FUTURE SURVEY

A Monthly Abstract of Books, Articles, and Reports Concerning Forecasts, Trends, and Ideas about the Future

A World Future Society Publication

* * * ***SPECIAL ISSUE*** * * *

SECURITY AND PEACE IN THE 21st CENTURY:
Nuclear Weapons, Terrorism and Other Threats

Assembled by

Michael Marien

FUTURE SURVEY MINI-GUIDE #2

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FOREWORD

The *Future Survey* Mini-Guide series seeks to select and highlight the best recent thinking on major problem areas that are critical for our future. Mini-Guide #1, ***Global Warming and the Energy Transition*** (Feb 2007), compiled 57 abstracts on what may be the most important long-term challenge facing humanity. This Special Issue on ***Security and Peace in the 21st Century*** assembles and re-edits 72 abstracts, all but one (#46) published in *FS* over the past 4-5 years. Both Mini-Guides are an attempt to arrange important futures-relevant information in a new and different way, so that readers and researchers can quickly get some grasp of current sectoral thought. The broad topics of the two Mini-Guides increasingly overlap, and are best considered together.

This Mini-Guide is sponsored by the World Academy of Art and Science <www.worldacademy.org>, as a wide-scope background for its Nuclear Weapons Abolition Project. Discussions about forming an international forum for exploring major concerns of humanity were begun in the post-WWII period. WAAS was founded in 1960 as an informal "world university" at the highest scientific level, to explore "the true enemies of peace" (ignorance, intolerance, fear, resignation) and "the social consequences and policy implications of knowledge" (notably regarding nuclear weapons). Membership in the Academy is by invitation only, and totals some 650 Fellows in 77 countries.

Among the Academy's founders were several involved in developing the first atomic bomb, who went on to became advocates of nuclear disarmament, including Albert Einstein, J. Robert Oppenheimer, and Joseph Rotblat (founder of the Pugwash conferences—see H-30).

WAAS has become increasingly concerned by the dangers of further proliferation, refusal of the nuclear powers to fulfill their NPT pledges to abolish all existing weapons, and the dire impacts of nuclear weapons use on humanity and the environment.

In 2005, the Academy formed a working group on nuclear issues and forged alliances with other institutions working to abolish nuclear weapons. Participants include Garry Jacobs (chair; see #23), Lincoln Bloomfield, Harlan Cleveland (past president, WAAS), John Cox, Jonathan Granoff, Robert McNamara (see #18), Asokan Natarajan, Jasjit Singh (see #23), and Robert van Harten.

Special thanks are due to Walt Anderson, outgoing WAAS president (and new *FS* Advisor), for facilitating sponsorship of this guide. Selections for this Mini-Guide and opinions expressed here are entirely those of the editor, and do not necessarily reflect the views of WAAS or WFS. As in regular issues of *FS*, the "A,B,C" rating on complexity indicates professional level (A), college level (B), and popular level (C), with AB and BC of value to two levels and ABC of some value to all.

BEST BOOKS AND ARTICLES

Many important books, reports, and articles have been written over the past decades on security, nuclear weapons, terrorism, and peace. Readers/researchers have a broad choice of items that overlap but do not duplicate each other. Some suggested starting points:

SECURITY

BEST single indicator of current global security:
- *Bulletin of the Atomic Scientists* "doomsday clock" (#1, H-36)

BEST broad overview of 21st century security challenges:
- Brown, **Grave New World** (#2)

BEST effort to shift focus from state security to security of people:
- Commission on Human Security, **Human Security Now** (#9)

BEST introduction to thinking about security in general:
- Schneier, **Beyond Fear: Thinking...About Security** (#12)

NUCLEAR WEAPONS

BEST overview of nuclear weapons trends:
- Cirincione, **Bomb Scare: History and Future** (#13)

BEST scenarios of the broad range of possible nuclear weapons use:
- Quester, **Nuclear First Strike: Consequences...** (#16)

BEST critique of the dangers of current US nuclear policy:
- McNamara, ***Apocalypse Soon*** (#18)

BEST recent hopeful statement on nuclear policy:
- Schulz *et al.*, ***A World Free of Nuclear Weapons*** (#22)

TERRORISM

BEST overview of terrorism trends:
- Hoffman, **Inside Terrorism** (revised edition; #28)

BEST predictions on terrorism developments:
- Enders/Sandler, **The Political Economy of Terrorism** (#30)

BEST survey of terrorism experts:
- *Foreign Policy* & CAP, ***The Terrorism Index*** (#31)

BEST long-term counterterrorism strategy:
- Richardson/Club de Madrid, **The Roots of Terrorism** (#37)

OTHER THREATS

BEST overview of environment, energy, and food supply threats:
- Pirages/DeGeest, **Ecological Security** (#45)

BEST overview of climate change as threat to security:
- CNA Military Advisors, **Natl. Security & Climate...**(#46)

BEST overview of the threat of infectious disease:
- RAND, **The Global Threat of...Infectious Diseases** (#50)

BEST overview of small arms/light weapons proliferation:
- Stohl/Schroeder/Smith, **The Small Arms Trade** (#55)

PROMOTING PEACE

BEST overview of ways to eliminate war:
- Hinde/Rotblat, **War No More: Eliminating Conflict...** (#60)

BEST overview of arms control:
- Levi/O'Hanlon, **The Future of Arms Control** (#61)

BEST statement on need to treat peacekeeping on a par with defense:
- CFR Task Force, **In the Wake of War...** (#65)

BEST statement on the future UN role in promoting peace:
- Thakur, **The United Nations: Peace and Security** (#72)

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Editor: Michael Marien

Production Editor: Lane Jennings

Research Assistant: Tricia Park

Advisors: Walter Truett Anderson; Clement Bezold; Arnold Brown; Joseph F. Coates; Hazel Henderson; Dennis C. Pirages; Arthur B. Shostak

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SYNTHESIS

Security has always been a key human concern, as regards protecting individuals, families, communities, and nation-states from threats posed by nature and other humans. We are now entering a new age of global security, where planet-wide threats are apparent, and planet-wide measures are increasingly needed.

This Big Picture Mini-Guide seeks to provide a broad appreciation of recent thinking about the complexities of 21st century security. As briefly indicated in the Hindsight section (pp 34-35), concerns about redefining "security," nuclear war, nuclear terrorism, terrorism in general, common security, and promoting peace have all been amply expressed over the past few decades. These worries are still present, although changing in significant ways, largely for the worse. Despite extensive economic and technological progress, we are at risk of an extensive setback in the early 21C, perhaps even species extinction, due to weapons technologies, global warming caused by our energy technologies, and the lack of adequate social technologies—institutions and norms—that will enable us to reduce these threats. It is time to begin thinking of some new approaches to the mounting problems of our "grave new world" (#2).

General Security. The "doomsday clock" of the atomic scientists, now set at 5 minutes to Midnight, provides a quick introduction to the worsening state of global security since 2002. Giving much more detail, Michael E. Brown (now Dean of the School of International Affairs at GWU), provides two excellent anthologies (#2/3) that clearly make the case for the many factors shaping the 21C "security landscape." Two textbooks published in 2006 reinforce the very strong case for a new and broader paradigm of "security" (#3/4), as does the Worldwatch Institute's widely-distributed "State of the World" report, building on earlier WW Papers (H-1, H-17, H-32) dating back to 1977. The UN High-Level Panel on Threats, Challenges, and Change (#7) notes six clusters of threats that must be addressed, and Kofi Annan's report, "In Larger Freedom" (#8), stresses how security, development, and human rights interconnect. The UN-sponsored Commission on Human Security urges a new paradigm that shifts from security of the state to security of people (#9). No counterarguments to the broadened view have been identified. With so many new concerns, it becomes more important than ever to think intelligently about risks, costs, and trade-offs (#12).

Nuclear Weapons. The supreme threat in recent decades has been—and continues to be—the use of nuclear weapons (although global warming is rising rapidly as an equal or greater threat). Fears about "nuclear holocaust" (H-10) and "nuclear winter" (H-18) have subsided since the end of the Cold War, only to be replaced by fears of nuclear terrorism—not a new concern (see H-26/H-27 from 20 years ago), but certainly a growing threat in the post 9/11 world. *The good news* about nuclear weapons is that their number has been cut in half over the past 15 years and they will continue to decline, and there is a new attitude toward nuclear weapons, toward greatly reducing nuclear forces (#13). *The bad news* is that >2000 US warheads still remain dangerously and unnecessarily on hair-trigger alert (#1, 18/19), the current Non-Proliferation Treaty suffers from a crisis of legitimacy and a lack of leadership (#15, 23), use of nuclear weapons could come about in a wide variety of scenarios (#16/17), current nuclear policy may lead to substantial proliferation (#18/19), the missile defense system is deeply flawed (#20), and terrorist groups appear willing and perhaps able to use nuclear weapons or "dirty" nuclear devices (#19, 21, 25/27). This imparts new urgency to long-standing calls to secure nuclear materials, sharply reduce the number of weapons, and eventually abolish them (#21/24).

Terrorism. Forecasts of terrorism in the late 1970s (H-5/H-8) pointed to growing sophistication and an ever-growing threat. Sadly, they proved correct. Today's forecasts continue to point to "a new era of terrorist violence" and "many al Qaedas" (#28), the rise of "complex terrorism" and "superterrorism" (#29), the increase of suicide terrorist incidents, and ever more costly attacks (#30). Among experts polled, 84% believe the US is not winning the "war on terror," and 79% believe an attack on the scale of 9/11 in the US is likely or certain by the end of 2011 (#31). Al Qaeda's thinkers seek to inflict broad damage on the US and its allies (#32). General anti-terrorism strategies are offered by the 9/11 Commission (#34), two experts formerly on National Security Council staff (#35), a Century Foundation Task Force (#36), the Club de Madrid (#37), RAND (#38), the OECD-linked Financial Action Task Force (#39), Yevgeny Primakov (#40) James Fallows (#41), and Zbigniew Brzezinski (#42). Yet the most simplistic ideas about ending "evil" and "winning" the war on terror have prevailed (#43/#44).

Other Threats. Still more threats are looming. Many of these can be grouped under "ecological security" (#45). Climate change is rapidly emerging as *the* major threat (#46). Also consider oil dependency (#47), agricultural bioterrorism (#48), new advances in bioweaponeering (#49), infectious diseases (#50), toxic warfare (#51), weak cybersecurity (#52), weak and failed states (#53), refugees and forced displacement (#54), the proliferation of small arms and light weapons (#55), global privatization of security (#56), lax homeland security (#57), and new threats to civil liberties (#58).

Promoting Peace. With all these mounting threats, we should pay *much* more attention to promoting peace and global security, for practical, as well as ethical, reasons (#59). Doing so is a never-ending task on a variety of fronts (#60). It involves the complex tasks of arms control (#61), promoting international law (#62), conflict prevention (#63), constructive conflict resolution (#64), greatly improving post-conflict capacities for peacekeeping (#65), managing "spoilers" to peacebuilding (#66), promoting reconciliation (#67), proactive long-term strategies (#68), encouraging dialogue (#69), and strengthening the UN as the main provider of international security (#72). In an era of huge government deficits, we should think carefully about which security investments have the highest payoffs. We need "smart" security, not "strong" security.

Four Summary Statements. ***1) New Reasons to End Nukes.*** Growth of complex terrorism, aggravated by unwise responses, raises the risk that nuclear weapons might be used by "asymmetrical" enemies, making nuclear retaliation meaningless (see #22). The Iraq quagmire has already cost some $500 billion and diverted much attention from the growing list of security threats. Detonation of even a low-end "dirty nuke" could inflict many billions of dollars in damage and divert further attention from global threats that must be addressed. Thus greatly reducing or ending the nuclear weapons threat would avoid the further distraction.

2) Taking Education Seriously. Many authors advocate peace education as necessary. This is important at the school and college levels, but elite adult education is especially needed for leaders in government, business, the media, and academia. This Mini-Guide is one possible tool, but many others must be tried. The task of getting good ideas in high places will not be simple.

3) Taking Debate and Dialogue Seriously. Robert McNamara (#18) argues that debates over nuclear policy are long overdue, and, if held, the abolition position would prevail. But we do not have institutions to promote sustained, high-level debate on matters of great importance. Facilitating public debate and dialogue must receive much more attention. A small investment could make a huge difference in promoting security and peace.

4) Taking Science and Knowledge Seriously. Finally, we should reassess the role of knowledge, and how best to communicate and apply it in addressing 21C problems. — M.M.

GENERAL SECURITY

#1 SECURITY/OVERVIEW (AB)

Approaching Midnight (Special Report). *Bulletin of the Atomic Scientists,* Jan-Feb 2007, 24-66.

The last change in the famous *BAS* "Doomsday Clock" was in Feb 2002, when the *BAS* Board of Directors moved the minute hand from 9 to 7 minutes to midnight—the same setting at which the clock debuted in 1947, and the third time the hand has moved forward since the end of the Cold War in 1991. The Board has now moved the minute hand from 7 to 5 minutes to midnight, noting "*the deteriorating state of global affairs*" and that "*we stand at the brink of a second nuclear age,*" characterized by a world of porous national borders and expanded commerce in dangerous dual-use technologies and materials. This period of globalization coincides with an erosion of the global agreements and norms that have constrained the spread of nuclear weapons for decades.

Fourteen brief essays follow, in five categories: ***1) Doomsday Reconsidered***: Martin Rees reprises his forecast that "*we might have no more than a 50-50 chance of avoiding a catastrophic setback to civilization*" (see **Our Final Hour**; Basic Books, 2003; *FS* *25:5/236); also Jonathan Schell, Tony Hallam, Sam Keen, and Thomas Homer-Dixon; ***2) Nuclear Weapons***: Bruce G. Blair (President, World Security Institute) warns that portions of both the US and Russian strategic missile arsenal are still kept on hair-trigger alert and that "*the anachronistic mind-set of the Cold Warrior still dominates their nuclear establishments, their agendas, and their relationship in ways that deeply undermine their efforts to contain 'loose nukes'*"; Wolfgang K.H. Panofsky questions the "weapons of mass destruction" term because nuclear, chemical, and biological arms are very different (the common designation severely inhibits efforts to control nukes, which are the most lethal and destructive [ALSO SEE #14]); ***3) Climate Change***: AAAS President John P. Holdren on possible catastrophes from global warming [see *FS* 29:4/131]; Robert Socolow (Princeton U) on the need for a new ethics to deal with climate change (noting that "*our descendants could find themselves spending their time and treasure moving cities inland, managing refugee populations, relocating agriculture, and keeping other creatures from going extinct*"); ***4) Emerging Technologies***: Matthew S. Meselson on worst fears about biotech, K. Eric Drexler on nanotechnology and a possible miniaturized arms race; ***5) Preventing Doomsday***: John Steinbruner on whether civilization can deal with the unknowable. [**NOTE**: Though the clock is a single indicator based on panel judgement, it deserves noting, especially the new emphasis on climate change. ALSO SEE H-36.] **(*BAS* Doomsday Clock updated)**

#2 SECURITY/OVERVIEW (AB)

Grave New World: Security Challenges in the 21st Century. Edited by Michael E. Brown (Director, Center for Peace and Security Studies, Georgetown U). Washington: Georgetown U Press, Aug 2003/342p/$29.95pb.

