other open sources reveals, interest in CBRN and successful use of these capabilities are not the same. The evidence suggests that the current CBRN threat would appear to be based on fairly basic and crude weapons. Of course, the groups involved may have learnt lessons by reading the open literature and threat assessments produced since 2001 and might have already developed – or be developing – a

^{35 &#}x27;Chemical terrorism' The Charlotte Observer [online edition] 9 June 2003

Valerie Seefried, 'Keeping our drinking water safe' Homeland Security & Resilience Monitor 2:9 (December 2003/January 2004) pp. 12-15

Wayne Turnbull and Praveen Abhayaratne, '2002 WMD Terrorism Chronology: Incidents Involving Sub-National Actors and Chemical, Biological, Radiological, and Nuclear Materials' Center for Nonproliferation Studies 2003 at: http://www.cns.miis.edu/pubs/reports/pdfs/conv2k2.pdf

³⁸ Ibid., p. 7

more sophisticated approach to CBRN. However, in terms of qualifying the threat assessments, we can use, and revise slightly, Ron Purver's 1995 typology of 5 types of 'threat' with chemical and biological weapons.³⁹ A revised typology including all CBRN might look thus:

- (1) Threats to use CBRN weapons without any evidence of actual capabilities;
- (2) Unsuccessful attempts to acquire CBRN weapons;
- (3) Actual possession of CBRN weapon(s);
- (4) Attempted, unsuccessful use of such CBRN weapons;
- (5) Successful use of CBRN weapons.

While there have been no spectacular attacks, all five have materialized with different weapons. Two additional studies of the principal cases often cited in the literature also reveal a mixed bag of attempts and threats. 40 Much of the information that is available in the public domain cannot be comprehensively validated, but a range of groups and individuals have historically expressed an interest in or attempted to develop CBRN weapons. This includes, left wing groups {Weather Underground (1970), Red Army Faction (1980)}, radical ecoterrorists {R.I.S.E. (1972)}, religious cults {Rajneeshees (1984), *Aum Shinrikyo* (1995)}, national liberation movements {Tamil Guerrillas (1980)}, right wing, Aryan, and Christian fundamentalists {Minnesota Patriots Council (1991) individuals such as Larry Wayne Harris (1995 & 1998) Chechen groups (mid-1990s onwards), radical Islamists (1988 onwards)}, as well as opportunistic individuals or criminals, as in the 1972 Oak Ridge incident.

Using Purver's typology, at this stage we appear to be in the area of (1) to (3): unsubstantiated threats; unsuccessful attempts at acquisition; and, limited actual possession of certain CBRN weapons. Unsuccessful use (4) has occurred and the 1995 incidents in Japan, the anthrax mailings in the United States, and reports of chemical-related incidents in 2003 and 2004 can also be categorized as (5) in terms of 'successful' use.

The principal lesson, however, is that the threat is not yet in the realm of mass destruction. Indeed, to date most of the CBRN incidents are not that sophisticated. Awareness and caution are certainly warranted in this area and governments and policy-makers are wise to put in place additional security measures to protect vulnerable facilities and possible targets. This includes also, preparing to deal with incidents and attacks via consequence management. That said, any assessment of the threat and risks involved in CBRN terrorism should not be blinded by hyperbole.

III. Some Conclusions

Two obvious conclusions can be extrapolated from the limited available evidence. First, that it is at the lower end of the CBRN spectrum where potentially the most significant challenges are, at least for the immediate future. Adam Dolnik, for example, has observed that when particular groups have used CBRN, 'the primary weapons of choice have been chemical

^{39.} Ron Purver, 'Chemical and Biological Terrorism: The Threat According to Open Literature' (Canadian Security Intelligence Service) Unclassified June 1995 p. 33

^{40.} Jonathan B. Tucker (Editor), *Toxic Terror: Assessing Terrorist Use of Chemical and Biological Weapons* (MIT Press, Cambridge Mass., 2001); and Nadine Gurr & Benjamin Cole, *The New Face of Terrorism: Threats from weapons of mass destruction* (I.B. Tauris, London, 2000)

(CW).⁴¹ These are everyday chemicals and other materials widely available in civil, industrial, and municipal facilities. The second lesson is that there could still be an opportunity to thwart or delay capabilities at the other end of the spectrum emerging. To be clear, while analysis and assessment cannot discount the threat of sophisticated CBRN weapons, or true WMD, the evidence from both state-level WMD programs and from the available information to date on terrorist development and use of CBRN suggests that the technical barriers to development, production, dissemination and/or use remain significant.

In considering the choice of weapon in the future, increases in the number of casualties and disruption have been achieved with conventional rather than CBRN weapons. In terms of technology, acquisition, costs and funding, transport, and deployability, conventional weapons may still be regarded as the 'superior' weapon of choice as such weapons can achieve the required symbolism in an attack. This could change, and may already be changing, as the capacity to develop new forms of weapon become available through globalization and technological revolution.

With regard to CBRN terrorism Bruce Hoffman has observed that, *inter alia*, terrorism as a whole is becoming more diffuse, amorphous, less centralized, and with more opaque command and control relationships. As he indicates, this not only required a change in how terrorism is countered, studied and understood, but also a recognition of the different kinds of threat terrorists – and especially those who might use CBRN – operate. At the same time, there are factors that may delay or prevent certain types of CBRN acquisition occurring. The safe haven, time, networks, freedom, access, and surprise required to tilt the odds in favor of a group seeking to develop, produce, weaponize, and use true mass destruction weapons are all diminishing. If that continues to be the case, it is both a success of efforts in the war on terrorism and efforts to reduce the CBRN threat. It is not a reason to be complacent: but, it is a reason to suggest that the success of relative 'non-use' to date can be built upon.

How might this be accomplished? Both before and after 9/11 there was recognition that a layered and integrated approach to the CBRN issue was required. The conceptual approach was not unlike the state-to-state one more familiar to many defense and security specialists. Thus thinking remained in terms of deterrence, detection, pre-emption, interdiction, defense, prevention, and consequence management.⁴³ The layered approach is not novel either in terms of state security threats and problems or in dealing with international terrorism. For example, in the *National Strategy for Combating Terrorism* the U.S. approach is:⁴⁴

A strategy of direct and continuous action against terrorist groups, the cumulative effect of which will initially disrupt, over time degrade, and ultimately destroy the terrorist

http://www.whitehouse.gov/news/releases/2003/02/counter_terrorism/counter_terrorism_strategy.pdf

^{41.} Adam Dolnik, 'Die and Let Die: Exploring the Links between Suicide Terrorism and Terrorist Use of Chemical, Biological, Radiological, and Nuclear Weapons.' *Studies in Conflict & Terrorism* 26:1 (January-February 2003) p. 31

^{42.} Bruce Hoffman, 'The Changing Face of Al Qaeda and the Global War on Terrorism' Studies in Conflict & Terrorism 27:6 (November-December 2004) p. 556

^{43.} John Simpson and Jez Littlewood, 'A Framework for Assessing UK Responses to CBRN Terrorism' BISA 28th Annual Conference University of Birmingham, 17 December 2003

^{44.} United States, National Strategy for Combating Terrorism 2003, p.2

organizations. The more frequently and relentlessly we strike the terrorists across all fronts, using all tools of statecraft, the more effective we will be.

This strategy also drew attention to a '4D' approach of *defeat, deny, diminish, and defend* and called for the defeat of 'terrorist organizations of global reach through the direct or indirect use of diplomatic, economic, information, law enforcement, military, financial, intelligence, and other instruments of power. '5 Similarly, the U.S. *Joint Doctrine for Combating Weapons of Mass Destruction* noted the requirement for an integrated approach that emphasizes non-proliferation, counter-proliferation, and consequence management. '6

Others have pointed to the broader beneficial outcomes that stem from dual-use measures. John Parachini endorsed the idea of dual-use measures that benefit society on a daily basis and also help prevent terrorism because '[e]liminating all possibility of terrorist groups or individuals using CBRN weapons is impossible.' The World Health Organization also underlined the importance of using existing systems to protect public health and augment these where appropriate as a response to biological and chemical weapons. Thus, integrating dual-use type measures into more traditional emergency and disaster responses, while at the same time augmenting capacities where necessary, could provide the basis for a robust and durable preparedness program. 49

The way forward could be the pursuit of an integrated strategy that involves the management of CBRN threats over the long term, while also paying attention to novel or short-term situations and risks. Consequently, prevention includes upholding the normative and legal prohibitions related to WMD in the NPT, BWC, and CWC as well as the supplemental agreements that support them such as the export control arrangements, the Proliferation Security Initiative, and other regional and multilateral agreements. It also embraces other regulatory approaches to disease monitoring and prevention while acknowledging that the security and safety of facilities and laboratories has to be supported where controls are substandard, as in the Co-operative Threat Reduction activities under the G8 Global Partnership. Equally, it embraces the requirement for more effective regulation, control and oversight of materials, equipment and knowledge within a state itself. In summary, countering CBRN terrorism requires a similar approach to countering WMD in all forms; a strategy stretching from the individual to the international.

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46. US, Joint Doctrine for Combating Weapons of Mass Destruction' 8 July 2004 http://www.fas.org/irp/doddir/dod/jp3_40.pdf

^{45.} US, National Strategy for Combating Terrorism p. 15

^{47.} John Parachini, 'Putting WMD Terrorism into Perspective' *The Washington Quarterly* 26:4 (Autumn 2003) p. 47.

^{48.} World Health Organization, 'Public health response to biological and chemical weapons: Who guidance' (WHO, Geneva, 2004)

^{49.} Richard A. Falkenrath, 'Problems of Preparedness: U.S. Readiness for a Domestic Terrorist Attack' *International Security* 25:4 (Spring 2000) p. 182

Observations on the Nature of the Terrorist Threat

Amy E. Smithson, Ph.D.