Examines a wide array of military and nonmilitary factors that will shape the security landscape in the 21st century, and prospects for the future in each area. Topics include: ***1) Technology and Security***: US military predominance remains certain in the short term, but "*technical expertise combined with targeted capital will allow relatively weak groups and states to create significant capabilities*"; ***2) Perils of Nuclear, Biological, and Chemical Weapons***: there is much good news in terms of nuclear weapons proliferation (but the US has increasingly begun to consider scenarios of using nuclear weapons); previously unrealized opportunities to construct a "poor man's atomic bomb" have opened; ***3) Proliferation of Conventional Weapons***: efforts to control their spread have been mixed at best; a significant effort by suppliers to restrain exports is unlikely; ***4) Infotech***: IT is becoming more ubiquitous, mobile, and vulnerable; security technologies are advancing, but so are tools for hacking; "*the global community may become excessively dependent on a handful of core networks whose integrity cannot be assured...even the most powerful and versatile networks will have vulnerabilities*"; ***5) Energy Security***: forecasts of growth in energy demand indicate the need to broaden our definition of security and take a global and multilateral approach; ***6) Environmental Change***: ecological buffers are becoming thinner with time [see #45].

7) Demographic Developments: "*migration, not fertility or mortality, is the factor most likely to exacerbate security concerns*" [see #54]; ***8) Conflict in the Developing World***: "dangerous instability exists in many parts of the world, particularly the poorest areas"; ***9) Transnational Crime and Corruption***: one of the most dangerous threats to the quality of life is collaboration of governments with the criminal underworld—the political criminal nexus (PCN)—which undermines the rule of law, human rights, and economic development in many parts of the world (of 192 states in the world today, some 120 can be regarded as medium to weak to failed states, with medium to strong PCNs); "*the magnitude of the problem today is unprecedented*"; ***10) Transnational Terrorism***: "the leading threat to the continued success of globalization."

Brown concludes that "*the forecast for the next decade or two is gloomy at best; there are only a few areas where policy problems are easing.*" Many security problems are receiving insufficient attention from policymakers: "*in most areas, policymakers are not thinking far enough ahead...in addition, they often favor simple, single-factor options and hope for quick fixes.*" But most security problems are not amenable to quick fixes, and many cannot be solved at all. Most of the policy lessons are simple: act early, think ahead, plan for the long haul, and recognize the limits of military actions and the need for multilateral initiatives. "Policymakers around the world routinely fail to meet even these minimal standards."

[**NOTE**: An excellent survey, albeit needing a chapter on infectious disease: a "microbial perfect storm" (*FS* 25:12/561) could overshadow and aggravate all of these security concerns.] **(security challenges: gloomy outlook)**

#3 SECURITY/OVERVIEW (A)

New Global Dangers: Changing Dimensions of International Security. Edited by Michael E. Brown (Georgetown U) and three others. An *International Security* Reader. Cambridge MA: The MIT Press, Dec 2004/546p/$28.

The end of the Cold War had tremendously important, positive effects on international security. At the same time, hopes for a new and predominantly peaceful world—so wide-

spread at the beginning of the 1990s—were dashed by the deadly conflicts that followed. The leading powers did not form a new partnership or a new world order. International responses to war, slaughter, and starvation were appallingly inadequate, especially in Rwanda. *Two things are clear about prospects for national and international security in 21C*: 1) *security problems will continue to be widespread and deadly* (it would be naïve to assume that they will simply go away, or that new problems will be neutralized by the positive benefits of globalization); 2) "*the security agenda will be far more complex than it has been in the past*" (we thus must examine the full range of military and non-military factors).

These reprinted articles from *IS* are in three parts: ***1) Weapons and Security***: the military foundation of US hegemony (the immense US military effort has not produced military omnipotence, and it probably cannot), three models of why states build nuclear weapons (security, pressure from domestic actors, deeper norms about what is legitimate and appropriate), contemporary nuclear proliferation concerns (and cases of reversal), preventing nuclear entrepreneurship in Russia's ten remote nuclear cities, proliferation of biological weapons (a severe challenge to 21C peace and stability, as they become more capable and more accessible to more actors), control of biological weapons (risk trade-off analysis is needed), building a regime to contain ballistic missile proliferation.

2) Nonmilitary Aspects of Security: "human security" as the latest neologism to encourage thinking about security beyond military concerns [see #9], the likelihood of violent conflict increasing because of environmental scarcities, growing pressures for international migration, security and male-dominated sex ratios in Asia's largest states [see *FS* 26:7/333], HIV/AIDS and the changing landscape of war in Africa (on the emerging symbiosis between HIV/AIDS and armed conflict), humanitarian assistance as a cause of conflict (refugee relief can feed militants, and contribute to the war economy).

3) Transnational Actors and Security: the sense of rage against market civilization in many developing countries [*FS* 29:4/123], globalization and international terrorism (if globalization is to continue, international norms and rule of law must be fully employed against the terrorist backlash), the new civil society of international NGOs (increasing uncertainty, competition, and insecurity for all organizations), and the rise of the privatized military industry. [**NOTE**: Top-rate scholarly essays.] **(international security: new dimensions)**

#4 SECURITY/OVERVIEW/TEXTBOOK (B)
Seeking Security in an Insecure World. Dan Caldwell (Distinguished Prof of Pol Sci, Pepperdine U) and Robert E. Williams Jr (Assoc Prof of Pol Sci, Pepperdine U). Lanham MD: Rowman & Littlefield, 2006/241p/$24.95pb.

During the Cold War, mention of "security studies" suggested "national security," in turn generally limited to matters relating to use of military force. "National security policy" and "defense policy" were generally regarded in interchangeable terms. This traditional paradigm has changed since the end of the Cold War. Security can no longer be defined exclusively in terms of the ability of a state to defend its territory. An ability to deal with other threats—global climate change, drug trafficking, international terrorism, resource scarcities, economic espionage, disease pandemics, transboundary pollution, computer viruses/hacking—is now thought to be essential. Also, "*seeking security in an insecure world for one's state alone is a strategy doomed to failure.*" We cannot ignore the security of others without endangering our own; thus the need to think in terms of international or global security. The "new paradigm" of security thus stretches the concept in two directions: a broadening with respect to the issues to be included on the security agenda, and a widening with respect to the subject of security. *The new paradigm is also "far more open to the possibility that the principal threat to the lives of citizens and other core values of a state may come from the state itself.*"

The new paradigm is necessary because of five factors: 1) the rise of nonstate actors (furthered by the privatization of security); 2) the rise of transnational threats; 3) the growing indivisibility of security ("everywhere we look, we see connections between various sources of insecurity"); 4) the problem of unintended consequences ("*often the attempt to achieve greater security has the unintentional result of threatening security*"; unintended effects may be most apparent in the "war on terrorism" and the Iraq war); 5) the shifting geographic focus (many of today's threats come together in Africa).

Chapters are in three parts: ***1) Traditional Sources of Insecurity***: conventional weapons (small arms, light weapons, explosive remnants of war), nuclear weapons, biological and chemical weapons, proliferation of WMDs; ***2) New Sources of Insecurity***: infectious diseases (the flu epidemic of 1918-1919 killed six times as many as all who were killed in WWI), cyberthreats, trafficking (illegal trade in drugs, humans, arms, etc.); ***3) Political and Social Conditions of Insecurity***: weak and failed states, ethnic conflict, economic security, ecological disasters (notably global warming), resource wars, the new terrorism. Security in the 21C still requires state-based national security, but "*human security and cooperative security must be part of any comprehensive approach to security in the century ahead.*" **(security: new paradigm for 21C)**

#5 SECURITY/OVERVIEW/TEXTBOOK (B)
Global Security in the Twenty-First Century: The Quest for Power and the Search for Peace. Sean Kay (Chair of International Studies, Ohio Wesleyan U). Lanham MD: Rowman & Littlefield, March 2006/380p/$85; $34.95pb.

A broad-ranging textbook with ten chapters: ***1) Dynamics of Global Security***: the globalization of security, the new distribution and diffusion of power, the high value of "soft power" (where economic capacity can become a crucial measurement of power), asymmetrical power, the power of nature (which might force a redefinition of the search for peace to include living in harmony with the environment); ***2) The Quest for Power***: realism as the dominant and traditional approach to understanding the quest for power; ***3) The Search for Peace***: idealism as the counterpoint to realism (seeking to identify conditions for a more peaceful international society), cooperative security, peace through commerce, emerging security paradigms (these include: constructivism, transnational civil society, postmodernism, feminism).

4) Great Powers and Grand Strategy: the US, Russia, China, EU; ***5) Regional Flashpoints***: India/Pakistan, Korean peninsula, Taiwan, Persian Gulf/Middle East, Eurasia; ***6) Tech-***

nology and the Business of Security: the "revolution in military affairs" (RMA), the limits of technology in war (e.g., the lack of accurate situational awareness before the US invasion of Iraq), the dramatically expanded role of information systems, the military use of space, global military spending ($1.035 trillion in 2005, about half by the US), transnational organized crime and illegal weapons, security privatization.

7) ***Asymmetrical Conflict***: new opportunities for substate groups and individuals, genocide and ethnic cleansing, terrorism and insurgency, the globalization of terror; ***8) Human Security***: foreign policies that emphasize human security (in Scandinavia, Canada, and Ireland), human rights and democracy, population and security, migration and refugees, food security and health, the human costs of war, critique of human security (it risks being applied in an overly broad manner so that virtually everything can become a security issue; however, it has made a major contribution in refocusing the traditional emphasis on nation-state security to the security of individuals and groups, and environment/energy issues; ***9) Environmental Security and Energy Security***: the evolving environmental security paradigm, energy as a highly strategic element of environmental security, environmental dangers; ***10) Meeting the Challenges of Power and Peace***: strengths and weaknesses of realists and idealists ("this book is neutral on the value of each general approach...each has a role to play"; realists view idealists as naïve, while idealists see realists as perpetuating self-fulfilling prophecies), education as the most vital tool for addressing the various threats of the 21C, crisis management.

[**NOTE**: A bland overview, but valuable for straddling realism and idealism.] **(security in 21C: overview)**

#6 SECURITY/NEW THREATS (AB)

State of the World 2005: A Worldwatch Institute Report on Progress Toward a Sustainable Society. Michael Renner, Hilary French, and Erik Assadourian (Project Directors). Foreword by Mikhail Gorbachev (Chairman, Green Cross International). NY: W. W. Norton, Jan 2005/237p/$18.95pb.

This 22nd annual edition focuses on ***Redefining Global Security,*** and *"launches a broader Global Security project in which the Institute will work with an expanding network of partners to generate a deeper understanding of global security challenges and policy opportunities."* Renner explains that, *"in sharp contrast to the Cold War's bipolar standoff involving nuclear arsenals and competing core ideologies, today's security challenges tend to be more diffuse, less predictable, and more multidimensional."* Fears of a violent showdown between two superpowers have given way to concerns about the rise of global criminal and terror networks, local and regional wars mostly fought with small arms, instability emanating from weak and failed states, corrupt public institutions, and the lack of recourse to justice. These threats and challenges have led a wide range of scholars and NGOs to redefine security.

Some core insights: 1) weapons do not necessarily provide security; 2) real security in a globalizing world cannot be provided on a purely national basis; 3) the traditional focus on state or regime security is inadequate and needs to encompass safety and well-being of individuals; 4) democratic governance and a vibrant civil society may ultimately be more imperative for security than an army; 5) *"a combination of resource depletion, ecosystem destruction, population growth, and economic marginalization of poor people has set the stage for more frequent and more devastating 'unnatural' disasters"*; 6) water is the most precious resource, and 40% of world population will live in water-stressed countries by 2015; 7) climate change is certain to sharpen a broad range of environmental challenges; 8) *"a number of measures have been undertaken in the name of anti-terrorism that may well perpetuate a cycle of violence."*

Chapters discuss connections between population and security (>100 countries had "youth bulges" in 2000), the high priority of containing infectious disease, the growing number of environmental refugees (adding to 17 million refugees in 2003), cultivating food security (in a time of declining agricultural diversity, food scares, and climate shifts), managing water conflict, changing the oil economy that leads to climate warming, cutting nuclear weapons and conventional small arms (some 300,000 people are killed by small arms each year in armed conflicts, and another 200,000 in gun-related violence), building peace through environmental cooperation (environmental peacemaking strategies offer the chance to craft a positive policy framework), laying the foundations for peace (by better equipping the UN for security challenges), and principles for a more secure world (addressing the roots of insecurity, seeking conflict prevention, and being cross-cutting and integrative). [**NOTE**: SOTW is available in 21 languages and 26 countries). In the Foreword, Mikhail Gorbachev calls for a value shift on how we handle Earth and for "Global Glasnost"—openness, transparency, and public dialogue—on the part of governments and citizens.] **(global security redefined)**

#7 SECURITY/U.N. PANEL (A)

A More Secure World: Our Shared Responsibility. Report of the Secy General's High-Level Panel on Threats, Challenges and Change. NY: United Nations, Dec 2004/129p/$15pb.

The central challenge for the 21C is to fashion a new and broader understanding of collective security, and of the responsibilities, commitments, strategies, and institutions that come with it, if it is to be effective and equitable. In the 21C, more than ever before, no State can stand wholly alone. Collective strategies and institutions are indispensable; *"we all share responsibility for each other's security."* Any event or process that leads to large-scale death or lessening of life chances, and undermines states as the basic unit of the international system, is a threat to international security.

Now and in the decades ahead, the world must address six clusters of threats: ***1) Poverty, Infectious Disease, and Environmental Degradation***: more resources and action toward ending poverty and promoting sustainable development via the Millennium Development Goals; a special session of the UN Security Council on HIV/AIDS as a threat to international peace and security; begin negotiations on a new long-term strategy to reduce global warming beyond the period covered by the Kyoto Protocol; ***2) Inter-State Conflict***: despite few inter-State wars in the past 60 years, the threat has not vanished; all states should seek Security Council authorization to use force; ***3) Internal Conflict***: strengthen the UN role in preventing wars; provide support to weak states in managing their natural resources to avoid future conflicts; expedite

negotiations to control small arms; ***4) Nuclear, Radiological, Chemical, and Biological Weapons***: multilayered action is required to prevent proliferation; nuclear weapon states should restart disarmament; reduce supply and develop better enforcement; ***5) Terrorism***: develop a comprehensive global strategy of fighting terrorism that addresses root causes and strengthens responsible states, the rule of law, and human rights; ***6) Transnational Organized Crime***: negotiate a comprehensive international convention on money laundering (e.g., crime groups gain $300-$500 billion/year from narcotics); form a robust UN capacity-building mechanism for rule-of-law assistance; ensure that sanctions are enforced. **(UN agenda to enhance security)**

#8 SECURITY/U.N. REFORM (AB)
In Larger Freedom: Towards Development, Security and Human Rights for All. Report of the Secretary-General (Kofi Annan). NY: United Nations, June 2005/88p/$10pb.