I. Introduction

In the absence of a crystal ball and wishing to avoid speculation, responsible analysts are compelled to examine history and to pour over statistics to make projections about what terrorists are most likely to do in the years to come. Such sources point to conventional weapons as the tools that terrorists probably will turn to for the foreseeable future, followed in declining order by chemical, radiological, and biological weapons. Depending on whether one sees the glass as half empty or half full, the terrorist track record with unconventional weapons can provide both reassurance and concern.

When projecting the likelihood of whether terrorists will successfully acquire and use more technically demanding weapons, analysts should also consider not just the technical challenge but the sociological factors that could influence whether terrorists can or cannot obtain and successfully wield unconventional weapons. Many analyses slight sociological factors in favor of more tangible discussions of whether terrorists can afford or operate widget "x." However, sociological factors can play a determining role in whether terrorist groups are able to achieve their objectives. In the case of Aum Shinrikyo, sociological factors were very influential in the cult's failure to master chemical and biological weapons. Aum's members and many of its carefully recruited scientists were brain washed, drugged, famished, and sleep deprived. Such conditions are hardly conducive to high-level scientific and technical performance and may be a major reason why Aum's corps of scientists and technicians made such juvenile mistakes as using a sprayer that sprayed backwards, donning amateurish self-protection gear, and employing safety practices that jeopardized worker safety. More clear-headed scientists would probably not have made these types of technical gaffes. To the extent that terrorist groups seeking to cross into the use of unconventional weapons impair themselves by placing the individuals assigned that mission in an environment that can distort their ability to resolve technical problems, they are likely to fall short of the mark.

Another factor that needs to be taken into consideration when analyzing terrorist capabilities is the tendency for nations/groups to aggrandize the enemy, particularly in the aftermath of a horrific attack or when a threat is sharply perceived. Following *Aum Shinrikyo*'s 20 March 1995 sarin gas attack against Tokyo subway commuters, the cult was credited with causing far more injuries than in fact occurred and with achieving weapons capabilities that it never possessed. For instance, countless media accounts use the casualty statistic 5,500, which is a one hundred-fold exaggeration of the serious and critical injuries from the attack.

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¹ For a more thorough description of Aum's chemical and biological weapons programs, see Amy E. Smithson, "Rethinking the Lessons of Tokyo," in *Ataxia: The Chemical and Biological Terrorism Threat and the U.S. Response*, Amy E. Smithson and Leslie-Anne Levy, report no. 35 (Washington, DC: Henry L. Stimson Center, October 2000), 71-111.

Additionally, it was asserted that *Aum Shinrikyo* attacked Tokyo's citizenry on numerous occasions with anthrax and botulinum toxin, when the cult never obtained virulent strains of either disease, much less dispersed them in a manner that would cause infections. *Aum Shinrikyo*'s activities gave rise to many forecasts from analysts and politicians of pending, even imminent, catastrophic terrorism involving weapons of mass destruction. *Aum Shinrikyo* may not be the beacon that lures terrorists to go in this direction. A decade later, those predictions have not, thankfully, materialized.

The Jihadist organizations that have dominated many terrorist threat assessments for the past few years exhibit a trend toward indiscriminate violence that runs counter to the moderation of violence that more traditional terrorist groups have staged to gain attention while winning sympathy for their designated cause. Some Jihadist organizations embrace apocalyptic and nihilistic philosophies that would make them more likely than traditional terrorist groups to employ any weapon they can get their hands on, no matter how destructive. Al-Qa'eda and its affiliates have also garnered a reputation for using Western infrastructure as tools of attack (e.g., aircraft, transportation nodes). When reviewing terrorist activities, one can discern a trend toward chemical and biological activities. Certainly, the number of plots and attempts to acquire these materials are on the rise.

II. Deciphering Terrorist Activities

According to the RAND/MIPT Terrorism Incident Database that records international terrorist activities dating back to 1968, the 1980s saw a dramatic rise in the number of terrorist attacks. In 1986, there were over 450 attacks with another spike in activity in 1991 before the number of terrorist attacks began to dwindle. From 1998 forward, the RAND/MIPT statistics combine international and domestic terrorist events, so the cumulative numbers are much higher. In 2002, the database shows over 2,645 terrorist attacks, and the number declined to 1,942 in 2004. Records show that terrorists are most likely to attack, in descending order, private citizens and property, businesses, government entities, and diplomatic targets. Big corporate enterprises such as McDonalds and Citibank are targeted more often than less prominent companies. By far, the favored weapon of terrorists is bombs—pipe bombs, truck bombs, and even boat bombs. Suicide bombing has been a particularly prominent tactic in the Middle East. Of the 11,922 attacks in the RAND/MIPT database that terrorists executed from 1997 to 2004, 11,884 of them involved conventional weapons or materials.

Terrorism through Unconventional Weaponry

Although less than one half of one percent the number of terrorist attacks has involved chemical, biological, or radiological weapons or substances, a closer look at terrorist activities with unconventional weapons reveals issues of concern and interest. Other than *Aum Shinrikyo*, several terrorist groups and individuals have experimented with chemical and biological substances, but these unconventional materials are not often delivered in a manner that will cause more than a few casualties. One group that is known for its intent to cause massive, indiscriminate casualties, *al-Qa'eda*, is trying to acquire chemical weapons. U.S. troops found chemical weapons cookbooks in Afghanistan after toppling the Taliban

government and CNN has aired videotapes of *al-Qa'eda*'s supposed chemical weapons tests, which show dogs succumbing perhaps to cyanide or to a nerve agent.²

No one should be particularly surprised when *al-Qa'eda* or other terrorists figure out how to synthesize small quantities of various chemical warfare agents. With the availability of agent formulas, ingredients, and equipment, making poison gas in a beaker is not a technical feat, but it is much tougher to produce significant quantities of warfare agents. When the U.S. government first attempted to mass-produce sarin, the production line had to be reengineered. The inability to scale-up production was one factor that disrupted *Aum Shinrikyo*'s aspirations of a mass casualty chemical attack. *Aum* built a state-of-the-art production facility to make sarin, but never managed to get it to operate. Unlike the formulas for the classic chemical warfare agents, the technical know-how associated with working with large quantities of super-toxic and highly caustic chemicals is not contained in textbooks. Terrorists are unlikely to cause mass casualties with a small amount of a chemical agent unless they employ a brutally efficient dispersal method (e.g., via a building's air circulation system). Should terrorists tap into the effective use of mini-reactors, however, a fairly new private sector technology, they may be able to decipher more quickly how to produce more significant quantities of chemical agents.

If the objective of terrorists is to cause widespread indiscriminate death, one would have to wonder why terrorists would go to such extensive trouble to make scale-up quantities of sarin or other warfare agents when hundreds of industrial chemicals can produce that type of outcome. Extremely hazardous industrial chemicals, known generically by emergency response and industry personnel as "ethyl-methyl-bad-stuff," are produced, processed, consumed, and stored in hundreds of thousands of locations in the United States and Europe. On both continents, chemical plants are located in and around major metropolitan areas. Whether by insider sabotage or a targeted attack from the outside, the results of attacks on industrial facilities could be as bad or worse as the 1984 incident at Bhopal, India, where roughly 3,800 died and more than 11,000 were injured in a matter of hours.³ Given the proclivity of *al-Qa'eda* to turn Western infrastructure against Western society, the targeting of chemical industry facilities is a genuinely worrisome prospect.

With regard to nuclear weapons and radiological dispersal devices (RDDs), the former is unlikely to be a terrorist weapon of choice because of the significant expense and level of technical skill required either to acquire a black market weapon or produce one from scratch. Considerable resources have been devoted through the Cooperative Threat Reduction Program to secure and dismantle, whenever possible, the remnants of the former Soviet Union's prodigious nuclear weapons arsenal, reducing the possibility that terrorists might be able to purchase a full-up nuclear round on the black market. Even if terrorists did manage to get their hands on a nuclear weapon, their efforts to detonate the weapon could be stymied by the safeguards placed on many munitions to prevent accidental and/or unauthorized launch. To construct a nuclear weapon on their own, terrorists would have to

² Judith Miller, "Qaeda Videos Seem to Show Chemical Tests," New York Times (19 August 2002).

³ Robert D. McFadden, "India Disaster: Chronicle of Nightmare," *New York Times* (10 December 1984); Ashok S. Kalelkar, "Investigation of Large Magnitude Incidents Bhopal as a Case Study," presentation to the Institution of Chemical Engineers Conference on Preventing Major Chemical Accidents, London, United Kingdom, May 1988.

acquire either 25 kilograms of highly enriched uranium or four kilograms of plutonium.⁴ Not only is manufacture of these materials very expensive, it is also time-consuming and technically demanding. These reasons account for the projection that terrorist detonation of a thermonuclear weapon is among the more unlikely scenarios discussed.

The Threat of Radiological Dispersal Devices

In contrast, terrorist groups could find the assembly of radiological dispersion devices (RDDs) much easier. An RDD essentially marries radiological materials with explosives. The effects of RDDs are a combination of blast and fragmentation at the bombsite, dispersal of radiation, and fear.⁵ Quelling public panic and decontamination of the attack site are likely to be the most significant challenges for the jurisdiction attacked in this manner.

The reason that RDDs are a more noteworthy possibility is that terrorists already have know-how and operational experience with explosives and potentially could tap into one of many commercial radiation sources to make such devices. The overwhelming majority are low-level radiation sources such as the waste from medical, industrial, or research facilities. A small number of high-level radiation sources are of considerable concern, namely Americanium-241, Californium-252, plutonium-238, strontium-90, cesium-137, cobalt-60, and iridium-192. Anyone working with these higher-level radiation sources would need to take serious safety precautions to avoid injury. For example, a bomb with 10,000 curies of radiation would need to be surrounded by over 300 pounds of lead to protect those carrying it.⁶

As for whether terrorists have been able to amass sufficient materials to date to construct such RDDs, the track record breeds both comfort and worry. Numerous attempts have been made to smuggle nuclear materials from the former Soviet Union, and in all known incidents the perpetrators have been caught. Whether all smuggling has been detected is another question, but it is doubtful that all diversion has been detected. The International Atomic Energy Agency (IAEA) records 540 incidents of illegal trafficking in nuclear materials from 1993 to 2003. This tally includes 335 incidents involving radioactive materials, 7 involving plutonium, 10 involving highly enriched uranium, 131 involving natural uranium, depleted uranium, or thorium, and 63 involving low enriched uranium. Terrorists in search of a high-risk radiation source might turn to the approximately 1,000 lighthouses that ring the former Soviet Union. Located in remote coastal areas, each of these lighthouses is powered by a generator that contains 30,000 to 300,000 curies of strontium-90.

The potential to divert radioactive materials is not constrained to the former Soviet Union. In the United States, the IAEA states that between 500,000 and 2,000,000 radiation sources are no longer needed and 375 radiation sources are "orphaned" every year. This term refers

⁴ Steven Erlanger, "Lax Nuclear Security in Russia is Cited as Way for Bin Laden to Get Arms," New York Times (12 November 2001).

⁵ Ronald Kotulak and Peter Gorner, "With 'Dirty Bomb,' Chaos Could Be Main Fallout," *Chicago Tribune* (11 June 2002).

⁶ James L. Ford, "Radiological Dispersion Devices: Assessing the Transnational Threat," *Strategic Forum*, no. 136 (March 1998).

⁷ To date, there have been two cases of tampering reported with these lighthouses, although the vandals appear to have been more interested in the other metals rather than in the radiation source. Norway has a program to convert these lighthouses to other power sources.

to the inappropriate disposal of a radiation source, which would make such materials more vulnerable to terrorist diversion, theft, or purchase. Across the European Union there are 30,000 unneeded radiation sources, with 70 being orphaned annually. As if the availability of dirty bomb materials were not enough cause for concern, in 2003 British intelligence released documentary evidence that al-Qa'eda had already built a small RDD in Afghanistan.⁸

With the abundance of radiological materials on the planet, one would expect databases to contain a fair number of RDD incidents. Instead, the annals contain an aborted plot or two and one more fully developed incident. In 1995, Chechen rebels placed a thirty-pound container with a small amount of cesium-137 in Izhmailovsky Park, a popular Moscow flea market. The device was not detonated.⁹

The Prospects of Bioterrorism

As for the prospects of bioterrorism, the threat received a great deal of attention following the 2001 mailing of anthrax to prominent U.S. politicians and media figures. The agents of most likely interest to terrorists are the classical biowarfare agents such as anthrax, plague, and the other agents that nations are known to have researched, developed, tested, and produced for their germ weapons programs. Biowarfare agents can be delivered in a wet slurry or in a freeze-dried form. Both delivery methods have advantages and drawbacks, the latter of which can frustrate terrorists. The advantage of a slurry is that the post-production preparation is not required. The downside to a wet slurry is that the agent, which must arrive alive at its intended target in the appropriate microscopic size (e.g., 1 to 10 microns for humans), will be more susceptible to environmental stresses such as ultraviolet rays and heat, increasing the kill rate for the organisms after release. Moreover, the sheer mechanical forces involved in dispersing a wet agent through a sprayer can kill large numbers of microbes. Producing a dried agent, which is more resistant to environmental stresses after its release, requires a much higher level of technical skill and biosafety.¹⁰

The most extensive known terrorist effort to date to master biological efforts is that mounted by *Aum Shinrikyo*. For the most part, the dozen or so scientists that the cult recruited never managed to get off the mark. They were unable to obtain virulent strains of anthrax or botulinum toxin, and their efforts to spread a wet slurry material resulted in glops of stuff, not the ultra-microscopic mist required to infect humans. The *Aum* case shows that technical hurdles can hinder even well financed and technically sophisticated terrorist groups. If *Aum Shinrikyo*'s scientists were unable to get anywhere after a few years of laboratory and field work, the discussion about terrorists by-passing classic bio-weapons agents for engineered designer bugs would appear to be somewhat premature.

Having said that, however, one must acknowledge the technical revolution underway in the life sciences and the worldwide growth of the biopharmaceutical industry will gradually make the equipment and know-how more widely available. Also, universities are now teaching

⁸ The purported RDD was constructed from medical equipment in a laboratory in Herat, Afghanistan. British intelligence also uncovered a training manual on the effective use of RDDs and other documentation to support their assertion that *Al Qa'eda* should be considered RDD-capable. Josh Meyer, "Al Qaeda Feared to Have 'Dirty Bombs," *Los Angeles Times* (8 February 2003).

⁹ Michael Specter, "Chechen Insurgents Take Their Struggle to Moscow Park," New York Times (24 November 1995).

¹⁰ For more detail, see pages 37-56 of *Ataxia*. Op cit.

combination skill sets that used to be taught in isolation, such that a weapons acquisition process that occupied tens of thousands of former Soviet scientists and technicians can now be accomplished with much less manpower. At some point, in other words, terrorist groups will probably scale the technical hurdles to bio-weapons acquisition and use. The individual or group that sent the anthrax letters in 2001 clearly overcame those hurdles, although those who have been dabbling in ricin thus far have not.

Al-Qa'eda leader Osama Bin Laden has told his followers that it is their duty to acquire weapons of mass destruction, 11 so one can assume that efforts to obtain biological agents are underway. When U.S. forces invaded Afghanistan, they found instructions pertinent to bioweapons manufacture as well as rudimentary laboratory capabilities. Al-Qa'eda is rumored to have acquired some agents (e.g., anthrax, botulinum toxin, salmonella), but none were found in these laboratories. 12 Furthermore, rumors do not equate to facts, so it is important to resist the temptation at this juncture to credit al-Qa'eda with a bona fide bio-weapons capability. Any terrorist group trying to acquire biological weapons will experience a fair number of technical nightmares, and those that wish to jumpstart their efforts would court the thousands of scientists that powered the former USSR's vast bio-weapons program, seeking seed cultures, cookbooks, and expertise.

Putting the Threat of Unconventional Weapons into Perspective

Poring through the terrorism database that the Monterey Center for Nonproliferation Studies maintains, the overwhelming majority of unconventional terrorism incidents involving chemical or biological substances are plots, pranks, and hoaxes. In many cases when people begin to dabble with these materials, they try to assassinate specific individuals rather than to inflict mass casualties. Such cases are usually classified as criminal rather than terrorist cases. In roughly half of the cases where terrorists have actually used a chemical or biological substance, the substance either can be attributed to *Aum Shinrikyo* or was a "low end," or not very dangerous material, such as butyric acid. Monterey categorizes all use cases according to the delivery method employed. The most prevalent delivery methods are not conducive to mass casualties, such as injecting a substance or sending it in the mail. Aerosolization is the delivery method of concern since many people can be simultaneously exposed if the execution is successful. To date, *Aum Shinrikyo* is responsible for all aerosol delivery attempts involving chemical or biological substances. Despite erroneous media reports that inflate the cult's accomplishments, *all* of *Aum Shinrikyo*'s aerosol delivery attempts failed for one reason or another.

Other interesting statistics from the Monterey database relate to casualties. The largest death toll from a chemical or biological attack is twelve. This number pales in contrast to the huge death tolls for September 11th, the African embassy bombings, and other well-known conventional attacks. Moreover, in over 90 percent of the cases where terrorists have used a chemical or a biological substance, the attacks have killed or injured three or fewer people.

¹¹ On 23 December 1998, Osama Bin Laden was interviewed by *Time* magazine, saying "And if I seek to acquire [nuclear and chemical weapons], I am carrying out a duty. It would be a sin for Muslims not to try to possess the weapons that would prevent the infidels from inflicting harm on the Muslims." Rahimullah Yasufzai, "Wrath of God: Osama bin Laden Lashes Out Against the West," *Time* (11 January 1999), 16.

¹² Michael R. Gordon, "U.S. Says It Found Qaeda Lab Being Built to Produce Anthrax," New York Times (23 March 2002).

In over half of the cases where terrorists have used a chemical or biological substance, no injuries have resulted. These statistics indicate that to date terrorists have not been able to master the intricacies of chemical and biological weapons or they have not aimed to harm more than a handful when using them.

One can gain further perspective on the prospects for unconventional terrorism by again tapping the RAND/MIPT database. From 1997 to 2004, this database records a total of 11,922 terrorist events. Of that total, 15 events involved biological materials. Twelve of the 15 biological cases relate to the 2001 anthrax letter attacks, which killed five. Just over 45 events involved chemical substances and no events involved radiological materials. During this time period, there were also 11 events involving contamination of a food or water supply. These incidents killed four and injured 118. These 62 chemical and biological cases also include eight assassination attempts and three kidnappings during which six of the victims died. Pondering the terrorist use patterns of chemical and biological substances thus far, perhaps the terrorists have looked at the most prominent case to date, namely Aum Shinrikyo, in a different light than many Western analysts. Aum Shinrikyo's Tokyo subway attack killed a dozen and seriously wounded about 150. This tally, while notable and very sad, is not nearly as high as the crashing of an airliner or the bigger bombings that al-Qa'eda has engineered. The Tokyo attack was spooky and spectacular, but so was September 11th, and it was not nearly as technically complicated to execute. Terrorists do place a premium on symbolism, and for now the weight of symbolism rests largely in the target itself (e.g., the Pentagon, a U.S. naval vessel) more than in the method of attack. If terrorists can claim victory by hitting the intended target, it is questionable whether the victory becomes more valid or valuable because they wielded an unconventional weapon. Absent access to the inner thinking of contemporary terrorist masterminds, it is not possible to know what is really driving their behavior patterns.