A report for Heads of State and Government meeting in Sept 2005, inspired by the 14 volumes of the Millennium Project [see *FS* 27:9/428 and other volumes in 27:8 and 27:9] and the High-level Panel on Threats, Challenges, and Change [see #7], urging that it is within our power to pass on to our children a brighter future, to halve poverty and halt the spread of major known disease in the next 10 years, and reduce violent conflict and terrorism. "All the conditions are in place for us to do so," if we can perceive the glue of common interest and our common humanity. *"This is an agenda of highest priorities...we must come together to bring about far-reaching change."* Development, security, and human rights are imperative, and they reinforce each other. We will not enjoy development without security, or security without development, and we will enjoy neither without respect for human rights.

1) Freedom From Want: A Shared Vision of Development: to promote global prosperity for all, each country with extreme poverty should adopt a comprehensive national strategy to meet the Millennium Development Goals for 2015; developed countries should achieve the target of 0.7% of GNP for official development assistance by 2015; complete the WTO Doha round of trade negotiations; provide resources for a comprehensive response to HIV/AIDS; ***2) Freedom From Fear: A Vision of Collective Security***: pledge full compliance to all articles of weapons treaties; develop international instruments to regulate small arms and light weapons; implement the comprehensive UN counter-terrorism strategy; accede to all relevant international conventions on organized crime, establish a Peacebuilding Commission and a voluntary fund for peacebuilding; establish a UN civilian peace standby capacity; ***3) Freedom to Live in Dignity***: promote universal values of human rights and the rule of law, recommit to principles of democracy, embrace "responsibility to protect" as the basis for collective action against genocide and ethnic cleansing, strengthen the International Court of Justice, make human rights treaties more effective, create a Democracy Fund at the UN to help countries seeking to strengthen democracy.

Concludes with a section on the many changes needed to strengthen the UN and make it more efficient: revitalize the General Assembly by speeding up the deliberative process and concentrating on major substantive issues; enable the Assembly to engage fully with civil society; broaden representation on the Security Council; endorse management reforms for the Secretariat; ensure stronger system-wide coherence. [**NOTE**: An ambitious vision, seen as *"the most far-reaching reforms in the history of the UN."*] **(UN action and reform agenda)**

#9 SECURITY/U.N. COMMISSION (AB)
Human Security Now: Protecting and Empowering People. Commission on Human Security <www.humansecurity-chs.org>. NY: CHS, May 2003/159p/$20pb (dist. by UN Pubs).

The independent CHS, co-chaired by Sadako Ogata (former UN High Commissioner for Refugees; Ford Foundation Scholar-in-Residence) and Amartya Sen (Master, Trinity College, Cambridge U), was launched at the 2000 UN Millennium Summit by the government of Japan.

In the past, security threats were largely confined to protecting the state from external attacks. In recent decades, our understanding of state security and the many types of threats has broadened, reflecting the changing international environment. But, in responding to terrorism, states may revert to a narrower understanding of state security, and violate human rights under the guise of a war on terrorism. *"The international community urgently needs a new paradigm of security."*

Attention must now shift from the security of the state to security of the people. *"Human security complements state security, enhances human rights, and strengthens human development. It seeks to protect people against a broad range of threats to individuals and communities, and to empower them to act on their own behalf."* It seeks to protect the vital core of all human lives in ways that enhance human freedoms and human fulfillment. It includes protecting citizens from environmental pollution, transnational terrorism, infectious diseases, and long-term conditions of oppression and deprivation.

Chapters discuss factors that cause violent conflict (competition over land and resources, growing inequality, increasing crime and corruption, weak and unstable political regimes), how massive migrations affect the security of receiving states, a human security approach to recovering from violent conflict, gaps in post-conflict strategies, poverty and human security, health and human security, basic education and human security, and a proposed global initiative that puts human security at the top of the agenda. Doing so would integrate development concerns with human rights activities, complement the Millennium Development Goals by addressing conflict and humans rights violations, enhance official development and humanitarian assistance, and promote a culture of human security. Advancing human security on all fronts includes protecting people in violent conflict, protecting people from arms proliferation, assuring the security of people on the move, minimum living standards everywhere, universal access to basic health care, etc. [ALSO SEE **Human Security in a Global World** edited by Lincoln Chen *et al.* (Harvard U Asia Center, Global Equity Initiative, Dec. 2003/278p), with 11 papers on the *human security* concept, first advanced in **Human Development Report 1994**.] **(Commission on Human Security report)**

#10 SECURITY/OVERVIEW (A)
The Shield and the Cloak: The 21st Century Demands a More Expansive Understanding of National Security, Gary Hart (Prof of Public Affairs, U of Colorado), *Issues in Science and*

Technology, 23;1, Fall 2006, 37-40.

Former US Senator asserts that leaders must be in touch with 21C realities and be bold enough to define new rules for the new game. "*The new security will be national and international, defensive and offensive. It will require a shield and spear, representing new kinds of military forces, as well as a cloak that protects the global commons from nonmilitary threats.*" The old security required cooperation among Western armies, and massive weapons in massive numbers. The new security requires cooperation among intelligence services, and special forces of individual warrior teams. The old security meant prevention of nuclear war. In addition to that goal, "*the new security is a cloak composed of security of livelihood, security of energy, and security of the environment.*"

In many ways, success in achieving security in the early 21C will be measured by the imagination shown by the US and other nations in creating opportunities to convert global revolutions into threat-reduction policies for the commons. Security of the commons in the future will be achieved in direct proportion to humanity's ingenuity in reducing the causes of insecurity. It is possible to use technology and trade to improve the lives of billions, to stabilize fragile states and improve economies, to reverse dangerous climate change, to control epidemics and attack diseases, to bring the vast majority of the global population closer together, and to dramatically reduce proliferation of destructive technologies. The hard part is generating the political will to do what must be done.

[**NOTE**: This article is derived from **The Shield and the Cloak: The Security of the Commons** (Oxford Univ. Press, Feb 2006), and from Hart's experience as co-chair of the US Commission on National Security.] **(security for the 21C)**

#11 SECURITY/NEW THREATS (A)

New Threats and New Actors in International Security. Edited by Elke Krahmann (Lecturer in International Relations, U of Bristol). NY: Palgrave Macmillan, Jan 2005/230p/$65.

"*New threats and new actors are changing the nature of security.*" New threats such as terrorism, transnational crime, civil conflicts, and AIDS are much more pervasive and probable. New non-state actors have not only contributed to the emergence of new security threats such as crime and terrorism, but are also playing a growing role in providing security. The making and implementation of security policies is becoming increasingly fragmented among a multiplicity of actors, including states, international organizations, NGOs, and private military companies. "*A broader understanding of security has by now come to be widely accepted not only in international relations theory, but also among policy makers.* The field of international relations today includes an ever-increasing number of studies on environmental security, HIV/AIDS as a security issue, and human security."

Chapters are devoted to peacebuilding NGOs as the new conflict managers, humanitarian NGOs and mercenaries (many NGOs have turned to international private security companies for their security requirements), similarities among drug traffickers and terrorists (international cooperation between the US and its allies is critical in both wars), targeting money laundering, the AIDS pandemic, NGOs as security actors in the fight against AIDS, the proliferation of small arms and light weapons (SALWs kill half a million people/year), NGOs and the shaping of the EU conventional arms regime, and the emergence of "security governance" and standards of "good governance." **(security: broader view of threats and actors)**

#12 SECURITY/METHODS (ABC)

Beyond Fear: Thinking Sensibly About Security in an Uncertain World. Bruce Schneier (<www.schneier.com>; Founder and CTO, Counterpane Internet Security). NY: Copernicus Books, Sept 2003/295p/$25.00.

A "professional thinker about security" and author of **Applied Cryptography** (1994), said to have sold >200,000 copies, applies the methods developed for computer security to broader security issues, especially security against terrorism. "*Security issues affect us more and more in our daily lives, and we should all make an effort to understand them better. We need to stop accepting uncritically what politicians and pundits are telling us. We need to move beyond fear and start making sensible security trade-offs.*" Everyone makes security trade-offs, every day. We live our lives making judgments, assessments, assumptions, and choices about security (e.g., when we lock the door to our home). Making security trade-offs isn't some mystical art: "the goal of this book is to demystify security, to help you move beyond fear." To get beyond fear, you have to start thinking intelligently about trade-offs, the risks you face, and the options for dealing with those risks. A lot of lousy security is available for purchase, and a lot of lousy security is imposed on us by government. Once we move beyond fear, we can recognize bad or overpriced security.

No security is foolproof, but neither is all security equal. There's cheap security and expensive security, unobtrusive security and security that forces change in how we live. There's security that respects our liberties and security that doesn't. "*A common path to bad security is knee-jerk reactions to the news of the day. Too much of the US government's response post-9/11 is exactly that.*" Most of the changes we're being asked to endure won't result in good security. They're Band-Aids that ignore the real problems. "*Security is always a trade-off, and to ignore or deny those trade-offs is to risk losing basic freedoms and ways of life we now take for granted.*" Security exists to deal with a few bad apples. It's a tax on the honest. Perfect security is impractical because the costs are too high. Despite a plethora of security systems in every aspect of our lives, "none of these systems is perfect." The challenge is to figure out what to keep, what to alter, what to toss, and what to build from scratch. The status quo is never fine, because security is never done. It has no beginning and no end.

A five-step process is used to analyze and evaluate security systems, technologies, and practices: 1) What assets are you trying to protect? 2) What are the risks to these assets? 3) How well does the security solution mitigate those risks? 4) What other risks does the security solution cause (in that most solutions cause new problems)? 5) What costs and trade-offs does the security solution impose? [**NOTE**: Simply-written, with wisdom for everyone, at every level—from personal and family security to organization and nation. Schneier's ideas were profiled in ***Homeland Insecurity*** by Charles C. Mann (*The Atlantic Monthly*, Sept 2002, 82-102).]

(security: basic issues)

NUCLEAR WEAPONS

#13 NUKES/OVERVIEW (AB)

Bomb Scare: The History and Future of Nuclear Weapons. Joseph Cirincione (VP for National Security, Center for American Progress, Washington). NY: Columbia U Press, Feb 2007/206p/$27.50.

From the beginning, nuclear weapons have both terrified and fascinated us. Fear of the bomb motivated the first atomic program, and allure of the bomb's power propelled national leaders to build ever-larger arsenals. Today, "*fear of a nuclear attack by terrorists or another country has made nuclear proliferation the number one security threat facing the US and many other nations.*" Yet several countries still maintain extensive nuclear arsenals developed for another era, develop plans for new weapons, and postulate new nuclear missions. Leaders in several other nations covet the weapons now denied them. This book is about "how and why nuclear weapons have multiplied, and what can be done to slow, stop, and reverse their spread," assuming that proliferation of nuclear weapons is undesirable—an assumption that is far from universal.

"Nuclear optimists" still contend that nuclear weapons are beneficial, that their presence enhances stability (the theory of nuclear deterrence), and that their spread is inevitable. "Nuclear pessimists" warn that nuclear arsenals create instability, that the risk of nuclear weapon use by intention or accident is too great to accept, and that proliferation increases the risk of terrorism. "While presenting both sides of the debate, this book clearly aligns with the nuclear pessimists." The consequences of a nuclear explosion in any major city would be far beyond WWII. A small atomic weapon of 20 kilotons (similar to those used on Hiroshima and Nagasaki), would destroy or damage most buildings, and kill almost everyone within a 10-square-mile area. "*A modern 1-megaton hydrogen bomb would kill most people within 150 to 600 square miles.*" This threat stems not only from the 27,000 nuclear weapons held by 8 or 9 nations today, but also from terrorist groups or other nations.

Chapters discuss the Manhattan Project to build the bomb in the early 1940s, Bernard Baruch's June 1946 proposal to the UN for a strong International Atomic Development Authority to own and control all dangerous elements of the nuclear fuel cycle so as to prevent an arms race, the Atoms for Peace proposal in 1953 [see *FS* 29:4/105], the US-USSR arms race, why states want nuclear weapons, barriers to proliferation, the threat of nuclear terrorism ("there is enough fissile material in the world for 300,000 bombs"), the "grave dangers" from existing arsenals, the risk that the entire international nonproliferation regime could collapse ("the longest-term, but most severe, nuclear threat we face today"), the nonproliferation successes of the Bush II administration, and the failures of the Bush II nonproliferation policy (the war with Iraq was "the world's first nonproliferation war," fought primarily over the perceived need to prevent acquisition or transfer of WMDs).

Some positive trends: ***1) Fewer Nuclear Weapons and Programs***: the number of nuclear weapons in the world has been cut in half over the past 15 years, and stockpiles will continue to decline; more countries have given up nuclear weapons or programs in the past 15 years than have started them; ***2) Fewer Ballistic Missiles***: the danger that any nation could strike the US with a nuclear "bolt-out-of-the-blue" is declining: "*there are far fewer long-range missiles capable of hitting the US today than there were 10 or 20 years ago,*" and the global stockpile of intermediate-range missiles has declined by 98% from Cold War levels; ***3) Fewer Biological and Chemical Weapons***: though still a serious terrorist threat, "*these weapons have been largely eliminated from state arsenals;*" ***4) A New Attitude Toward Nuclear Weapons***: we may be seeing the start of a trend toward viewing nuclear weapons as illegitimate and abhorrent, and that prohibitions must apply to all; "*there is, in fact, broad agreement across the political spectrum that US nuclear forces could be reduced from thousands to hundreds without harming national security.*" A change in US policy "may be the prerequisite to implementing a global transformation."

Any future nuclear policies should follow two guiding principles: 1) focus the greatest government resources on the most serious threats such as nuclear terrorism and blocking new nuclear states; 2) minimize proliferation drivers (i.e., reduce prestige associated with these weapons) and maximize proliferation barriers (to increase the political cost of violating the global nonproliferation norm). There is reason to believe that the peoples and nations of the world will come to see nuclear weapons as the "historic accident" IAEA's Mohamed El Baradei says they are. **(nuclear weapons: past and future)**

#14 NUKES, ETC./OVERVIEW (A)

Deadly Arsenals: Nuclear, Biological, and Chemical Threats (Second Edition). Joseph Cirincione (Director for Nonproliferation, Carnegie Endowment) *et al.* Washington: Carnegie Endowment for International Peace (dist. by Brookings Institution Press), July 2005/490p/$29.95pb.