Outcomes and Perceptions

Among the lessons that terrorists may be considering is whether, aside from perpetuating fear, their actions have the desired impact. For example, *Aum Shinrikyo* did not achieve its goal of toppling the Japanese government, nor did *al-Qa'eda*'s September 11th attack cause the United States and its allies to withdraw from Saudi Arabia and other Muslim countries. ¹³ The bombing of the Murrah Building in Oklahoma City did not foster the collapse of the U.S. government. Similarly, the bombings at the Khobar Towers, the African embassies, and the USS Cole do not appear to have furthered other aspects of *al-Qa'eda*'s stated agenda, such as the establishment of an Islamic caliphate. Instead, these events prompted the nation(s) attacked to pursue and attempt to render ineffective the group(s) responsible.

On the other hand, terrorists may perceive the outcome of the Madrid train bombing differently than many Western officials and analysts. If they are not well-informed, terrorists may think that the Spanish government decided to withdraw its troops from Iraq as a result of that bombing, when in fact the withdrawal decision was taken beforehand. Terrorists may also claim that the bombing significantly influenced the outcome of the Spanish election because the incumbent government was defeated. The misperception that European nations

¹³ The United States did, however, take U.S. troops least off shore from Lebanon when terrorists bombed the Marine barracks there in 1983.

may make certain concessions to reduce the chance of future attacks, should it be believed in terrorist circles, could make European targets more attractive to terrorists. If the view in terrorist ranks is that easily assembled backpack bombs can deliver some of the desired results, terrorists may, for the time being, not see the value in going to the trouble and risk of escalating to chemical, biological, or radiological weapons.

III. Concluding Thoughts

With each succeeding high-profile attack, Western governments have ratcheted up the physical security around key target buildings, assets, and sites. These actions will shape the ability of terrorists to execute these types of attacks in the future. If guards and barriers prevent a truck from being pulled in close proximity to a target, the attack will be muted or terrorists will choose a different target. Other factors influencing the ability of terrorists to carry out an attack include heightened border security; better international intelligence cooperation and better coordination among federal and local law enforcement authorities; increased tracking and blocking of terrorist-linked finances, more concentrated interception of terrorist communications, heightened efforts of concerned nations to capture and/or kill known terrorists, and more successful efforts to shadow individuals with links to terrorist organizations and more concerted efforts to infiltrate terrorist groups. All of these activities will hamper the ability of terrorists to operate successfully, no matter what type of weapon they employ.

Yet, terrorist groups that are patient and innovative may still hit their marks. Given the number of possible targets, staying ahead of determined terrorist groups will prove to be very difficult, if not impossible. As governments struggle with how to contain and combat terrorism, their biggest challenge in combating terrorism will be to fight this "war" without transforming major cities into armed camps and destroying the civil liberties that are a hallmark of Western societies.

Overcoming the technical challenges associated with the successful production and dispersal of chemical and biological agents will continue to prove difficult for most terrorists, even those who are fairly sophisticated. Attacks with conventional means will remain the most prevalent. The next likeliest method of attack will probably be the sabotage of commercial chemical plants or the release of chemical agents, which are the most accessible and easiest to manufacture and disperse in small quantities. Also, should a terrorist group manage to execute a chemical or biological attack that has September 11th casualty toll; other terrorists will be more likely to copycat the activity. Governments concerned with the prospect of such attacks should not just harden targets and engage in other counter-terrorist activities, they should also enhance the preparedness of local emergency response personnel. Such initiatives are well advised because they will save lives whether the cause of a disaster is a natural event, an industrial accident, or a terrorist attack.

Future Terrorist Targets

Aris A. Pappas

I. The Issue

What targets are terrorists most likely to strike? That is the question that has been posed, but cannot be answered, simply because no one can see the future with that clarity. Hardly surprising, but profoundly true. Our inability to see into tomorrow is the reason the question is so important: we don't know where the terrorists will strike, we don't know what they will strike, and we don't know when they will strike. Anyone who can answer with certainty just one of those questions would earn the gratitude of the millions who could have been counted among the next casualties. Uncertainty, however, is the very essence of terror.

We must, therefore, consider the many unknowns that comprise the universe containing our elusive answers. Through this scrutiny we might be able to somehow bound the problem, or at least discover linkages, that could make some tidbit of future information useful to us in deterring an attack or eliminating the attackers.

II. Targets

At the risk of sounding stereotypically academic, we must first deconstruct a deceptively easy question: what is a target? The range is enormous, extending from the personal—an individual; to the physical — an aircraft, or a building, or a city; or to something less precise, e.g., the internet. Vastly different kinds of targets, surely, but interconnected in a way that makes events at any part of the scale reverberate up and down the whole.

It is still generally true that a single soldier's death in battle is not an event that draws the entire war effort into question. As civilized peoples, we accept that the value of even one life is immeasurable, yet we can also easily define situations in which countless numbers will be risked and sacrificed in pursuit of a greater good. Throughout history, that rationalization has been the moral justification for war.

Terrorism is not war and the effect of death on the larger enterprise is different in an important respect: the loss of life, a single life, is considered a battle lost. It is the very randomness of the act that "strikes terror," magnifying the event and causing a reverberation that to a terrorist is analogous to the slight tremor that can destroy a mighty dam.

We are attempting to protect free and open societies. Where we see individual citizens deserving of life and protection, the terrorist sees nothing more than a school of fish, anonymous and interchangeable, deserving only death. In history, the assassination of a leader will leave a greater mark than the death of an ordinary citizen, which is why such murder is afforded its own specialized term. But in our societies the basis of governance is that protections are afforded, legally and morally, to all. As a result, we must start our list of targets at the most elemental level, the individual. We are forced to measure our success by the ability to protect that single individual. For ourselves we have set an incredibly high

standard that is morally and socially inviolate, yet ridiculously easy for the terrorists to overcome.

The most commonly recognized targets are those physical things that we hold dear; the symbols of our civilization that inspire and define our community. Because the quality of our lives is something we value, we also must defend what is now termed our "critical infrastructures." As with individual citizens, no single element can be declared expendable.

This does not mean that we must defend all equally, all the time. Those involved in the protection of that critical infrastructure have strived diligently to bring a professional approach to the concept of risk assessment to allow them to allocate scarce resources to the "most critical" of our critical infrastructures. Surely, the explosion of a major chemical plant, resulting in the deaths of many thousands is somehow worse, more horrible, than a more minor attack and the deaths of tens or hundreds. So, from the perspective of the defense, the protective situation calls for something akin to triage, the prioritization of otherwise unacceptable outcomes.

What we choose to protect, however, only limits the choices a terrorist might have, and, we hope, reduces potential consequences. The terrorist knows that even a limited attack, if successfully accomplished, will produce the anticipated effect of terror; exacerbating feelings of insecurity and vulnerability without regard to the relative significance of the target. Indeed, the argument could be made that an attack or a series of attacks on necessarily less well-protected facilities could have a greater effect than one larger attack. The chemical plant attack is largely driven by perceptions of consequences: the noxious green cloud enveloping and killing the peaceful village. It would be difficult to argue that anyone felt anything for the plant itself.

That is not the case with other parts of the physical target range, where a strike can affect even more deeply our perceptions of security and vulnerability. Tragically, many of those things we value the most are the same things that there is little we can do to protect. Thus, the unspeakable horror of the recent attack on the Beslan School No. 1 in Russia. Scale is, essentially, irrelevant. A successful attack on the smallest pre-school would stir the same feelings of loss and insecurity that would attend an assault on a university campus – perhaps more. Our recent experience with the so-called "DC Snipers" is an excellent example of this relationship. Two men, in a broken down car and armed with a single rifle managed to create a pervasive sense of fear and concern throughout the entire Washington metropolitan region.

The targets considered thus far have been individual or multiples of the individual, whether human or physical. The cloak of protection must cover the entire spectrum from the particulate through the aggregate, but the purposes of terror can be served anywhere along the spectrum. Stepping back and looking at the elements under attack, we can perceive another kind of target: economic disruption. Attacks on aircraft combine the worst fears of the flying public with the kind of physical vulnerability that defines any object suspended thousands of feet in the air. They also directly affect the economic well being of the airlines, which in turn affects the economic stability of a nation. It is hard to find so large an economic sector that exhibits the vulnerabilities and fragilities of the airlines. The consequences of their collapse or significant diminishment are enormous.

An examination of the target range, therefore, is not terribly useful in helping us defeat terrorism. Quite simply, terrorist targets can be, and are, any single person or thing or set of persons or things, that is vulnerable to attack without warning. The size of such a list is simply incomprehensible.

Analyzing Terrorist Objectives as an Aid to Target Prediction

If it is difficult for us to distinguish or predict likely targets, perhaps a more useful approach would be to understand more accurately terrorist objectives and how they might affect target selection.

Terror, like violence perhaps, is rarely senseless and does solve some things although not always as its practitioners intend. Political terror seeks to persuade the victim to negotiate a settlement. Ideological terror seeks millennial ends that present the victim with no options but total surrender or a fight to the death. In both cases, terror is intended to provoke the attacked into a reaction that itself sets the conditions for change. The first goal of terrorists is change.

In modern times, terror most often has been used to weaken public support for policies, external or internal. One species of terrorist — the Provisional IRA or the Basque ETA for example — has objectives that, in theory at least, are susceptible to negotiated settlement. A more terrifying species — anarchists or *al-Qa'eda* — demands unconditional surrender. In this last instance, the finer points of distinction between method and ideology are meaningless.

Clearly, *al-Qa'eda* wants the United States, and the influence of western culture, out of the Middle East, and is willing to go to terrible lengths to accomplish that objective. The events of 9/11 are seared in our memories. To some degree, the memory itself suits *al-Qa'eda's* purposes. Terror and uncertainty must be maintained over time to achieve their full effect. Without attempting to divine the thinking of murderous thugs sprung from the 7th Century, we can dispassionately describe *al-Qa'eda's* objective as a change in U.S. policy. A profound change, to be sure.

An Aberrant Terror Campaign

The *al-Qa'eda* campaign against the United States differs from any other terrorist situation in the world today in that it is not, inherently, an incipient civil war. It is an attack from without, conducted, literally, by foreigners whose objectives do not include lasting change for themselves within the American society or polity. The Irish and British, the Chechens and Russians, the Basque and Spanish, even the situation between the Palestinians and Israelis all represent the use of terror to affect change within a society, to obtain rights and benefits, or to express violently some segment's disaffection and isolation within a given polity.