"*Proliferation of nuclear, biological, and chemical weapons is widely recognized as the most serious threat to the national security of the US and other nations.*" Official and public attention to proliferation issues, however, has varied over the years from near hysteria to apathy. Concern is now very high, with passionate debates over which strategies can best prevent the spread and use of these weapons. First published in 2002 as **Deadly Arsenals: Tracking Weapons of Mass Destruction** (*FS* 24:12/558), this revised and updated edition no longer employs the term "weapons of mass destruction," because the phrase conflates very different threats from weapons that differ greatly in lethality. "*A failure to differentiate these threats can lead to seriously flawed policy*" (e.g., in describing the potential threat from Iraq). Nuclear weapons are the most deadly weapons ever invented—the only true WMDs.

1) Nuclear Weapons: only eight nations are known to have nuclear weapons: Russia (16,000), US (10,300), China (410), France (350), UK (200), Israel (100-170 suspected), India (75-110 possible), and Pakistan (50-110 possible). Iran and North Korea may be actively pursuing nuclear weapons programs; many more countries, however, have given up such programs since signing the NPT in 1968. If Iran were to acquire nuclear weapons, Egypt, Saudi Arabia, and others might follow. The most serious threat is from nuclear terrorism, with "*a substantial risk of terrorist theft from the nuclear stockpiles in more than 40 countries around the world.*" ***2) Radiological Weapons***: although not as destructive as nuclear explosive weapons, they also pose a serious danger, particularly as a

terrorist threat. Dispersal of radioactive materials via conventional explosives (a "*dirty bomb*") would contaminate a wide area. There is also the risk of a "*reverse dirty bomb*" that brings the conventional explosive to an existing radioactive source (e.g., storage pools for spent-fuel rods in nuclear reactors). ***3) Biological Weapons***: intentional use of living organisms to kill is second to nuclear weapons in their potential to cause mass casualties. It is often difficult to get a complete picture of which countries or groups have biological weapons or programs. By spring 2005, 169 nations had signed the BWC (Biological Weapons Convention) which outlaws production and stockpiling of bioweapons. However, seven nations are suspected of retaining bioweapons or programs: China, Egypt, Iran, Israel, North Korea, Russia, and Syria. ***4) Chemical Weapons***: as of spring 2005, 168 countries were party to the 1996 Chemical Weapons Convention which started a process of deproliferation; four countries (US, Russia, India, South Korea) retain significant stockpiles and six countries are suspected of having significant programs. ***5) Missile Proliferation***: 30 nations have ballistic missiles; five have intercontinental missiles with range of 5,500+ km (China, France, Russia, UK, US), while seven have medium-range missiles with ranges of 1,000-3,000 km (China, India, Iran, Israel, North Korea, Pakistan, and Saudi Arabia). Chapters analysize the eight nuclear weapons states, the two "hard cases" (North Korea and Iran), and "nonproliferation successes" (eight countries that have backed off). Appendices describe various treaties.

[**NOTE**: Seeks to be "the most complete and authoritative resource available" on the spread of these weapons and their delivery. ALSO SEE: **Universal Compliance: A Strategy for Nuclear Security** by George Perkovich, Jessica Mathews, Joseph Cirincione, *et al.* (Carnegie Endowment, 2005), on ending the threat of nuclear terrorism by comprehensively securing and eliminating nuclear materials worldwide to prevent new nuclear weapons states.] **(nuclear weapons threats)**

#15 NUKES/ENERGY (B)

Nuclear Weapons, Energy, and Nonproliferation: Pressures on the Global Community. The Stanley Foundation. Muscatine IA: The Stanley Foundation, Nov 2006/42p/free <www.stanleyfoundation.org>.

A summation of the 41st Conference on the United Nations of the Next Decade, held in June 2006 with 28 participants from 16 nations. The discussion centered on eight topics: ***1) Shortcomings of the Existing Nuclear Regime***: participants overwhelmingly agreed that, for a variety of reasons, the entire regime is in serious trouble (the current Non-Proliferation Treaty suffers from a crisis of legitimacy, a lack of leadership by the US and Russia, an inability to function effectively, and the rise of nonstate actors); ***2) Characteristics of an Effective Nuclear Regime***: a set of multilateral rules and norms is needed that can be effectively implemented ("*participants generally agreed that total disarmament is not a politically viable option at the present time, but that it should be a long-term goal*"); ***3) Controlling Our Nuclear Weapons Legacy***: since the end of the Cold War, much work and substantial resources have been directed toward dealing with "loose nukes" in Russia and related items; efforts have lacked focus, and only 30-50% of the identified need has been addressed; strained relations between the US and Russia are hampering threat reduction efforts; ***4) The Future of Nuclear Energy***: global warming and rising energy needs will drive an increased reliance on nuclear energy, a reliable international interdependent system is needed to guarantee states access to fuel supply; ***5) Managing the Fuel Cycle***: discussion over whether all states should be allowed to pursue a complete nuclear fuel cycle; many argued for creating an international fuel bank; ***6) Obligations of Nuclear Weapon States***: many noted that the US and Russia—the two states with the largest arsenals by far—need to take a more aggressive leadership role, and that developing new generations of nuclear weapons [see #18-#19] is inconsistent with commitments to disarmament; ***7) Confidence-Building Measures***: credible security assurances by multilateral institutions, removing NATO nuclear weapons (currently positioned in six European states), ratification of the Comprehensive Test Ban Treaty by all states (US failure to ratify has endangered the future of the CTBT), nuclear-weapon-free-zones (these beneficial zones should be promoted and strengthened in Africa, Latin America, Asia, and the Middle East). **(nuclear weapons issues)**

#16 NUKES/SCENARIOS (A)

Nuclear First Strike: Consequences of a Broken Taboo. George H. Quester (Prof of Government, U of Maryland). Baltimore: Johns Hopkins U Press, Feb 2006/159p/$22.95pb.

This book seeks "to survey the probable consequences if nuclear weapons were to be used again in anger, for the first time since the bombing of Nagasaki in 1945. It is a speculative analysis of what the world's likely reactions would be, and of what the policy responses of the US (and the other democracies) perhaps should be to such an awful event." Use of nuclear weapons is not very likely, but it would be useful to have considered the consequences *if* such an event occurs.

The *most likely scenarios*, for the moment, are: 1) war breaking out between two opposing nuclear powers, such as India and Pakistan (developments could then range from all-out escalation to just one nuclear detonation); 2) use of nuclear weapons by North Korea against Japan, South Korea, or even the US ("the style of the North Korean leadership has unfortunately been such that almost nothing can be excluded"); 3) a terrorist attack on the US. But what we expect the least may cause the greatest damage and shock, if and when it occurs. Thus we must consider less likely scenarios, of escalations in which no one gets killed, escalations in which millions perish, the nuclear escalator as an ally of the US, the victim as a state closely allied with the US, weapons detonated as an act of insubordination or insanity, etc. This study takes 2045—the 100th year after Nagasaki—as a meaningful landmark: if abstention from nuclear attack can be maintained until then, the "nuclear taboo" will most probably be reinforced.

Discrete types of scenarios are discussed: ***1) Cases of Ambiguity***: spreading nuclear "garbage" or radioactive debris, a conventional preemptive attack against nuclear weapons that causes one to explode, a dud of a bomb that yields much less than expected, a conventional attack mistaken for a nuclear attack (perhaps with a press declaration that the nuclear taboo had been violated), a "test" detonation at a tense political moment, use of a nuclear weapon in a civil war, detonation by simple accident; ***2) Surprisingly Low Collateral Damage***: there

would be no doubt that a nuclear weapon had been used, but the world would be pleasantly surprised that few or perhaps no people had been killed and little or no damage inflicted (e.g., a defensive antimissile system with a nuclear warhead destroys an incoming missile, or a small nuclear weapon with very low yields); ***3) Irresponsible Nuclear Escalations***: cases with uncertainty about the responsibility for the decision to strike, ranging from simple accident to madness and nuclear terrorism; ***4) Clear and Highly Destructive Nuclear Escalation with Definite Government Responsibility***: possibilities include attack from a rogue state (followed by a brave outside world response), world retreat or appeasement to avoid further detonations, two opposing sides hitting each other with nuclear weapons, limited nuclear war where the perpetrator retains a major residual nuclear force. Likely US popular reactions and appropriate US policy responses are explored for each of these scenarios. [**NOTE**: A very useful exploration of a very broad range of possibilities.] **(scenarios of nuclear weapons use)**

#17 NUKES/SCENARIOS (AB)

Nuclear Explosions in Orbit, Daniel G. Dupont (Arlington VA; editor, InsideDefense.com), *Scientific American,* June 2004, 100-107.

In July 1962, the US detonated a 1.4 megaton warhead at an altitude of 400 km over the Pacific Ocean, some 1,300 km from Hawaii. Communications in Hawaii briefly malfunctioned from the strong electromagnetic pulse (EMP) sweeping through the vast region below the blast. Unexpectedly, seven low earth orbit satellites, a third of the planet's fleet at the time, were crippled. US military researchers conducted three more high-altitude military explosions (HANEs) later that year, but then stopped when the Cuban Missile Crisis led to signing the Atmospheric Test Ban Treaty.

Since the early HANE tests, little has been said about the threat such events pose to the growing constellation of satellites that provides critical communications, navigation, broadcast and cable TV, and weather forecasting. Some 250 commercial and military satellites now orbit in the lowest altitudes, and most are defenseless against the radiation of a high-altitude atomic burst. *"The launch and detonation of a nuclear-tipped missile in low earth orbit could disrupt the critical system of commercial and civil satellites for years, potentially paralyzing the global high-tech economy."*

In 2001, a space policy committee chaired by Donald H. Rumsfeld warned that "the US is an attractive candidate for a Space Pearl Harbor." The possibility of an attack is relatively remote, but the consequences are too severe to be ignored. Even though the US is installing an expensive missile defense system [see #20], use of an antimissile interceptor against a nuclear-tipped target could set off a destructive HANE phenomenon. The Pentagon's Defense Threat Reduction Agency (DTRA) predicted the results of hypothetical scenarios in 2001: a single low-yield nuclear weapon the size of the Hiroshima bomb (10-20 kilotons) detonated 125-300 km above the earth's surface could disable in weeks to months all LEO satellites not specifically hardened. The side effects of a HANE could lead to >$100 billion in replacement costs—not accounting for the damage to the global economy. But hardening satellites is expensive, adding 20-50% to the total cost of a satellite.

The DTRA group used two scenarios of a HANE incident in 2010: 1) Indian forces cross into Pakistan during a clash over Kashmir; Pakistan responds by detonating a 10-kiloton weapon 300 km over New Delhi to demonstrate its ability to launch a deadly nuclear attack; 2) North Korea faces possible invasion, and explodes a nuclear warhead over its own territory to prove its determination to resist. **(nuclear weapons and satellites)**

#18 NUKES/U.S. POLICY (AB)

Apocalypse Soon (Cover Story), Robert S. McNamara (former US Sec'y of Defense), *Foreign Policy*, May-June 2005, 28-35.

"Current US nuclear weapons policy (is) immoral, illegal, militarily unnecessary, and dreadfully dangerous." It is well past time for the US to cease its Cold War-style reliance on nuclear weapons as a foreign policy tool. Much of the current US nuclear policy has been in place since the 1960s, and has only grown more dangerous and diplomatically destructive since then. Today, the US has deployed about 4,500 strategic, offensive nuclear warheads. Russia has roughly 3,800. Britain, France, and China each have about 200-400 nuclear weapons. Pakistan and India have <100 weapons each. North Korea claims to have nuclear weapons, and US intelligence estimates that it has enough fissile material for 2-8 bombs. The average US warhead has 20 times the power of the Hiroshima bomb. Of the 8,000 active or operational US warheads, 2,000 are on hair-trigger alert, ready to be launched on 15 minutes' warning. Russia presumably has similar arrangements.

McNamara has never seen any plan for the US or NATO to initiate use of nuclear weapons with any benefit for the US or NATO. *"To launch weapons against a nuclear-equipped opponent would be suicidal. To do so against a non-nuclear enemy would be militarily unnecessary, morally repugnant, and politically indefensible."* Yet, more than a decade after the end of the Cold War, US nuclear policy is unchanged. We should at least remove all strategic weapons from hair-trigger alert, which would greatly reduce the risk of accidental nuclear launch.

The Bush administration is projecting deployment of large numbers of strategic weapons far into the future, and planning an extensive and expensive series of programs to sustain and modernize the existing nuclear force, and to begin studies for new launch vehicles. *"If the US continues its current nuclear stance over time, substantial proliferation of nuclear weapons will almost surely follow."* Neither the Bush administration, the Congress, the American people, nor the people of other nations have debated the merits of alternative long-range nuclear weapons policies for their countries or the world. *"They have not examined the military utility of the weapons, the risk of inadvertent or accidental use, the moral and legal considerations relating to use of threatened use of the weapons, or the impact of current policies on proliferation."* Such debates are long overdue; if held, they will conclude that "we must move promptly toward the elimination—or near elimination—of all nuclear weapons." **(US nuke weapons policy questioned)**

#19 NUKES/U.S. POLICY (AB)

The New Nuclear Danger: George W. Bush's Military-Industrial Complex. Dr. Helen Caldicott (President, Nuclear Policy Research Inst.; founder, Physicians for Social Responsibility). NY: The New Press, April 2004/302p/$17.95pb.

First published in 2002, this book is still notable for its detailed outline of US nuclear policy and weaponry, which "has never been more aggressive." The US currently has some 2,000 intercontinental land-based hydrogen bombs, 3,456 nuclear weapons on subs roaming the seas, and 1,750 nuclear weapons on intercontinental planes. "Of these 7,206 weapons, roughly 2,500 remain on hair-trigger alert" (Russia has about 2,000 weapons on hair-trigger alert). The US has in place plans to fight and win a nuclear war. The Pentagon's official targeting plan, the single integrated operational plan (SIOP), has been upgraded since 1989, and now has a total of 3,000 targets, up from 2500 (these include 2,260 Russian sites, 1,100 of which are ostensibly nuclear facilities). According to retired admiral Eugene Carroll, "*interservice rivalry is the real engine of the nuclear arms race...it's about power building, each wanting and demanding more planes, bombs, and ships.*"

In the last six years, the nuclear weapons laboratories—Los Alamos and Sandia in New Mexico and Lawrence Livermore in California—have embarked on "the largest scientific endeavor ever attempted." This new project, the Stockpile Stewardship and Management Program, nicknamed Manhattan II, was ostensibly instituted to ensure the proper functioning of the US stockpile of nuclear weapons. "*But this benign description disguises the truth: nuclear scientists are actually designing, developing, testing, and constructing new nuclear weapons at an annual cost of $5 billion over the next 10-15 years.*" This is twice the cost of the original Manhattan Project [current dollars?] and much more than the annual average of $3.8 billion spent on nuclear weapons during the Cold War.