In this sense, *al-Qa'eda*'s closest parallel is the Anarchist Movement, whose appeal was international in the years from the 19th to the early 20th centuries. The Anarchist Movement was widespread, uncoordinated, yet effective in disrupting the affairs of nations and set the spark for the First World War. The subsequent collapse of the monarchies defined the course of Europe, and ultimately the rest of the world, for the next 100 years. The

Anarchists pursued change for change's sake, convinced that nothing could be worse than the present and secure in their faith that the destruction of governments would be replaced by a society founded on the progressive goodness of man. What happened was not quite what the anarchists expected. Their disparate efforts to topple the retrospectively benign monarchies of the 19th century led directly to the emergence, worldwide, of the modern and temporarily effective tyrannies of Fascism and Communism.

To achieve that objective, Osama bin Laden engineered an assault on the United States that is designed to take advantage of the openness and freedom that so offend his beliefs. And, on a case-by-case basis, he has the advantage. As we saw above, he only has to be right once, while we cannot afford to be wrong ever. Not good odds when multiple encounters are anticipated.

The terrorists hold additional advantages as well. Open societies and integrated economies rely on free travel and a degree of privacy, indeed anonymity, that make the job of finding the clever terrorist difficult and more dependent on luck than we would like to admit.

Militarily, we would call those tactical, if not operational, advantages. But, what of the strategic balance? There, *al-Qa'eda* may not be as well off, particularly with regard to the United States. Osama bin Laden may be facing the same kind of problem that has stumped strategic war planners since the days of early aviation enthusiasts (such as Billy Mitchell) and the advent of strategic bombardment concepts arguing that the application of overwhelming force, deeply and throughout a nation's infrastructure, can have the effect of so demoralizing a population that they capitulate. The problem with the theory is that it has never worked in modern times. Indeed, history shows that almost exactly the opposite happens. The application of force, even overwhelming force, absent what is now commonly referred to as "boots on the ground" results in a strengthening of resolve and a deepened desire for revenge. History teaches that enraged democracies are the most implacable.

No one knows, for example, just what bin Laden and the Taliban were thinking would happen as a result of their attacks on New York and Washington, but it is not a conceit to argue that the successful invasion of Afghanistan and destruction of the Taliban, all within 90 days or so, would not have made their list.

The application of force against modern, integrated societies does not produce the same kind of result it once did in the era of Mongol hordes or of eradication on the level of Carthage. We last saw that kind of potential in the Cold War, and the world wisely has stepped away. Absent such raw power, the application of force has to be carefully measured against consequences intended and unintended. Capitulation by the West, or the United States in particular, is a highly unlikely outcome, therefore, of the current challenge. Whether bin Laden and his followers understand this is unknown.

Some have argued that this is fight to the death. Perhaps, but there is no real evidence that it is seen that way by both sides. Despite the rhetoric, for example, it is difficult to argue that the West considers itself in a life or death battle based upon the resources and priorities assigned to the war on terrorism writ large. Indeed, one of the great dangers of the current situation is that one side is tactically deadly and has strategically absolute objectives that could result in massive losses of human life and lucre, while the other is engaged in a

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concerted effort to protect itself and to mitigate its vulnerabilities, but is not necessarily pursuing traditionally aggressive and pro-active war aims. In short, *al-Qa'eda* would see us all dead, for reasons of philosophy, religion and culture, while what the West really wants is for it all to go away.

Image Manipulation as a Strategic Objective of Terrorism

Another important element of terrorist objectives is more tactical: they must not be seen to fail. Of course, no one wants to lose, least of all an ideological movement that believes it is carrying out the wishes of God. The question of why God would allow his chosen to fail has undermined more than one theologically based movement. The issue here is one of public perception. In order for terror to work, its perpetrators must be perceived as threats that are outside the normal course of events. Murders happen every day, as do automobile accidents, and the death tolls from both are high and arguably unacceptable. But, these occurrences are accepted as "normal" and do not evoke unusual fear or panic. With the dramatic exception of 9/11, the work of terrorists rarely exceeds the routine mayhem of society in terms of blood spilt or resources lost.

Terrorists seek to evoke panic by appearing to be unstoppable, unavoidable, and random. They depend on developing and maintaining a palpable sense of vulnerability amongst their opponents, matched with a sense of their own invulnerability fostered by perceptions of secrecy and brutality. This has significance in terms of targets and objectives because it argues that effective protective measures can limit terrorist target selection.

Although one could plausibly argue that an attack on the White House would be quite attractive to al-Qa'eda, it poses real psychological risks to the movement itself. They would be forced to contemplate the very real possibility that some damage might be done, but that the leading stories spread around the world would be accompanied by pictures of all or most of the attackers dead on the grounds, with black suited Secret Service agents standing over them. Martyrdom aside, such an outcome and images do not serve the purpose of terror. The same group could more easily identify a fundamentally unprotected shopping center, where their attack would have a very dramatic impact, regardless of the survival of the terrorists themselves.

Considering the difficulty terrorists have in preparing and equipping themselves to directly confront trained, professional, and alerted security, we can conclude that robust protection of high-value, high consequence targets can be effective in deselecting that target from the terrorist's list.

All this is particularly pertinent to any attempt to predict "targets" in Europe. What we have seen is that the attack may be directed at virtually anything, but its strategic objective could limit or otherwise define those targets.

Europe: A Critical Battlefield

Much has been written and said about Europe's vulnerability simply because it is an open society inimical to the same fanaticism that hates the United States. We will not add to this discussion but will instead consider another facet of more immediate consequence.

Osama bin Laden and his movement have global pretensions. They hope to gain the support of Muslim populations, or significant portions of them, all around the world. The single most critical factor in the *al-Qa'eda*-based terrorist threat in Europe, therefore, is the status of Europe's Muslim population. Descriptions of the lot of the 20 million European Muslims are invariably accompanied by dire stories of their disaffection and dissatisfaction with their position in the various European societies. Although those conditions differ from place to place, overall they are bad enough to foster almost precisely the kind of condition suited to *al-Qa'eda* development and recruitment. The critical factor, in fact, is not the disaffection of immigrants, but of second and third generation European Muslims. Educated, motivated, but not assimilated, they are prototypical candidates for the kind of arguments propounded by *al-Qa'eda*.

We have already seen the connection between support by European networks and the 9/11 perpetrators. It is significant to point out that while there is some heated debate over the presence of al-Qa'eda "sleeper cells" within the United States, there is little or none over their existence in Europe. In the United States, the war on terror has been largely absent any degree of reaction against the indigenous Muslim population. And, although some of us would like to see a more active resistance to al-Qa'eda by U.S. Muslims, it is also fair to say that their cooperation with counterterrorist efforts has far outstripped any general or specific support seen for al-Qa'eda. This is not to say that the U.S. Muslim population does not support Muslim issues worldwide, but there is the important distinction to be made between that and support for deadly terrorism.

The distinction is in the issue of assimilation, acceptance, and a favorable projection of their position in society. The United States is a melting pot, if an imperfect one, where becoming a real part of the polity is possible in the first generation of emigration as Henry Kissinger or Arnold Schwartzenegger could attest. Further, the United States has taken great pains to disassociate the war on terrorism from any criticism of its Muslim communities. Thus, the external imposition of the attack results in the ability for those communities to disassociate themselves from it, while maintaining their Muslim beliefs and general support for Muslim issues.

Reports of conditions and attitudes within the European Muslim communities are quite different, leading to the potential, not only for *al-Qa'eda* recruitment against generalized objectives, but more directly in the form of terrorism akin to that conducted by the IRA, the Basques, or even the Palestinians. Thus, unlike the United States, Europe faces violence rooted in an indigenous and disaffected population.

Europe, then, holds appeal to *al-Qa'eda* as a source of recruitment and support, but also as a means of fortifying its very roots. The ability to do this is aided by the very loose organizational structure *al-Qa'eda*. Independent *al-Qa'eda* "franchises" can contribute to the movement without necessarily compromising their own particular objectives. I'd venture to

guess that bin Laden would simply prefer that the Muslim Diasporas collapse back to their Holy Lands of origin. The objectives of European Muslims, however, may be somewhat different, and have more to do with their place in European society. This may be a circle that cannot be rationally squared, but in its initial stages, the goals and objectives of the European Muslims and *al-Qa'eda* will likely show a great many parallels. The ultimate outcome, much like the unintended consequences that affected the anarchists of the last century, may be very different than anyone can imagine. But the path to that outcome could be deadly.

Having identified the objective as Muslim support and adherence, specific targets may be assessed as having high or low probability, dependent upon their ability to influence this projected outcome. The specific definition of those targets will require profound understanding of not only *al-Qa'eda* but of the indigenous Muslim populations, whose loyalties and perceptions are at the heart of support at both the lowest tactical and highest strategic levels.

Attacks like the one in Madrid can serve multiple goals. On the one hand, they can support external objectives like weakening the power and stability of the coalition that is threatening to bring 21st century ideals and benefits to an oppressed Islamic society. On the other, they can also demonstrate the inability of a government to protect its citizens and serve as object lessons to those considering ways to express their growing grievances with that same society. In that sense, Madrid was doubly successful and can be seen a model for future efforts.

The marriage of intense dissatisfaction to very powerful weapons makes the European targeting issue one of critical significance. Europe is not an ancillary sideshow in this war; it may be its most critical battlefield. If *al-Qa'eda* can be defeated in its attempt to enlist the Muslim populations, an almost inconceivable threat can be reduced to much more manageable proportions. Terrorist rhetoric emphasizes the United States, but its content reveals its more widespread threat to Western ideals and progress.