Aggressive militarization under the rubric of defense against terrorism threatens to provoke a chain reaction among nuclear nations, big and small, that, once set in motion, may prove impossible to control. In addition to nuclear weapons, there are three other nuclear threats: ***1) Terrorist Nuclear Weapons***: "up to 100 small suitcase Russian nuclear weapons have been lost over some years; the al Qaeda network may now possess several of these, which could well be smuggled into America on a small boat or overland"; ***2) Dirty Nuclear Devices***: hundreds of tons of highly carcinogenic plutonium and enriched uranium stand unguarded in Russia; the UN International Atomic Energy Agency documented 153 confirmed cases of theft of nuclear materials between 1993 and 2000; ***3) Nuclear Meltdown***: a planned meltdown of one of the 438 nuclear power plants throughout the world (including 103 plants in the US) can be facilitated by a jumbo jet or by an infiltrator working as an operator who takes over the control room.

Chapters describe the medical reality of nuclear war (millions of decaying bodies will rot, infected with viruses and bacteria that will mutate in the radioactive environment, and transmitted by insects from the dead to the living, whose immune systems will have been severely compromised by high levels of background radiation), nuclear winter [see H1], accidental nuclear war, think tanks ("the Heritage Foundation is still very much involved in promoting the nuclear arms race in all arenas"), the big defense corporations (notably Lockheed Martin), the Manhattan II project, national missile defense systems [see #20], and US plans for war in space.

(US nuclear policy more aggressive)

#20 NUKES/U.S. POLICY (AB)

Holes in the Missile Shield, Richard L. Garwin, *Scientific American*, Nov 2004, 70-79.

A long-time expert in nuclear weapons, missiles, and missile defense questions the national missile defense system now being deployed by the Bush administration. The Pentagon plans to install six interceptor rockets—designed to strike a ballistic missile in mid-course—in silos at Fort Greely in Alaska in Oct 2004, with ten more deployed at Ft. Greely and four more at Vandenberg AFB in California by the end of 2005. The reason for the deployment is to counter the threat of a rogue state—North Korea or Iran—attempting to hit the US with nuclear or biological weapons delivered on ICBMs. But "*despite more than $80 billion spent by the US on missile defense since 1985, this system will not provide significant protection for many years, if ever.*" The system's main weakness is that an attacker could easily load a ballistic missile with dozens of decoys.

A strong defense against ballistic missiles is a worthy goal. But instead of rushing to construct a flawed system, our leaders should pay more attention to evaluating the relative magnitudes of threats and assessing the capabilities of the proposed defenses. The present missile defense is "utterly useless" against ICBMs because midcourse countermeasures are so effective. Moreover, "*the primary missile threat to the US is not ICBMs...(but) short-range missiles launched from ships near US coasts." In a 2002 press briefing, Secretary of Defense Rumsfeld said that "Countries have placed ballistic missiles in ships—dime a dozen—all over the world. At any given time, there's any number off our coasts.*" Despite this acknowledgement, "the Defense Department has no system planned for deployment that could defend against these missiles." A nuclear weapon is much less likely to come to the US on an ICBM than in a shipping container, truck, suitcase, or backpack. [ALSO SEE **Hit to Kill** by Bradley Graham (Public Affairs, updated edition, Dec 2003), concluding that "the history of missile defense is littered with exaggerated claims of progress."] **(US missile defense system questioned)**

#21 NUKES/REDUCTION (AB)

The Race Between Cooperation and Catastrophe, Sam Nunn, NTI, *Vital Speeches of the Day*, 71:12, 1 April 2005, 369-373.

A March 2005 address to the National Press Club by the former US Senator (D-GA), who emphasizes that "*The US and its partners must be as focused on fighting the nuclear threat in this century as we were in fighting the communist threat in the last century.*" The greatest danger during the Cold War was a confrontation with Moscow. In contrast, we must cooperate with Moscow and many other capitals in addressing the greatest threats we face today: catastrophic terrorism, a rise in the number of nuclear weapons states, and increasing danger of mistaken, accidental, or unauthorized nuclear launch. These changes in little more than ten years "have left us with serious security gaps." We have taken important steps to prevent a nuclear attack, notably the Nunn-Lugar Cooperative Threat Reduction Program, which has been working since 1991 to secure and destroy weapons and materials in the former Soviet Union. Still, "*we and the Russians have completed between 25-50% of the job of securing nuclear weapons and materials, depending on definitions.*" Other important steps include the

emerging Global Partnership Against the Spread of Weapons and Materials of Mass Destruction, the Global Threat Reduction Initiative, an April 2004 resolution of the UN Security Council requiring stronger laws against export or transfer of nuclear materials, the Proliferation Security Initiative, and several agreements between Presidents Bush and Putin.

Yet we must elevate our effort and the speed of our response, or "we could face disaster." *On a scale of 1 to 10, the adequacy of our response to today's nuclear threats is about a three.* Four threat scenarios illustrate Nunn's sense of urgency: 1) terrorist attack with a nuclear weapon; 2) terrorist attack with a dirty bomb in New York City's financial district; 3) an accidental or unauthorized nuclear missile strike; 4) a sharp increase in the number of nuclear weapons states within a decade (e.g., Japan, South Korea, Iran, Egypt, Saudi Arabia, Brazil, Argentina, Indonesia), provoking greater regional tensions, greater pressure on other nations to go nuclear, and greater chance of nuclear accidents or weapons/materials falling into terrorist hands. Each scenario has a "day after" list of actions that could have prevented it. "*Preventing the spread and use of nuclear and other weapons of mass destruction should be the central organizing security principle for the 21st century.*"

[**NOTE**: Nunn is founder and head of the Nuclear Threat Initiative, a Washington-based foundation begun in 2001 and funded first by Ted Turner and later by Warren Buffett. NTI finances direct-action programs to secure nuclear materials around the world, coordinating with the US and foreign governments. In its effort to fill in the gaps where government is failing to reduce nuclear threats, it "may be the most ambitious example of private dollars subsidizing national security" (*NY Times Magazine,* 25 Feb 2007).] **(nuclear weapons threats)**

#22 NUKES/ABOLITION (AB)

A World Free of Nuclear Weapons, George P. Shultz (former Secretary of State), William J. Perry (former Secretary of Defense), Henry Kissinger (former Secretary of State), and Sam Nunn (NTI), *Wall Street Journal* (Op-Ed), 4 Jan 2007, A15.

Nuclear weapons were essential to maintaining international security during the Cold War because they were a means of deterrence. "*The end of the Cold War made the doctrine of mutual Soviet-American deterrence obsolete...reliance on nuclear weapons for this purpose is becoming increasingly hazardous and decreasingly effective.*" The world is now on the precipice of a new and dangerous nuclear era. "*Most alarmingly, the likelihood that non-state terrorists will get their hands on nuclear weaponry is increasing.*" Such groups with nuclear weapons are conceptually outside the bounds of a deterrent strategy, and present difficult new security challenges.

Strong non-proliferation efforts are underway. But by themselves, none of these steps are adequate to the danger. A major effort should be launched by the US to produce a positive answer through concrete stages. First and foremost is to turn the goal of a world without nuclear weapons into a joint enterprise, leading to a series of agreed and urgent steps, including: 1) changing the Cold War posture of deployed nuclear weapons to increase warning time and thus reduce the danger of accidental or unauthorized use of a nuclear weapon; 2) continuing to reduce substantially the size of nuclear forces in all states that possess them; 3) eliminating short-range nuclear weapons designed to be forward-deployed; 4) initiating a bi-partisan process in the US Senate to ratify the Comprehensive Test Ban Treaty, taking advantage of recent technical advances; 5) providing top security for all weapons stocks, weapons-usable plutonium, and highly enriched uranium everywhere in the world; 6) getting control of the uranium enrichment process; 7) halting production of fissile material for weapons globally; 8) redoubling efforts to resolve regional confrontations and conflicts that give rise to new nuclear powers.

Reassertion of the vision of a world free of nuclear weapons is consistent with America's moral heritage. "*The effort could have a profoundly positive impact on the security of future generations. Without the bold vision, the actions will not be perceived as fair or urgent. Without the actions, the vision will not be perceived as realistic or possible.*" [**NOTE**: An important bi-partisan statement.] **(major US effort to end nukes?)**

#23 NUKES/ABOLITION (A)

Dangerous Knowledge: Can Nuclear Weapons Be Abolished? Jasjit Singh (Centre for Strategic and Intl. Studies, New Delhi <csis_india@yahoo.co.in>), Manpreet Sethi (CSIS, New Delhi), and Garry Jacobs (Intl. Center for Peace and Development, Napa CA), *Futures* (forthcoming, 39:8, Oct 2007).

"*Possession and use of nuclear weapons will be universally acknowledged as a crime against humanity and every known weapon will be destroyed.*" It will look easy in retrospect, a mere succession of plausible steps, motivated by self-interest. The only questions are when and how. The historians will find obvious answers; only the futurist has to struggle.

The threat of nuclear weapons has loomed over the world for the past 60 years. During the Cold War, the arms race spurred development of vast nuclear arsenals amounting to >70,000 weapons, fanning fears of a nuclear Armageddon. The climate changed suddenly in the mid-1980s, when Mikhail Gorbachev proposed eliminating nuclear arsenals to Ronald Reagan in 1986 [see H-22], and the 1988 Third Special Session on Disarmament at the UN called for an end to nuclear weapons.

Some of this new thinking was propelled by proposals such as those put forth by George G.W. Bush in 1991 to hasten elimination of strategic nuclear weapons. A "gathering tide for nuclear abolition" in the 1990s included efforts by the International Network of Engineers and Scientists against Proliferation (INESAP), Australia's Canberra Commission on the Elimination of Nuclear Weapons, a pronouncement by the International Court of Justice, the Lawyers' Committee on Nuclear Policy, the Middle Powers Initiative in 1998 (chaired by Douglas Roche, former Canadian Disarmament Ambassador [see #59]), and the New Agenda Coalition involving the foreign ministers of 8 middle powers. Despite these efforts by nation-states, NGOs, and international organizations, "*the momentum for disarmament began to slow in the late 1990s and gradually unwound over the last five years.*" The roots of nuclear deterrence are proving difficult to dislodge, and the US, UK, NATO, and Russia have updated their nuclear doctrines. The lesson from past initiatives is that good ideas and proposals require the right political environment directed by visionary leadership. "*An integrated approach is needed to the goals of disarmament, non-proliferation, and human security.*"

Global abolition of nuclear weapons is now feasible and

more desirable then ever before. Major hurdles to address: 1) the political prestige of having these weapons; 2) the belief that possession enhances security; 3) the broadly-accepted view that abolition is not feasible, especially without strong US support; 4) the absence of an imminent pervasive threat; 5) the view that ballistic missile defenses can provide security against limited nuclear attack; 6) the sense of complacency arising from the fact that the US and Russia are reducing their stockpiles; 7) the belief that the threat of new nuclear states can be managed through the NPT, diplomacy, and possible use of force. Today we need leadership from many in thought, hope, and action. At any moment there is scope for fresh, positive initiative. There are always pragmatic next steps that can be taken. It is time for the concept of cooperative security to replace competitive security. **(nuclear weapons abolition: hurdles)**

#24 NUKES/U.S. POLICY (A)

Delegitimizing Nuclear Weapons: The US Should Take the Lead, Jack Mendelsohn (Adjunct Prof, GWU and American U), *Issues in Science and Technology*, 22:3, Spring 2006, 67-74.

Former Deputy Director of the Arms Control Assn argues that "*the most urgent national security issue facing the US is the possibility that a nuclear weapon might be used against this nation as an instrument or war or terror.*" This threat must be addressed vigorously and soon. But no nuclear weapon has been used in war since 1945, with few tests during the past decade. We have developed a nuclear amnesia, which is critically dangerous because nuclear weapons are far more destructive than other weapons. Some 27,000 nuclear weapons still exist, there are no effective defenses against a nuclear weapon delivered by long-range missile, and nuclear states with the exception of China continue to maintain the right of first use.

The current US administration is unwilling to negotiate treaties or enter into binding agreements, so "the burden of securing our future will fall on the next president." The attractiveness of nuclear weapons must be reduced, with policies that delegitimize them: 1) the US should declare that it does not consider nuclear weapons a legitimate weapon of war and will not use them unless used by an adversary (this statement might also be coordinated with other nuclear powers); 2) the next administration should make it clear that the US does not intend to resume testing to develop new nuclear weapons (this would curb substantial arsenal modification by the major nuclear powers, and enhance US credibility in its efforts to convince other nations to stem proliferation); 3) the US should encourage creation of NWFZs, enlarging areas of the world that are off limits to nuclear weapons. [**NOTE**: All well and good for nuclear states, but will not dissuade any terrorist group from using nukes.] **(nuclear weapons: delegitimizing use)**

#25 NUKES/TERRORISM (A)

The Four Faces of Nuclear Terrorism. Charles D. Ferguson (Council on Foreign Relations) and William C. Potter (Director, Center for Nonproliferation Studies, Monterey Institute). NY: Routledge, Sept 2005/376p/$27.95pb.

"*The US has faced the threat of nuclear terrorism for many years, but this peril looms larger today than ever before.*" Controls over nuclear and radioactive materials are fragmented and uncertain in many states where terrorist groups operate, often with popular support. The list of incidents of terrorist interest in nuclear mayhem is growing. Nuclear arms are at heightened risk for terrorist seizure in both Russia and Pakistan. Nuclear materials suitable for bombs are perhaps at even greater risk than nuclear weapons themselves. Hundreds of tons of plutonium and weapons-usable uranium in Russia have yet to receive even rudimentary security improvements. Even fissile material stocks in the US, where security is far stronger, may be vulnerable to attack. Meanwhile, criminal activities involving radioactive materials are on the rise.

These developments highlight the four faces of nuclear terrorism—the ways nuclear assets can be used: ***1) An Intact Nuclear Weapon***: stealing an existing weapon and detonating it; ***2) Improvised Nuclear Device***: theft or purchase of fissile material leading to fabrication and detonation of a crude nuclear weapon; ***3) Nuclear Facilities***: attacks against or sabotage of facilities, especially nuclear power plants; ***4) Dirty Bomb***: the unauthorized acquisition of radioactive materials leading to the fabrication and detonation of a radiological dispersion device.