III. Conclusion

Europe has dealt with terrorism before, and justifiably considers itself prepared to deal with its more recent incarnations. Which model will more correctly represent the threat: independent and relatively small scale attacks by autonomous groups with specific political aims, or coordinated and now much more deadly attacks by a league of cells professing adherence to a millennial end? More and more, the latter seems to be the emergent threat, making immediate corrective and protective actions an absolute necessity.

Homeland security must become a European priority ranking at least equal to the imperative of counterterrorism. Perhaps even more importantly, significant efforts must be made to deal with the terrorists' growth medium, the Muslim populations. Their concerns and complaints need to be addressed with the same kind of attention that in previous times we have given other displaced and disaffected populations. Frankly, this is not in the European tradition, and will require some difficult and potentially risky, unpopular decisions. But to do less is to risk those unanticipated consequences, those releases of dark forces that so totally dominated the landscape of the last century.

What are the targets in Europe? The target is Europe, in a way and to a degree that surpasses even the threat now felt by the United States. It is a threat that has the potential to change the very core of those many societies whose insularity has weakened their ability to assimilate the mass ethnic migrations that now so define the modern world scene. The economic interdependence of the world is matched by a degree of ethnic interaction that results in throwback ideologies like *al-Qa'eda's*; ideologies that, like Hitlerism, contain the seeds of their own destruction, but whose course can consume the innocents of a modern age.

Future Terrorist Targets

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I. Just what is al-Qa'eda?

Al-Qa'eda's Rhetoric and Its Implications

Western experts and intelligence community analysts are still coming to terms with the nature of al-Qa'eda and the ways in which it differs as an organization from the terrorist groups we were familiar with during the Cold War. One of the most obvious differences between the likes of the Irish Republican Army (IRA), Euskadi Ta Askatasuna (ETA), and al-Qa'eda are the alleged end-states that they wish to achieve. The former groups strove, or still strive, to achieve goals that are at least theoretically possible, and are solely political in nature (such as the re-annexation of Northern Ireland to Eire, greater autonomy for the Basque lands). Al-Qa'eda goes beyond the political into what one strategist, the provocative Ralph Peters, calls the transcendental — a vision informed, in this case, by religion. Given the amount of exposure bin Laden has guaranteed for himself, and the sheer amount of propaganda material he and his lieutenants have released in the last thirteen years, it seems obvious that a closer examination of the group's rhetoric will afford a better insight into the minds of those people behind the attacks of September 11th and March 11th. In fact, in a statement made just prior to the 2004 U.S. presidential election, bin Laden emphasized how al-Qa'eda can only be understood through its statements.

The Evolution of bin Laden's Ideology

Bin Laden's ideological beginnings were shaped at university, by Abdallah Azzam and through his experiences in the Afghan resistance to the Soviets. Following Iraq's invasion of Kuwait, bin Laden failed in his attempt to convince the Saudi royal family that he and his Mujahedeen should be allowed to protect his homeland from Saddam Hussein's army. When bin Laden learned that the United States would be permitted to take on this role, his alienation from the Saudi government became complete as he considered infidel protection an affront to Arab sovereignty.

At this point bin Laden's ideology moved from concepts of a more limited 'defensive jihad' to targeting of U.S. interests and the Saudi regime itself. He viewed the United States and its allies as the aggressors, having attacked the integrity of the Muslim world with its actions in the Gulf and with its protracted support of Israel. His actions and attitudes prompted the Saudi government to strip him of his Saudi citizenship and the now exiled bin Laden went further in solidifying his mantra until he issued a personal call to jihad in 1996, a struggle against the cabal of "Jews and Christians" and their proxies – apostate Arab/Muslim elites in non theocratic countries.

During the next several years, bin Laden's ultimate goal became more and more apparent, as did the extent of the target affinity group. Interviews from the internet and the Pakistani media make it clear that his message/target was the entire Muslim world and that he considered the populations of secular states such as Iraq as potential recruits and allies in the

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battle against their own leaders and the West. His goal was and remains to make national borders meaningless in a new Caliphate-type structure that would develop throughout Central Asia and the Middle East, halting and reversing the 'crusades' of the Christians. In this vision, repeated references are made to the Taliban regime of Afghanistan as the model for future universal theocracy. This was soon followed by bin Laden's issuance – without any reasonable clerical authority – of a fatwa against the United States in which attacks against civilians were justified: "We call on every Muslim who believes in Allah and wishes to be rewarded to comply with Allah's order to kill the Americans and plunder their money wherever and whenever they find it." Shortly after this fatwa the 9/11 attacks were executed.

Mixed Messages: Rational and Irrational at the Same Time?

One of the signatures of *al-Qa'eda*'s rhetoric is the way in which it has, over time, mingled the transcendental and irrational with the feasible or politically realistic. In the video statement bin Laden prepared for the invasion of Afghanistan, very concrete demands were made with regard to U.S. troops withdrawing from Saudi Arabia and for the creation of a free and independent Palestine. Such classic demands, very reminiscent of those of Cold War terror groups, are difficult to associate with the far more extreme visions concerning the creation of a global Caliphate. More recent statements do, however, give clues to what could be happening.

The fact that *al-Qa'eda* has a communications council suggests that such mixed messages are unlikely to be accidental. Over the past year, several statements have been aimed at new audiences or made in a new voice. Statements clearly aimed at the governments of Europe before and after the Madrid bombings are meant to make bin Laden look more moderate, more of a political leader. At the same time, other statements aimed clearly at the broader Muslim community or *umma* reflect a protracted struggle against the economic strengths of the United States and its allies. This does not diminish, however, the importance of the more transcendental demands. To quote a recent study by the US Congressional Research Service:

Bin Laden has outlined specific political demands that support the image of *al-Qa'eda* as a pliable, pragmatic political actor. Nevertheless, *al Qa'eda's* operational record seems to indicate that its leaders' commitment to specific national causes and strategic objectives are rhetorical tools designed to elicit support for their broader ideological agenda of confrontation with the West and puritanical reform in the Islamic world.

Given all the evidence to date, we would agree that despite an increase in worldly, immediate demands, the overarching aim of the organization and its leaders remains the creation of a global Caliphate. As a result, *al-Qa'eda* is not a group to be negotiated with and is unlikely ever to become such.

Tactical Evidence

In addition to the dozens of first person statements, there exist now, especially after the invasion of Afghanistan and the investigation of several *al-Qa'eda* safe-houses and camps, more and more samples of *al-Qa'eda's* internal documents. These include the "Super Bomb" guide found by a CNN team in Kabul and the so-called '*al-Qa'eda* Manual'. These documents go beyond the purely operational to include the political and ideological. For example, the

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al-Qa'eda Manual suggests that, "Islamic governments have never and will never be established through peaceful and cooperative council [viz. the Loya Jirga]. They are established as they always have been: by pen and gun; word and bullet; tongue and teeth."

The Manual discusses in detail how it is justified to take hostages, to use violence against them and eventually even to kill them, as we see now in Iraq. It also discusses the justifications behind breaking the Islamic religious codes relating to proper dress and prayer in the case of individuals functioning as covert *al-Qa'eda* operatives within Western nations. Lest one think that these documents are vague concoctions of religious ideas and simple tactical guidelines, the truth is that many issues crucial to covert operations are dealt with in a systematic and clear-headed fashion, with distinctions being made between classified and open source materials and even the importance of culture and its effect on intelligence gathering.

In Knights under the Prophet's Banner, published in London, Ayman al-Zawahiri clearly enumerates, in a very holistic sense, the strategic tools that the West, including Russia, are using against the Islamists. These include the United Nations, multinational corporations, international communications and data exchange systems, satellite media channels and international relief agencies, which are used to camouflage covert operations targeting al-Qa'eda. The treatise also sheds light upon the new generation of al-Qa'eda recruits, 'mujahid youths' who have abandoned their families, country, wealth, studies, and jobs in search of jihad." Many of these new recruits, as a result of the 'Jewish crusade,' become "like orphans in a banquet for the villains." These comments confirm analyses from European members of the international intelligence community, especially the German foreign intelligence agency (BND), that the organization is continually renewing its membership, with each tier having a different common denominator: Generation One is linked by the Afghan resistance, Generation Two by involvement in Bosnia and Chechnya and the newest, third Generation, by shared experiences in the Middle East, especially at the more fundamentalist universities.

The Generations of al-Qa'eda

As the violent attacks in Iraq have multiplied, it is becoming evident that the moniker, al-Qa'eda, has been unwisely overused, fueling the potentially dangerous misrepresentation that the United States and its allies are facing a monolithic and unitary foe responsible for all Islamist violence on the globe. In fact, responsibility for attacks across the world points to a completely different analysis. Based upon information from a variety of European sources, including the BND, it is not possible to discuss what is, in effect, the next generation of Osama bin Laden's network. Where the first generation of al-Qa'eda was a homogenous core, the next generations could be described as heterogeneous, both in experience and in background.

Generation One: Down But Not Out

Demographically and socially, the first generation of the *al-Qa'eda* network is made up of individuals in their 40s or 50s. This core membership is tied together by the common experience of having fought the Soviets in Afghanistan in the 1980s. In fact, their link to this war imbues (or at least imbued) them with a distinct status amongst Muslim

fundamentalists. This generation had a monolithic and unitary structure that functioned very much on the basis of personal acquaintance.

The majority of agencies and open-source analysts agree that the original generation of al-Qa'eda has been severely degraded as a result of the military operations in Afghanistan that disposed of the Taliban regime. Osama bin-Laden's generation of al-Qa'eda has always relied on a central base of operations. Since becoming involved in recruiting and training fighters to resist the Soviet occupation of Afghanistan, and through his usurpation of the Bureau of Services for Mujahedeen and its transformation into the Base (al-Qa'eda), bin Laden has required a safe-haven to operate his headquarters. His migration from Pakistan to Sudan and then to Afghanistan after 1989 suggests not only his operational flexibility, but also his need at every point to have a physical center for his organization.