"*The nuclear terror acts with the highest consequences are the least likely to occur because they are the most difficult to accomplish.*" The first two classes of incidents would involve nuclear explosions, with hundreds of thousands of lives lost and total costs that "could soar to several trillion dollars." Destruction of a nuclear power plant would probably cause much less damage, but still cost tens to hundreds of billions of dollars. Use of a dirty bomb could result in hundreds of casualties and costs of tens of billions of dollars. "*While the probability of nuclear terrorism remains much smaller than the likelihood of terrorism involving conventional means of violence, the danger of high-end terrorism is growing.*"

Despite this concern, the US government does not have a comprehensive plan to combat the threat. "*The foremost requirement...is the need for the US to alter dramatically its ranking of threats to its national security.*" American thinking about nuclear dangers was forged during the Cold War, but the threat posed by nuclear-armed states is being eclipsed by the threat of non-state terrorist organizations. "*Numerous US nuclear policies remain mired in the past and are impeding measures to reduce the nuclear terror dangers of today.*"

The US must reprioritize to focus on three key policies: 1) put HEU first: protect fissile materials abroad and reduce facilities that possess HEU; 2) reduce nuclear risks in South and Central Asia; 3) secure vulnerable Russian nuclear weapons.
(nuclear terrorism: growing risks)

#26 NUKES/TERRORISM (AB)

Preventing a Nuclear 9/11, Matthew Bunn (Project on Managing the Atom, JFK School, Harvard U), *Issues in Science and Technology*, 21:2, Winter 2005, 55-62.

A terrorist attack using an actual nuclear explosive would be very difficult. "*Despite a number of claims, there is no credible evidence that any terrorist group has succeeded in getting a nuclear bomb or the materials needed to make one.*" Nevertheless, the warning signs are clear: 1) al Qaeda and the movement it has spawned wants nuclear weapons; Osama bin Laden has called acquiring nuclear weapons a "religious duty," and al Qaeda operatives have repeatedly attempted to obtain nuclear material and recruit nuclear expertise; 2) if terrorists could get

highly enriched uranium (HEU) or plutonium that are essential ingredients, "*making a bomb might well be within the capabilities of a sophisticated group*"; 3) hundreds of tons of nuclear material in dozens of countries today remain dangerously vulnerable to theft; there are no binding global nuclear security standards, and security around the world varies from excellent to appalling (many of the >130 civilian research reactors using HEU fuel, found in some 40 countries, "have no more security than a night watchman and a chain-link fence"); 4) the International Atomic Energy Agency has documented 18 cases of theft involving weapons-usable plutonium or HEU; 5) if terrorists could steal, buy, or make a nuclear bomb, there is little confidence that the government could stop them from smuggling it into the US; the key ingredients can fit easily into a briefcase, and the weak radiation emitted can be shielded; 6) such a terrorist bomb could incinerate the heart of any city.

Currently, the scope and pace of the US and world response to this threat does not match the urgency of the threat. Russia has the largest stockpiles of nuclear weapons and materials, with huge quantities dispersed in hundreds of buildings and bunkers at scores of sites. Security for these stockpiles has improved from poor to medium in the past 15 years. But there is widespread complacency. **(nuclear 9/11 warning signs)**

#27 NUKES/TERRORISM (AB)
Thwarting Nuclear Terrorism, Alexander Glaser and Frank N. von Hippel (both Program on Science and Global Security, Princeton U), *Scientific American*, Feb 2006, 56-63.

Terrorists who acquire <100 kilograms of highly enriched uranium (HEU) could build and detonate a crude but effective atomic bomb relatively easily. HEU is also attractive for states that seek to develop nuclear weapons secretly, without testing. Although production of HEU is beyond the means of nonstate actors, procurement through theft or black market purchase is not. The world is awash in about 1,800 tons of HEU, created during the Cold War mostly by the US and Soviet Union. HEU can be found at both civilian and military sites, but civilian HEU is less securely guarded. Over 50 tons of HEU are in civilian use worldwide to support about 140 reactors employed to conduct scientific or industrial research or to produce radioactive isotopes for medical purposes. These sites are often in urban areas, and are minimally protected.

Improving security is essential. "*In the long run, the most effective solution to the danger posed by nuclear terrorism is to eliminate wherever possible the use of HEU and remove accumulated stocks.*" The recovered HEU should then be diluted with uranium 238 to produce low-enriched uranium containing <20% uranium 235—which is not usable in weapons. Despite current concerns over nuclear terrorism, most segments of the HEU clean-out program are still proceeding much too slowly. "*If the US and its allies were to take seriously the challenge of preventing nuclear terrorism, civilian HEU could be eliminated from the world in 5-8 years.*" Delay in completing this task only extends the window of opportunity for would-be nuclear terrorists. [ALSO SEE ***How to Stop Nuclear Terror*** by Graham Allison of Harvard U (*Foreign Affairs*, Jan-Feb 2004, 64-74, proposing a "Three No's" doctrine of No Loose Nukes, No New Nascent Nukes, and No New Nuclear Weapons.] **(nuclear terrorism: need to secure HEU)**

TERRORISM

#28 TERRORISM/OVERVIEW (A)
Inside Terrorism (Revised and Expanded Edition). Bruce Hoffman (Director, RAND Washington office; Senior Fellow, Terrorism Center, US Military Academy). NY: Columbia U Press, July 2006/432p/$27.95pb.

The attacks on 9/11 "clearly validated" the conclusion of the 1998 first edition that the nature of terrorism is changing and we are at the dawn of a new era of terrorist violence, motivated by religion and higher levels of lethality. Chapters discuss changing definitions of terrorism, the end of colonialism and the origins of contemporary terrorism, the PLO and the internationalization of terrorism, religion and terrorism (emergence of a transnational network of extremists seeking theocratic rule is potentially a far more lethal threat than traditional terrorist adversaries), suicide terrorism (the dominant force behind this trend is religion), the media and terrorism (terrorist acts easily become big media events), the revolution in terrorist communications (perhaps most startling is the emergence of the terrorists' own TV stations; among the pioneers has been Hezbollah), and the modern terrorist mind-set. State sponsorship "continues unabated," with Iran deemed by the US State Department in 2005 as the "most active state sponsor of terrorism."

During the past decade, long-standing assumptions about terrorism seeking only limited violence have been called into question. The new generation of terrorists is characterized by more salient theological influences, less cohesive organizational entities, the absence of any publicly identified central command authority, and removal of any inhibitions about inflicting widespread and indiscriminate casualties. *Compelling motives and technological breakthroughs "could portend for a bloodier and more destructive era of terrorism in the future."* The resilient and amorphous al Qaeda movement today is best seen as a networked transnational constituency rather than a monolithic organization; "*today there are many al Qaedas rather than the single al Qaeda of the past; the current al Qaeda exists more as an ideology that has become a vast enterprise—an international franchise with like-minded local representatives.*" Whatever the future for bin Laden and al Qaeda, "*it is indisputable that the war on terrorism will likely be longer than many believed...winning the war on terrorism will take decades, not years, to accomplish.* If we are to succeed, our efforts must be as tireless, innovative, and dynamic as those of our opponents." [**NOTE**: A thorough account of terrorism trends, but no effort is made to explain what "winning the war on terrorism" will require.] **(terrorism in transition)**

#29 TERRORISM/TECHNOLOGY (B)
The Rise of Complex Terrorism (Cover Feature), Thomas Homer-Dixon (Director, Centre for the Study of Peace and Conflict, U of Toronto), *Foreign Policy*, Jan-Feb 2002, 52-62.

We have belatedly realized since 9/11 that high-tech societies are wide-open targets for terrorists. The steady increase in the destructive power of small groups and individuals is driven largely by *three technological advances: 1) new weapons technologies* through progress in materials engineering, the chemistry of explosives, and miniaturization of electronics (the effects of these improvements are particularly noticeable in

developing countries, where small groups have graduated from bolt-action rifles to cheap assault rifles); *2) new communications technologies* allowing violent groups to access and share information, marshal resources, and coordinate activities around the planet (info-processing technology has also boosted the power of terrorists to hide or encrypt their messages through some 140 steganography tools that can embed messages into digital photographs or music clips); *3) high-tech societies populated by supercharged devices* packed with energy, combustibles, and poisons, giving terrorists ample opportunities to divert such nonweapon technologies (e.g., large gas pipelines near urban areas) to destructive ends. The vulnerability of advanced nations also stems from the growing complexity and interconnectedness of modern societies. Terrorists and other malicious individuals can magnify their disruptive power by exploiting this complexity and amplifying emotional impact. The multiplier effect of technology-amplified emotional response appears far greater than the 9/11 terrorists ever dreamed possible. *"The total cost of lost economic growth and decreased equity value around the world could exceed a trillion dollars. Since the cost of carrying out the attack itself was probably only a few hundred thousand dollars, we're looking at an economic multiplier of over a millionfold."*

Complex terrorism is particularly effective if it creates widespread fear, panic, and economic disruption. To lessen the risks, we must first acknowledge our own limitations: little can be done about the rising capacity for violence. We must then take steps to reduce the vulnerabilities related to our complex economies and technologies, e.g., "circuit breakers" that interrupt dangerous feedbacks, dispersing high-value assets, greater use of decentralized and local energy production, increased autonomy of local and regional food production networks, and increased inventories of feedstocks and parts. [ALSO SEE **A Faceless Enemy: The Origins of Modern Terrorism** by Glenn E. Schweitzer of NAS (Perseus, July 2002/363p), a reprint of **Superterrorism** (Plenum, 1990), which also points to the growing likelihood of terrorists using advanced technologies.] **(multiplier effect of disruptive terrorism)**

#30 TERRORISM/PREDICTIONS (A)

The Political Economy of Terrorism. Walter Enders (Bidgood Chair of Economics, U of Alabama) and Todd Sandler (Prof of Intl. Relations, Economics, and Law, USC). NY: Cambridge U Press, March 2006/278p/$24pb.

A behaviorist approach using game theory and statistical analysis of data on terrorist behavior, with chapters on the basic dilemma of liberal democracies (between responding too passively and too harshly), terrorist behavior, counterterrorism, strategic differences between proactive and defensive policies, inhibitors to international cooperation, hostage taking, distribution of terrorism across regions, the economic effect of transnational terrorism (*contrary to widely-held views, "the US macroeconomy should experience only small effects from terrorism"* because relatively few attacks are staged in the US), and issues of homeland security.

Concludes that *"terrorism is here to stay; it levels the playing field between the weak and the strong, providing the weak with a cost-effective means to engage in conflict."* Some predictions: 1) the most likely future scenario is continued reliance by terrorists on an occasional large-scale conventional attack like those of 9/11 and 3/11; 2) for an unconventional attack using CBRN, a chemical attack is most likely and a nuclear attack is highly unlikely; 3) domestic terrorism will continue to overshadow transnational terrorism in terms of number of incidents (the ratio is typically >8:1); 4) both domestic and transnational terrorism (an incident involving perpetrators or victims of another country) will remain cyclical, so that a downturn should not necessarily be projected into the future; 5) terrorists will continue to respond to countermeasures by finding new ways to circumvent them and by shifting tactics, venues, and targets; 6) *"suicide terrorist incidents will increase in prevalence and will occur in the US and Europe"* (on average, suicide attacks are 13 times more deadly than a typical transnational incident; suicide missions are logistically simple and relatively inexpensive, making them attractive to some terrorist groups); 7) geographically, the region for concentration of transnational terrorist attacks will be the Middle East, followed by Asia and Eurasia (because of augmented homeland security in the US and Europe, the venue for transnational terrorism will remain poorer countries less able to protect against attacks); 8) terrorists will increasingly rely on the Internet to link networks and to coordinate attacks (the Internet has greatly helped terrorist groups to expand territorial reach); 9) although spending on counters to WMDs will rise annually, "we do not view a large-scale WMD attack as very likely; the bomb will remain the terrorists' favorite mode of attack"; 10) modern technology and the growing variety of potential attacks will make counterterrorism measures ever more costly. **(terrorism predictions)**

#31 TERRORISM/EXPERT POLL (AB)

The Terrorism Index, *Foreign Policy* and Center for American Progress, *Foreign Policy*, #155, July-Aug 2006, 48-55 (online at <www.ForeignPolicy.com>.).

After 9/11, Americans had great faith that the Global War on Terror would keep them safe, with 94% approving of how the fight against terrorism was being handled, as the US went to war in Afghanistan. Five years on, America has yet to experience another attack. But is the US winning the war on terror? FP and CAP surveyed >100 top foreign policy experts, both Republicans and Democrats, including retired top military commanders, seasoned members of the intelligence community, distinguished academics and journalists, and former top government officials. *"The index results show striking consensus across party lines"*; 84% say the US is not winning the war on terror, and 86% see a world today that is growing more dangerous for Americans. A terrorist attack on the scale of 9/11 occurring again in the US was seen as "likely or certain" by the end of 2006 (35% of expert respondents), and much more so by the end of 2011 (79% of respondents) and the end of 2016 (84%). The methods most likely to be used in the US by global terrorists are suicide bombing attack (67% of respondents), attack on major infrastructure (66%), attack using a radiological weapon (20%), cyberattack (12%), attack on chemical or nuclear plants (11%), chemical weapon attack (10%), biological weapon attack (9%), and nuclear weapon attack (6%).

"Respondents sharply criticized US efforts in a number of key areas of national security, including public diplomacy, intelligence, and homeland security. Nearly all of the depart-

ments and agencies responsible for fighting the war on terror received poor marks." Although Americans appear to be growing tired of the war on terror, the experts believe that the battle has just begun. Expert opinion is contrasted with recent general public polls on several matters: 1) America is winning the war on terror (experts 13%; public 56%); 2) A major terrorist attack is likely in the US this year (experts 35%; public 56%); 3) The war in Iraq has had a positive impact on the war on terror (experts 10%; public 38%); 4) Becoming less dependent on foreign sources of energy will strengthen national security (experts 82%; public 90%). The experts were asked which actions should receive higher priority in the war on terror: reduce foreign oil use (82%), improve intelligence (76%), stop loose nukes (68%), strengthen the UN (68%), strengthen DHS (65%), kill terrorist leaders (37%), and increase military action (30%). **(experts: US not winning war on terror)**

#32 TERRORISM/AL QAEDA (AB)

The Master Plan: For the New Theorists of Jihad, Al Qaeda Is Just the Beginning, Lawrence Wright, *The New Yorker,* 11 Sept 2006, 48-59.

Author of **The Looming Tower: Al Qaeda and the Road to 9/11** (Knopf, Aug 2006) reviews and analyses several Al Qaeda thinkers and documents.

In 2002, Abu Musab al-Suri, a Syrian theorist of jihad who had been a member of Al Qaeda's inner council, began writing his defining 1,600-page work, *Call for Worldwide Islamic Resistance,* published on the Internet in Dec 2004, which lays out a plan for the future of the struggle. The goal, he writes, is "to bring about the largest number of human and material casualties possible for America and its allies." He specifically targets Jews, Westerners in general, members of NATO, Russia, China, and atheists. Suri sees the underground terrorist movement (Al Qaeda and its sleeper cells) as defunct, and proposes the next stage of jihad through individuals or small autonomous groups which will wear down the enemy and prepare the ground for an outright struggle for territory.

Ayman al-Zawahiri, Al Qaeda's chief ideologue and second-in-command, outlined the next steps for the Iraqi jihad in July 2005: expel the Americans from Iraq; establish an Islamic authority or emirate; extend the jihad wave to the secular countries neighboring Iraq; a clash with Israel.

Abu Bakr Naji, one of Al Qaeda's prime thinkers, published an Internet document on *The Management of Savagery* in spring 2004, asserting that Al Qaeda must carry the battle to the media, and that jihadis continually attack the vital economic centers of Jordan, North Africa, Nigeria, Saudi Arabia, and Yemen so that governments eventually lose control; savagery will follow, offering Islamists the opportunity to capture the allegiance of a population desperate for order.

In 2005, Fouad Hussein, a radical Jordanian journalist produced "perhaps the most definitive outline of Al Qaeda's master plan," a book titled *Al-Zarqawi: The Second Generation of Al Qaeda,* largely a favorable biography of the late Zarqawi. Hussein claims that dragging Iran into conflict with the US is key to Al Qaeda's strategy, and that Iran has been building a secret global army for 15 years. Al Qaeda's 20-year plan has six phases: 1) "The Awakening," beginning with 9/11 and ending in 2003 when US troops entered Baghdad; 2) the "Eye-Opening" stage will last until the end of 2006, as Iraq becomes the recruiting ground for all young men eager to attack America; 3) "Arising and Standing Up" (2007-2010), as Al Qaeda focuses on Syria and Turkey, and begins to directly confront Israel; 4) through 2013, Al Qaeda will bring about the demise of Arab governments, with attacks against the Middle East oil industry and completing capabilities "to launch electronic attacks to undermine the US economy"; 5) the fifth stage until 2016 will declare an Islamic caliphate and the Islamist movement will attract powerful new economic allies such as China; 6) "Total Confrontation" will see an Islamic Army instigating a worldwide fight between "believers" and "non-believers," with "definitive victory" by 2020: "*the Islamic state will lead the human race once again to the shore of safety and the oasis of happiness.*"

Wright's conclusion: this version of utopia has drawn the allegiance of a new generation of Arabs, who have been tutored on the Internet by ideologues such as Suri and Naji. However, Al Qaeda's apocalyptic agenda is not shared by all Islamists: the goals of most jihadi groups are often more parochial, having to do with purifying Islam and toppling "heretical" regimes in their own countries. [ALSO SEE ***Terror Officials See Qaeda Chiefs Regaining Power: Global Network Is Goal*** (*New York Times*, 19 Feb 2007, p1).] **(Al Qaeda long-term strategies)**

#33 TERRORISM/SCENARIOS (AB)

Terror: What's Next. Nine Cautionary Tales (Special Report), edited by Jean Kumagai, *IEEE Spectrum,* Sept 2006, 36-45.

Nine scenarios are briefly sketched, each with difficulty and likelihood rated on a 1-5 scale, an estimate of possible damage, and possible tech solutions. ***1) Bomb in a Box***: Kim Jong-Il demands $50 billion in gold from the wealthy nations, threatening to detonate a 2-kiloton atomic bomb hidden inside a shipping container somewhere in Hong Kong; *tech solution*: radiation/gamma ray scans of every container could help, but they are expensive and could slow shipping). ***2) Electroshock***: a concerted series of attacks on high-voltage transformers and transmission towers by white supremacist groups results in a NYC blackout (several thousand killed or injured; *tech solution:* there are no means to prevent attacks on substations and towers); ***3) Toxic Train Wreck***: terrorists blow a hole in the side of a tank car carrying 90,000 kg. of chlorine, as the train crosses near Washington DC's Mall on the evening of July 4 where many thousands have gathered for fireworks (100,000 dead and many more injured; *tech solution*: redesign industrial processes to do without highly toxic, pressurized gases); ***4) Crude Attack***: terrorists blow up the Western Hemisphere's largest oil refinery on the north coast of St. Croix (*tech solution*: redundant, distributed control systems); ***5) Agro-Armageddon***: three men who want only to profit by betting on the rise in the price of futures contracts for beef and pork bellies visit state fairs and stockyards, contaminating heifers with foot-and-mouth disease; authorities eventually slaughter >300 million cattle, hogs, and sheep, pushing the world economy into a recession; ***6) Black Christmas***: radical activists who despise consumerism deposit shopping bags throughout a mall with open containers of ethyl mercaptan (a noxious-smelling chemical used to signal the presence of propane gas) and remotely detonate a series of smoke grenades; worried shoppers every-

where head home; *7) **Star-Struck***: animal rights activists seize control of the Oscars, take thousands of actors hostage, and televise their demand for a ban on all fur and leather products (*tech solution:* RFID badges to control access); *8) **A Farmer's Fury***: a new French government agrees to a program of large-scale agricultural reform starting with a 25% reduction in subsidies; a small group of fruit growers plot a series of attacks using fertilizer truck bombs on EU offices; *9) **Too Much or Too Little***: two brief scenarios illustrating the two basic perils in trying to discern and counter terrorist threats: overestimating them (wasting billions and curtailing liberties) or underestimating them so that lapsed vigilance invites a major attack (*tech solution:* none).

A follow-on 4-page essay (pp46-49) by Charles Perrow of Yale U (author of **Disasters Evermore? Our Vulnerability to Natural, Industrial and Terrorist Disasters**; Princeton U Press, Spring 2007) argues that we can't defend everything, but "*we should concentrate instead on defending against more frequent and disastrous threats...we spend billions on unproven technical remedies for imagined terrorist threats while skimping on known methods of mitigating the effects of hurricanes, floods, and toxic-waste spills...the chances are extremely low that Middle Eastern terrorists will stage an attack on US soil.*"

[**NOTE**: Good overview of various vulnerabilities to attacks by various groups, and how best to exercise protective foresight. ALSO SEE ***America Attacked: The Sequel: Looking Back from 2011—An Imagined History*** by former national security coordinator Richard A. Clarke (*Atlantic Monthly* Cover Feature, Jan-Feb 2005, 61-77) for an extensive single scenario with 49 detailed footnotes.] **(scenarios of terrorist attacks)**

#34 TERRORISM/9-11 COMMISSION (AB)
The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States. NY: W. W. Norton, July 2004/567p/$10pb. (Excerpts in *The New York Times,* 23 July 2004, A14-15.)

The ten commissioners—five Republicans and five Democrats—"have come together to present this report without dissent." Sept 11 was a day of shock and suffering unprecedented in the history of the US. The nation was unprepared. "*The most important failure was one of imagination. We do not believe leaders understood the gravity of the threat.*" The terrorist danger from Bin Laden and al Qaeda was not a major topic for policy debate among the public, the media, or in the Congress.

"*Al Qaeda's new brand of terrorism presented challenges to US governmental institutions that they were not well designed to meet.*" Terrorism was not the overriding national security concern for the US government under either the Clinton administration or the pre-9/11 Bush administration. "The missed opportunities to thwart the 9/11 plot were also symptoms of a broader inability to adapt the way the government manages problems to the new challenges of the 21st century." Management should have ensured that information was shared and duties clearly assigned across agencies and countries.

The enemy is not just terrorism; it is the threat posed specifically by Islamist terrorism. The enemy is not Islam, but a perversion of Islam, inspired in part by al Qaeda. Thus our strategy must match our means to two ends: dismantling the al Qaeda network and, in the long term, prevailing over the ideology that contributes to Islamist terrorism. Long-term success demands the use of all elements of national power. If we favor one tool over others, we leave ourselves vulnerable.

A strategy with three dimensions is proposed: *1) **Attack Terrorists and Their Organizations***: root out sanctuaries, strengthen long-term commitments to Pakistan and Afghanistan, confront problems with Saudi Arabia in the open; *2) **Prevent the Continued Growth of Islamist Terrorism***: stand as an example of moral leadership to the world, stand for a better future, communicate and defend American ideas in the Islamic world through much stronger public diplomacy, offer an agenda of opportunity that supports public education and economic openness, devote maximum effort to stop WMD proliferation; *3) **Protect Against and Prepare For Terrorist Attacks***: complete a biometric enry-exit screening system, standards for issuing ID, strategies for neglected parts of transportation security, base federal funds for preparedness solely on risks and vulnerabilities (with NYC and Washington topping the list). Unity of effort is key in five areas: a National Counterterrorism Center (built on today's Terrorist Threat Integration Center), a National Intelligence Director (to oversee intelligence gathering), sharing information, stronger Congressional intelligence committees, and an integrated FBI national security workforce. **(National Commission on Terrorist Attacks)**

#35 TERORISM/STRATEGY (AB)
The Next Attack: The Failure of the War on Terror and a Strategy for Getting It Right. Daniel Benjamin (Senior Fellow, Center for Strategic and International Studies) and Steven Simon (Senior Fellow, Council on Foreign Relations). NY: Owl Books (Henry Holt), June 2006/346p/$15pb. (First published by Times Books, Oct 2005.)

The authors, who both served on the National Security Council staff for five years, argue that, four years after 9/11, "*America is heading for a repeat of the events of that day, or perhaps something worse. Against our most dangerous foe, our strategic position is weakening. Inspired by Osama bin Laden's boldness and outraged by America's recent actions, more Muslims are sympathizing with the radical Islamists and joining their movement.*" In disparate places around the globe, the jihadist ideology has become the banner under which an array of grievances is being expressed, and often that expression is violent. "*In many of these regions, local and global grievances are merging into a pervasive hatred of the US, its allies, and the international order they uphold. Within parts of the Muslim world, social and religious inhibitions on violence are weakening, and the notion is gaining acceptance that an attack on infidels involving WMDs would be justified.*"

The US leadership appears not to have comprehended the ideologically driven insurgency. "*The failure to look beyond al Qaeda and to recognize the multiplying forms that the jihadist threat is taking represents a serious failure of vision...Unwittingly, we are clearing the way for the next attack—and those that will come after. Not only are we not attending to a growing threat, we are stoking the fire.*" By occupying Iraq, the US has played into the hands of its opponents, affirming the story they have been telling to the Muslim world that the US seeks to oppress Muslims.

A successful and comprehensive counterterrorism strategy

must center on four goals: 1) stop terrorists from committing acts of violence; 2) keep the most dangerous weapons out of their hands; 3) protect facilities in the US that, if struck, would cause catastrophic damage (recognizing that there is no way to prevent all attacks); 4) halt the creation of new terrorists by dealing with those grievances that are driving radicalization.

The new 14-page Afterword in this edition states that "*One year on, we are still losing. Equally important, the US is also losing the capacity to halt its slide toward a more dangerous future.*" The Bush administration is adrift, and the nation's ability to lead is deteriorating (e.g, the collapse of the US-inspired Nov 2005 "Forum for the Future" conference in Bahrain, which brought together the G-8 and >30 Muslim countries to launch political and economic reforms in the Muslim world). "*It seems unlikely that the US will be able to muster the resources and energy to change direction for several years.*" Whoever takes office in Jan 2009 will face a world in which trust in America has been deeply eroded. Creating a strategy to contain and diminish jihadist radicalism will be "vastly more difficult" than in 2006. [ALSO SEE **Attacking Terrorism: Elements of a Grand Strategy** edited by Audrey Kurth Cronin and James M. Ludes (Georgetown U Press, Jan 2004/320p) and **Terrorism, Freedom and Security** by Philip B. Heymann (MIT Press, Oct 2003/210p).] **(US losing war on terror)**

#36 TERRORISM/STRATEGY (AB)
Defeating the Jihadists: A Blueprint for Action. Richard A. Clarke (former White House assistant) and eight others. NY: The Century Foundation Press, Dec 2004/172p/$14.95pb.

Report of a Century Foundation Task Force emphasizing that "*the primary national security challenge confronting the US in the immediate future and likely for the next generation will be the international jihadist terrorism network,*" a small minority of the Muslim world that seeks to overthrow governments. Although it is difficult to be precise about the number of active jihadists, "*the strong consensus among experts is that the ranks of the jihadists have increased significantly since 9/11.*" The Bush administration has squandered valuable time in addressing this threat. "As a sin of commission, the Iraq war alienated crucial allies in the battle against jihadists, made friendly Muslims into skeptics, turned skeptics into radicals, and created a new battleground for itinerant jihadist insurgents...As a sin of omission, the Iraq war diverted massive and much-needed resources from the war on jihadists."

The war against the jihadists must be, and can still be won. The task of defeating the jihadists has four important components: 1) capturing or killing the hard-core terrorists; 2) improving relations with the Islamic world; 3) reducing US vulnerabilities to terrorist attack at home and abroad; 4) reinventing government capabilities to support these tasks. Two related issues of equal importance must also be addressed: 5) reducing the threat from the proliferation of nuclear and biological weapons; 6) shifting the economy from dependence on foreign fossil fuel sources. The nation would benefit greatly from clear measures of progress in pursuing these objectives.

Some key recommendations: 1) clarify the threat ("we must have consensus about the nature of the problem facing us": it is not terrorism, but the jihadist terrorists); 2) engage in the battle of ideas (stressing our common values and welcoming Islam as a part of US and European cultures); 3) provide assistance to Islamic nations (support human rights and strengthen education and economic opportunities); 4) defuse sources of Islamic hatred for the US (reduce US goals in Iraq); 5) augment homeland security (funds for reducing vulnerabilities should be significantly enhanced); 6) improve energy security (appropriate significant funds for a rapid shift in energy sources away from oil and gas). **(war against Jihadists: how to win)**

#37 TERRORISM/STRATEGY (A)
The Roots of Terrorism. Edited by Louise Richardson (Executive Dean, Radcliffe Institute for Advanced Study, Harvard U). Foreword by Mary Robinson. Club de Madrid Series on Democracy/Terrorism. NY: Routledge, May 2006/203p/$95.

The March 2005 Madrid Summit on Democracy, Terrorism, and Security was held on the first anniversary of the 2004 train bombings in Madrid. It involved >200 leading scholars in 17 working groups, including five groups on the causes and underlying factors of terrorism, focusing on Psychology, Political Factors, Economic Factors, Religion, and Culture. The sponsoring Club de Madrid <www.clubmadrid.org>, an independent group of 57 former heads of state and government that seeks to promote and defend democracy, includes Fernando Henrique Cardoso of Brazil (President), Kim Campbell of Canada (Secretary-General), Mary Robinson of Ireland (Vice President), Bill Clinton of the US (Honorary Co-Chair), Jacques Delors, Mikhail Gorbachev, Vaclav Havel, Javier Perez de Cuellar, John Major, etc. *The Madrid Summit aimed "to build a common agenda on how the community of democratic nations can most effectively confront terrorism."*

In the preface, Richardson argues that only by understanding the forces leading to terrorism can we hope to devise a successful long-term counterterrorist strategy. "*The search for the cause of terrorism, like the search for a cure for cancer, is not going to yield a single definitive solution. But as with any disease, an effective cure will be dependent on the accurate diagnosis of multiple risk factors as well as their interactions with one another.* The cure is likely to be almost as complicated as the disease, entailing a combination of alleviating risk factors, blocking interactions between them, and building up the body's resilience to exposure. Above all, it will focus first and foremost on preventing the spread of the disease."