While much has been made of the institutional and human weaknesses that led to the U.S. security and intelligence failures prior to the 9/11 attack, it seems clear that the post-9/11 response has so far been effective. Although bin Laden is still at large, most of the 29 recognized leaders of the original al-Qa'eda structure are now dead or in custody. The fact that almost four years after the attacks, despite all its bluster and bin Laden's various pronouncements, the organization has been unable to execute an attack of similarly catastrophic proportions, speaks to the operational weakness of the al-Qa'eda network. However, investigations of the still significant but somewhat smaller-scale bombings in Bali and Madrid indicate that the tactical initiative has moved to new, younger groups of terrorists that are less strictly linked to the original cadre of Mujahedeen fighters.¹

Generations Two and Three: An Even Harder-core Adversary?

The first regional group that sprang from the patronage of the original Arab Mujahedeen fighters, the so-called Afghan Arabs, was associated with the fighting in Bosnia. Numerical estimates by the BND put the original group at approximately 30,000 operatives and the second generation at 20,000. It should be noted that the majority of terrorist arrests made within EU territory since 9/11 have involved individuals in their 30s, most having combat experience from the Balkans, and Bosnia in particular.

Recently, a new sub-set of terrorists that could be identified with al-Qa'eda, or which identifies itself with the broader aims of the original group, has emerged. These Islamists are tied to the fighting in Chechnya, or to the former Soviet Republic of Georgia. Usually in their 20s, they are not linked by any particular campaign or by having trained together in one of the original al-Qa'eda camps. Rather, these Islamists have shared experiences at certain universities across the Arab and Muslim world, most often in Pakistan, which is home to the more virulent strains of the fundamentalist interpretations of Islam. Interestingly, in the case of some of the individuals that have been successfully identified or apprehended, these terrorists and potential terrorists are the sons or sons-in-law of first generation members of the original al-Qa'eda network. This is first and foremost an intellectual network, less reliant on the person-to-person contact so common to the original group. As a result, these cells have been found to be even more autonomous than was previously posited. They represent a broad outer circle, far more diverse than the original al-Qa'eda network.

¹ NOTE: This paper was written and edited for publication prior to the July 7, 2005 London bombings.

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Aspects of the New al-Qa'eda

The new generations of fundamentalist terrorists do not share the same group history as the one the United States and its allies have been fighting most frequently since 9/11. The non-aligned nature of many of the new cells established in Europe and Austral-Asia, for example, have a more international identity, greater independence and looser structures. Almost all the 9/11 hijackers were of one nationality, Saudi Arabian. Today, however, law enforcement agencies are, more often than not, apprehending or learning of cells with an extremely heterogeneous make-up. Good examples of this are the group that attempted a gas attack on the Paris metro in 2003, and those responsible for the simultaneous bombings in March 2004 of the Madrid railway.

In fact, we now know that, contrary to the government line, the Hamburg cell which had provided logistical support to the 9/11 leader Mohamed Atta was not effectively dismantled after the attacks. Instead, it reconstituted itself in the months following in order to play a crucial role in the Madrid bombings more than two years later. Likewise, more and more cells have been unearthed, the members of which are from North Africa and Asia. This led one senior European intelligence specialist to state that, "It is not *al-Qa'eda* that is the problem anymore. The next generation sees the original one as gone soft, or too vulnerable."

Furthermore, a pattern seems to be emerging in regard to how these new iterations have managed to sustain themselves. Training facilities have moved from Central Asia to Asia: particularly Indonesia (the Sulawesi region especially), the Philippines, Bangladesh and Nepal. And more often, it appears that operational planners have begun isolating specific Islamic centers, mosques or madrasas for operational targeting and recruiting. They take control of an existing facility, typically with the assistance of a radical Imam with a suitably fundamentalist or Salafi message, and turn this facility into a recruiting center for those who will be later sent to one of the new training camps. The creeping take-over of these centers reflects, in a methodological sense, the manner in which the original Bureau of Services subsumed previously innocuous charities and organizations all over the globe before *al-Qa'eda* was created.

II. The Global War on Terror: Europe's Response & its Role

The ramifications of the 9/11 attacks, and its lessons, have been understood differently in various parts of the world. Most striking, perhaps, is the apparent difference in response between Europe and the United States. How can we explain the growing number of voices that speak of irrevocable damage done to European-US relations caused by the radical shift in White House policies?

Crumbling Transatlantic Link?

Much has been made of the fact that in its responses to the attacks, the United States has demonstrated a propensity not only to a Machiavellian view of the world – divided among simply the good and the bad – but also a renewed unilateralism that favors force over political or diplomatic tools. Such a shift has been said to exacerbate tension between Washington and various capitals in Europe. While in many instances such a categorization

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of U.S. policies may indeed be valid, a judicious examination of foreign policy and defense initiatives under the previous two Democratic administrations results in a more nuanced appreciation of the current U.S. stance. It should not be forgotten that prior to 9/11, the Clinton White House was often prepared to use force unilaterally, in theaters such as Somalia, Afghanistan, and the Sudan – especially in response to terrorism. Likewise it was prepared more than once to commit sizeable defense assets to prolonged military operations in other parts of the world without a specific UN mandate (viz. Bosnia and Kosovo).

Operational Realities versus Political Transience

With the exception of the Madrid bombings in March 2004, *al-Qa'eda*-instigated mass-casualty terrorism has yet to make its presence felt throughout Europe.² As a result, the general sense of vulnerability amongst members of the public can be said to be quite low. Nevertheless, if we look at the history preceding the 9/11 hijackings, and also the numerous subsequent arrests made all across Europe, a distinctly different picture emerges.

We now know, predominantly as a result of effective cooperation between the FBI and the police and security services of Germany, that Europe played an important part in the staging and preparation of the 9/11 attacks. In fact, there is evidence that the Madrid train bombing was logistically underpinned by remnants of the support base used by Mohamed Atta in Hamburg, prior to his leaving for the United States. More significantly, in very successful (often international) operations conducted in the last two years across Europe, numerous terrorists and cells have been interdicted in countries such as Italy, France, Germany and the UK. More than once they have been found to be in possession of materials destined for use in a chemically-enhanced, toxic attack.

Those arrested since September 11 have often been legally resident immigrants. But in France, for example, non-Arab, previously non-Muslim French nationals have also been detained, having similar Islamic conversion stories to that of Richard Reid³. Indeed, wide use is also made of fake or re-engineered EU passports. During a number of arrests on the continent, no less that 28 false passports were retrieved. The unitary Schengen frontier around the continental members of the European Union obviously makes EU-nation-state issued travel documents all the more desirable, given the freedom of movement guaranteed to the holder once he has crossed the Schengen border.

Questioning of apprehended suspects has revealed that once inside an EU member state, the Arab Service Bureau system, as set-up by Osama bin Laden, continues to function on the continent and also in the UK. Along with remaining bureaus, certain mosques have become recruiting and meeting places for lower-level operatives, especially those associated with the more radical and charismatic imams. Overlapping this network is a string of charitable organizations, often linked to Islamist philanthropists resident in Saudi Arabia, and several schools which, if not overtly Islamist, are linked via board members, or in other ways, to the previous networks.

² NOTE: This paper was written and edited for publication prior to the July 7, 2005 London bombings.

³ Richard Reid, the infamous shoe-bomber, was a UK national who had converted to the Islamic faith.

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As a result of the numerous arrests, subsequent trials and information gathered, it is fair to state that operationally, Europe has indeed taken its responsibilities seriously. Law enforcement officials agree in their analysis that *al-Qa'eda* represents a significant threat not only to the United States but also to the continent. But this threat assessment is not universally appreciated. As one of Europe's leading *al-Qa'eda* experts from the German Foreign Intelligence Service (BND) indicated to this analyst, there is a distinct gulf between the reality on the ground perceived by the agencies and the stance evinced by the political leaders of many nations, Germany included.

Selective Targeting

Despite declaring for well over a decade that the whole of the West is heretical to the Muslim value system and must be destroyed, Osama bin Laden's organization has concentrated almost exclusively on attacking the United States. From the first World Trade Center bombing, through the African embassy attacks, the USS Cole and 9/11, al-Qa'eda has had a United States focus in its choice of "Western" targets. Subsequently, while operational officers are fully aware of the extent of penetration of the European Union and the fact that it may be only a matter of time until they too are attacked, politically this is a difficult reality for EU elites to broach, let alone openly discuss.

Many in the U.S. government expected this to change after Madrid. It was expected that the major nations of the EU would finally appreciate the full importance of the Global War on Terrorism (GWOT) and support it more fully. The results of the attacks were, however, quite the opposite of what was expected.

The Madrid bombing resulted in a more dovish Spanish stance because of the incompetence of the then administration and the surprise results of the elections held one week later. Once it was clear that it was *al-Qa'eda* and not ETA that was responsible for the attacks, as had been stated almost immediately by the then Minister for the Interior, the government was seen as wholly incompetent and worthy of punishment. The expected election results were therefore reversed and the incumbents replaced. Since the public had "voted with their feet," and since the Aznar government had been one of the GWOT's strongest supporters, the new administration, in a show of appreciation, distanced itself from the previous hawkish, pro-GWOT stance. It is unlikely that the same would happen if a similar attack were to occur in another EU state that was not on the cusp of an election and where the government did not make the mistake of apportioning blame incorrectly.

The difference, therefore between U.S. and European understandings of the 9/11 attacks and their ramifications are not as large as they may seem, especially if one is able to separate the political from the practical.

III. Conclusion

In identifying potential targets it is important to recognize the different motivations that drive today's terrorists. In the past, groups such as the IRA or ETA wished to influence a given government in a given direction by inculcating fear into the general population. Today's Islamist terrorist is not necessarily interested in such an end-state. Individuals such

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as Osama bin Laden wish to influence the broader *umma* or Muslim culture, and to take acts that inform a broader transcendental reality. As a result we can expect targeting to concentrate on greater and greater lethality, incorporating ever more symbolic targets. It is no accident that the targets on 9/11 included the Pentagon, the center of US military might, the WTC, the symbol of western capitalism, and, according to some analysts, the U.S. Capitol.

To conclude, the challenge now is to imagine what method of attack the enemy will use. They are very unlikely to resort once more to the methodology of 9/11. Second, is to posit from their point of view what the most symbolically powerful target would be. In this fight, the imagination will prove almost as important as our intelligence capabilities.

Annex A: Short Author Biographies

Sebestyén Gorka was educated in the United Kingdom. He moved to Budapest following the fall of communism in Hungary, to take up a policy position in the Defense Ministry of the first newly elected democratic government. Since then he has been an International Research Fellow at the NATO Defense College in Rome, Fellow at Harvard University's Kennedy School of Government and a policy analyst with the RAND Corporation in Washington, DC. In addition to running the Institute for Transitional Democracy and International Security in Budapest, he is also a non-resident fellow of the Terrorism Research Center in Virginia and a member of the U.S. Council for Emerging National Security Affairs. In the past he has acted as an ambassadorial briefer for the United States Department of State. He is an alumnus of the Atlantic Council of the United States. Mr. Gorka has published in excess of sixty articles and monographs internationally on the topics of terrorism, Central European military reform, Russia and the NIS, biological terrorism and organized crime. He is also a lead analytic contributor to the publications of the Jane's Information Group of the UK. He has written for Pinkerton's Global Intelligence Report and is a regular commentator for Hungarian and international news organizations on defense and security issues. Mr. Gorka also lectures on these topics at three universities, including the University of San Francisco's Budapest program.

Darryl Howlett teaches courses on international security at the University of Southampton, United Kingdom. Between 1987 and 1995 he was the Information Officer for the Programme for Promoting Nuclear Non-Proliferation (PPNN). Until it concluded its work in 2002, PPNN operated as an international networking program devoted to supporting nuclear non-proliferation by fostering dialogue, searching for constructive solutions and by disseminating research, analysis and information. An example of this work is to be found in the publication, *The Future of the Nuclear Non-Proliferation Treaty*, edited by John Simpson and Darryl Howlett, and published by Macmillan in 1995. Dr. Howlett's recent publications include, "The Emergence of Stability: Deterrence-in-Motion and Deterrence Reconstructed", in Ian R. Kenyon and John Simpson, eds. and *Deterrence and the Changing Security Environment*, Frank Cass, forthcoming (and published also as a special issue of the journal, *Contemporary Security Policy*).

Joseph McMillan is a senior research fellow at the National Defense University's Institute for National Strategic Studies, focusing on issues related to terrorism, the greater Middle East and South Asia. Prior to joining NDU, Mr. McMillan served in a series of civilian positions at the Department of Defense. He has more than 15 years of experience dealing with regional defense and security issues affecting the Persian Gulf, the Levant, South Asia, North Africa and the former Soviet Union. In 1997 he was named Principal Director for Russia, Ukraine and Eurasia in the Office of the Secretary of Defense. The following year he was promoted to the Senior Executive Service and appointed Principal Director for Near Eastern and South Asian Affairs. Mr. McMillan holds a B.A. in political science from the University of Alabama, did his graduate work at Vanderbilt University and is a 1992 distinguished graduate of the National War College. He was a career member of the Senior Executive Service and the recipient of the Defense Meritorious Civilian Service Medal with

Bronze Palm and the Defense Exceptional Civilian Service Medal. He has published a number of articles and book chapters on foreign and security affairs.

Aris Pappas is currently Senior Director of the Microsoft Institute for Advanced Technology in Governments, a focal point for the application of Microsoft research and development resources in solving big and complex problems that are of concern to governments and publics, worldwide. Mr. Pappas retired from the Central Intelligence Agency in 2003 as a member of the Senior Intelligence Service, with over 34 years of service. In 2003, he co-founded Intelligence Enterprises, LLC where he is the principal for homeland security and serves on a number of advisory panels, most recently the two "Kerr Commissions." He has held numerous senior management positions and has been awarded for work in both the analytic and clandestine services of the CIA. He established and served as the first Chief of the Homeland Security Staff in the office of the Deputy Director of Central Intelligence for Community Management. He received a B.A. from the City College of New York and an M.A. from Boston University. He was commissioned as a Regular Army officer in 1968 and served six years on active duty, including company command in the Republic of Korea and as Estimates Officer at the Headquarters, U.S. Army, Europe. He retired from the active reserve in 1996. Mr. Pappas attended the U.S. Navy War College's Centennial class, College of Naval Command and Staff in 1983, graduating with "Highest Distinction."

John Sandrock is the Director of the Program on International Security at the Atlantic Council of the United States. He has more than 30 years of experience with international security affairs, including Europe, the Middle East and Central/South Asia. Most recently, he managed a program to establish a media network in Iraq in support of the Coalition Provisional Authority. He was an international civil servant with the Organization for Security and Co-operation in Europe (OSCE) where he was the Deputy Director for Mission Support and Chief of Operations, leading senior diplomatic missions in Eastern Europe, Central Asia, the Caucasus and the Balkans. Colonel Sandrock also served as the U.S. Air Attaché in India and Afghanistan. His military career included tours with the Office of the Joint Chiefs of Staff, the Air Staff and NATO. He was a command pilot and served in Vietnam. John speaks German, Dari/Tajik and some French. He has a Master's Degree from Georgetown University and a Bachelor of Arts degree from the University of Montana.

Amy Smithson joined CSIS in September 2003. She specializes in in-depth field research on issues related to chemical and biological weapons proliferation, threat reduction mechanisms, defense and domestic preparedness. The author of a wide range of pertinent studies, she has addressed such topics as the reduction of U.S. and Russian weapons capabilities, the status of international treaties outlawing those weapons, the utility of export controls and unconventional terrorism and U.S. preparedness. She has testified before Congress and is frequently consulted by the electronic and print media. Before joining CSIS, she worked at the Henry L. Stimson Center, where she founded the Chemical and Biological Weapons Nonproliferation Project to serve as an information clearinghouse, watchdog and problem-solver on chemical and biological weapons issues. Earlier at the Stimson Center, she elaborated various proposals for the use of cooperative aerial inspections, co-edited *Open Skies, Arms Control, and Cooperative Security* and coauthored a study on the suitability of the U.S. government's structure for addressing arms control issues in the post-Cold War era. Previously, at the Pacific-Sierra Research Corporation, she concentrated on strategies and

tactics to monitor nuclear weapons accords. She holds a Doctorate in political science from George Washington University, a Master's in international relations from Georgetown University and two Bachelor's degrees in political science and Russian from the University of North Carolina, Chapel Hill.

Anne Speckhard, Ph.D., is Adjunct Associate Professor of Psychiatry at Georgetown University Medical School and Professor of Psychology in Vesalius College, the Free University of Brussels. Dr. Speckhard has been working in the field of posttraumatic stress disorder (PTSD) since the 1980's and has extensive experience working in the former Soviet Union. Currently she is research director of the Combating Suicide Terrorism project in Chechnya interviewing family members and studying the motivations and recruitment histories of suicide terrorists, and designing a counter-terrorism intervention for youth. She is also co-directing Understanding the Roots of Modern Suicide Terrorism a research effort in Morocco interviewing family members and close associates of the Casa Blanca suicide terrorists. She also has collected similar research interviews on the topic of suicide terrorism in the Palestinian territories (West Bank and Gaza). She is director of the Holocaust Survivors Oral Histories Project- Belarus a project constructing through oral histories and archival research the history of the Minsk Ghetto and Holocaust in Belarus. In 2002 she interviewed hostages in Moscow from the Chechen takeover of the theater regarding their psychological responses and observations of the suicidal terrorists and did the same in 2005 with surviving hostages from the Beslan school take-over. She also researched traumatic stress issues in survivors of the Chernobyl disaster and has written about stress responses to toxic disasters in general. Dr. Speckhard worked with American expatriates after 9-11 (at SHAPE, NATO, the U.S. Embassy to Belgium and Mission to the EU) and conducted research on acute stress responses to terrorism in this population. Dr. Speckhard directed the NATO Advanced Research Workshop - Ideologies of Terrorism: Understanding and Predicting the Social, Psychological and Political Underpinnings of Terrorism and serves on the NATO/Russia Counter-Terrorism Advisory Group as well as the Human Factors & Medicine Advisory Panel on Social and Psychological Consequences of Terrorism. She was previously awarded a Public Health Service Fellowship in the United States Department of Health & Human Services where she served as a Research Fellow.

Annex B: Acronyms

BND – Bundesnachrichtendienst (the German foreign intelligence agency)

BWC – Biological Weapons Convention (1972)

CBRN – Chemical, Biological, Radiological or Nuclear (Devices/Weapons)

CIA – Central Intelligence Agency (United States)

CW – Chemical Weapons

CWC – Chemical Weapons Convention (1993)

DPRK – Democratic People's Republic of Korea (North Korea)

ETA – Euskadi Ta Askatasuna ("Basque Homeland and Liberty")

EU – European Union

FBI – Federal Bureau of Investigation (United States)

FMV – Foot and Mouth Virus

GWOT - Global War on Terrorism

HEU – Highly Enriched Uranium

IAEA – International Atomic Energy Agency

ICBM – Intercontinental Ballistic Missile

IND – Improvised Nuclear Device

IRA – Irish Republican Army

ITF-25 - NATO's International Task Force-25

ITDB - Illicit Trafficking Database

LTTE – Liberation Tigers of Tamil Eelam (Sri Lanka)

NATO - North Atlantic Treaty Organization

NPT – Treaty on the Non-Proliferation of Nuclear Weapons (1968)

OAS – Organization of American States

PDD - Presidential Decision Directive

PFLP – Popular Front for the Liberation of Palestine

PIJ – Palestinian Islamic Jihad

PKK – Partiya Karkerên Kurdistan (Turkey, Kurdistan Workers Party)

RDD – Radiological Dispersal Device

UN - United Nations

WMD – Weapons of Mass Destruction

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