Chapters discuss psychological dynamics of terrorism, suicide terrorism, democracy and terrorism, counterterrorism and repression, the causes of revolutionary terrorism, economic factors, globalization, diasporas, religion and deculturation, and the rise of political Islam. Some policy proposals: 1) an essential long-term goal must be to reduce the reservoir of resentment that breeds support for terrorism; 2) punitive policies must focus on perpetrators of violence (e.g., a zero-tolerance approach to mainstream political Islamic movements produces alienation that feeds terrorism); 3) among the longer-term economic responses to terrorism are mitigating the impact of globalization or rapid socioeconomic change on vulnerable segments of the population in developing countries; 4) socioeconomic policies are needed to promote the growth of a middle class and the political/economic participation of women; 5) governments must be encouraged to reduce gross inequalities and group discrimination, and to integrate marginalized groups

into political and economic activity; 6) the West should provide alternatives to traditional Islamic education; 7) alienation of diaspora communities in the wealthiest countries remains a real vulnerability and must be addressed; 8) a vigorous campaign of public diplomacy is needed, but it will only succeed if commitment to liberal ideals and the rule of law is consistently applied and we hold ourselves and out allies to the same standards as we hold others. *"We should not have any illusions that success will come quickly."* **(long-term counterterrorist strategy)**

#38 TERRORISM/MUSLIM STRATEGY (A)

The Muslim World after 9/11. Angel Rabasa (RAND Senior Policy Analyst and Project Leader), Cheryl Benard (Senior Political Scientist, RAND Center for Middle East Public Policy), and Six Others. RAND Project Air Force. Santa Monica CA: RAND, Dec 2004/525p/$55;$45pb.

Examines the dynamics that are driving changes in the Muslim world, so as to provide a general overview of trends and events most likely to affect US interests and security. Two major cleavages are considered: between the Sunnis (the majority of the world's Muslims) and the Shi'ites (about 15% of the global Muslim population, but the majority group in Iran and Iraq), and the cleavage between the Arab world (about 20% of the world's Muslims) and the non-Arab world (more secular in outlook, with fewer economic, social, and political disorders). Chapters emphasize policy implications for the US in dealing with Islamic radicalism, the Middle East, the Maghreb, Turkey, Iran, Pakistan, Islam in India, Central Asia, Southeast Asia, Nigeria, and Muslim diasporas and networks.

Some proposals for US response: 1) promote moderate network creation (radicals are a minority, but in many areas hold the advantage because they have extensive networks); 2) disrupt radical networks and empower Muslim moderates to take over; 3) foster madrassa and mosque reform (radical madrassas—Islamic boarding schools—have been one of the main sources of personnel for radical movements and terrorist groups; there is an urgent need to support reform of Islamic schools so that they provide a broad modern education and marketable skills); 4) expand economic opportunities (lack of jobs can push individuals and communities to support radical organizations); 5) support civil society groups that advocate moderation and modernity; 6) deny resources to extremists; 7) balance requirements of the war on terrorism and of democracy in moderate Muslim countries (it is important for the US to demonstrate that it does not seek to strengthen authoritarian regimes); 8) engage Muslim diasporas to help the US advance its interests in the Muslim world; 9) lower the US military profile. [**NOTE**: Sensible long-range strategy to reduce radical Muslim terrorism.] **(US policy for the Muslim world)**

#39 TERRORISM/FINANCE (A)

The Financial War on Terrorism. Financial Action Task Force (Paris; <www.fatf-gafi.org>). Paris: FATF (distrib. by OECD), March 2004/129p/$30pb.

The FATF, an independent international body of 33 members, whose Secretariat is housed at OECD headquarters, was established in 1989 to coordinate and spearhead an international campaign against criminal money laundering. After the Sept 11 attacks, its responsibilities were widened to include the fight against the financing of terrorism. Terrorist money, like criminal money laundering, disguises itself as legitimate activity, subverting trading companies, banks, and charities. The cornerstone of FATF's strategy is to increase the transparency and oversight of payments and payment systems, and to encourage detection and vigorous prosecution of illegal financial transactions occurring outside of the regulated sector.

In Oct 2001, the FATF adopted Eight Special Recommendations on Terrorist Financing, setting out key steps that countries need to put in place: 1) ratify and implement the 1999 UN Convention for the Suppression of the Financing of Terrorism; 2) criminalize the financing of terrorism and associated money laundering; 3) freeze and confiscate terrorist assets without delay; 4) promptly report suspicious transactions related to terrorism; 5) international cooperation for mutual legal assistance and information exchange; 6) licensing or registering all operators of money transmission services; 7) require financial institutions to include accurate and meaningful originator information on funds transfers; 8) review the adequacy of laws/regulations on entities that can be abused for the financing of terrorism, particularly non-profit organizations.

This Guide also includes FATF's 40 underlying proposals for combating money laundering, a series of practical guidelines, and a list of 132 countries or territories (out of 213 possible jurisdictions) that have cooperated in responding to a self-assessment questionnaire. [**NOTE**: A big problem, though, is that 81 jurisdictions are *not* mentioned, and perhaps not cooperating. As to whether the FATF has made any progress in the "financial war," an objective outsider analysis is needed. It may be a case of the improvement-but-growing-inadequacy paradox, suggested in **Dirty Dealing** (Kogan Page, July 2003; *FS* 26:3/137) on "proliferation" of money laundering and its relation to terrorism. ALSO SEE ***The New Business of Terror*** (*U.S. News & World Report* Special Report, 5 Dec 2005, 40-54) on links between organized crime and global terrorism, and **Illicit** by Moisés Naím (Doubleday, Oct 2005/340p), on rising illicit trade, the traffic in small arms and loose nukes, and "geopolitical black holes."] **(FATF and terrorist financing)**

#40 TERRORISM/RUSSIA (AB)

A World Challenged: Fighting Terrorism in the Twenty-First Century. Yevgeny M. Primakov (Russia). Washington: Nixon Center & Brookings Inst. Press, April 2004/150p/$22.95.

Former Russian premier, who earlier served as foreign minister and head of intelligence, reflects on Osama bin Laden, the false equation of terrorism with Islam, peace in the Middle East, the US response to terror, and Russia's role in the world. ***1) Terrorism***: autonomous, self-sufficient organizations are at work in the global arena, and the world is ever more vulnerable to use of WMD (there are hundreds of targets in every large country with nuclear material); *the global community "must develop a comprehensive document, a charter, for the war on terrorism...(but it) will not be effective unless all forces for good in the world join together in this common goal—and this includes the world's one billion Muslims"*; ***2) Our Only Chance in the Middle East***: the Arab-Israeli dispute helps create a climate in which Islamic radicalism can flourish; a compromise peace plan brokered by intermediaries and imposed on Israel and Palestine is gaining support (there is no real alternative);

*3) **The US War on Terror***: "a permanent state of war against terrorism is supported by the new US military doctrine, which focuses on preemptive action against enemies the US freely makes up...*this excessively broad understanding of US security jettisons the concepts of both international law and national sovereignty*"; ***4) Trends to a Multipolar World***: the US is presently the world's most powerful nation, but trends are away from unipolarity, due to the new unified currency of the EU, China's growing economic power, and rising dissatisfaction with the US ("*a more multipolar world is in the best interests of the entire world community—even, perhaps paradoxically, the US; a multipolar world makes it easier to respond to new security demands*"); ***5) A United Counterforce Against Terrorism***: consensus and cooperation are requisites for a strong antiterrorist front; the world should guard against any power returning to the practice of a zero-sum game. [**NOTE**: In a brief Foreword, Henry A. Kissinger (Honorary Chairman of The Nixon Center) notes that Primakov's world view "clearly reflects mainstream Russian thinking...Russian views do matter and should be understood."] **(Russian view of terrorism)**

#41 TERRORISM/"WAR" QUESTIONED (AB)

Declaring Victory: A New Strategy for the Fight Against Terror (Cover Feature), James Fallows (*Atlantic* National Correspondent), *The Atlantic Monthly*, Sept 2006, 60-73.

In spring and summer of 2006, Fallows talked with some 60 experts about the current state of the conflict that Osama bin Laden thinks of as "world jihad" and the US government has called both the "global war on terror" and the "long war." The overall prospect looks better than many Americans believe. Because of al Qaeda's own mistakes, and because of the things the US and its allies have done right, "*al Qaeda's ability to inflict direct damage in America or on Americans has been sharply reduced.*" Its successor groups will continue to pose dangers. But "*its hopes for fundamentally harming the US now rest less on what it can do itself than on what it can trick, tempt, or goad us into doing.*" Documents captured after 9/11 showed that bin Laden hoped to provoke the US into an invasion and occupation that would entail all the complications that have arisen in Iraq. His only error was to think that the place where Americans would get stuck would be Afghanistan. Bin Laden also hoped that this entrapment would drain the US financially.

Instead of having one main terrorist group to worry about, the US now has hundreds. Our enemies think in centuries-long terms, while we live from election to election. Anti-American sentiment has hardened among Muslims worldwide. Sooner or later, our enemies will find our vulnerable points. Hostile groups and individuals will keep planning attacks on the US, and some will succeed. The US is far stronger than al Qaeda, but its very strength has been its disadvantage. The predictability of US responses lets opponents turn our size against us. Al Qaeda can do much harm to the US because the self-damaging potential of an uncontrolled American reaction is so vast.

"*How can the US escape this trap? Very simply: by declaring that the 'global war on terror' is over, and that we have won.*" A standing state of war no longer offers any advantages for the US, and creates problems: 1) it cheapens the concept of war, making the word a synonym for "effort" or "goal"; 2) it predisposes us toward overreactions, of the kind that have already proved so harmful; 3) a state of war encourages a state of fear (creation of insecurity and anxiety is central for terrorists); 4) a state of war predisposes the US to think about using assets in a strictly warlike way, and to give short shrift to many other possibilities; 5) an open-ended war is an invitation to defeat (*sometime* there will be bombings, shootings, and other disruptions in the US; if they occur while the war is still on, they are enemy "victories" and powerful provocations to another round of hasty reactions); 6) "*war implies emergency...(but) the US needs to shift its operations to a long-term nonemergency basis*"; de-escalation of rhetoric is the first step.

"*The US can declare victory by saying that what is controllable has been controlled: Al Qaeda Central has been broken up.*" Then the country can move to its real work: domestic protection, worldwide pursuit of al Qaeda, and "an all-fronts diplomatic campaign...to reduce the long-term sources of terrorist rage." **("war on terror": declaring victory)**

#42 TERRORISM/"WAR" QUESTIONED (AB)

Terrorized by 'War on Terror': How a Three-Word Mantra Has Undermined America, Zbigniew Brzezinski (Prof of Foreign Policy, Johns Hopkins U), *The Washington Post*, Sunday, 25 March 2007, B1.

Former national security advisor to President Carter charges that "*the 'war on terror' has created a national culture of fear in America.*" Elevation of these three words into a national mantra since 9/11 has had a pernicious impact on American diplomacy, America's psyche, and on US standing in the world. "*Using this phrase has actually undermined our ability to confront the real challenges we face from fanatics who may use terrorism against us. The damage these three words have done—a classic self-inflicted wound—is infinitely greater than any wild dreams entertained by the fanatical perpetrators of the 9/11 attacks.*" The phrase itself is meaningless: it defines neither a geographic context nor our presumed enemies. Terrorism is not an enemy but a technique of warfare.

Constant reference to a war on terror stimulates fear. Fear obscures reason, intensifies emotions, and makes it easier for demagogic politicians to mobilize the public to support their policies. "The culture of fear is like a genie...let out of a bottle. It acquires a life of its own—and can become demoralizing." America is now divided and susceptible to panic in the event of another terrorist act in the US. "That is the result of five years of national brainwashing on the subject of terror," quite unlike the more muted reactions of Britain, Spain, Italy, and Germany.

The events of 9/11 could have resulted in a truly global solidarity against extremism and terrorism. A global alliance of moderates, including Muslim ones, could have engaged in a deliberate campaign to extirpate both the specific terrorist networks and to terminate the political conflicts that spawn terrorism. This would have been more productive than a demagogically proclaimed and largely solitary American "war on terror" against "Islamo-fascism." Only a confidently determined and reasonable America can promote genuine international security which then leaves no political space for terrorism. [**NOTE**: A very similar statement is made by U of Pennsylvania political scientist Ian S. Lustick's **Trapped in the War on Terror** (U of Penn. Press, Sept 2006; *FS* 28:12/561).]

("war on terror" as self-inflicted wound)

#43 TERRORISM/RELIGION (A)
Terror and Civilization: Christianity, Politics, and the Western Psyche. Shadia B. Drury (Prof of Pol Sci and Philosophy, U of Regina; Canada Research Chair in Social Justice). NY: Palgrave Macmillan, 2004/211p/$55.

We are living in an age described as a clash of civilizations, but contrary to Samuel Huntington and others, *"the conflict between Islam and the West has its source in the sameness and not the difference between these two worlds."* Both parties are informed by the same biblical morality and self-understanding. Bush has declared a war on terrorism, convinced that terror and civilization are opposites. He considers himself a defender of civilization, determined to eradicate the enemies of civilization everywhere. Again and again he echoes Jesus (Luke 11:23) in declaring that those who are not with him are against him.

From the viewpoint of neoconservatives, the situation is advantageous: the presence of a constant threat allows government to amass powers that a free people would not normally tolerate. *"By insuring the endless nature of the struggle against evil, biblical dualism lends support to neoconservative assumptions."* The rhetoric of Osama bin Laden is no less dualistic, bombastic, and absolutistic. This posture polarizes the world, radicalizes politics, and denies plurality. The only hope of escaping from this impasse is to cultivate the self-criticism and self-understanding that transcends the simplistic biblical dualism that we are civilized and they are terrorists.

It is unlikely that America and the Islamic world will abandon this biblical rhetoric and move toward more moderate and pluralistic politics. If Muslims succeed in adopting the posture of victims and the oppressed people of God, "the US may emerge as the world tyrant and global bully...(and) Muslims may win the war of propaganda." The US can turn the tide only if it is willing to abandon the biblical rhetoric of good and evil in favor of a secular rhetoric of diplomacy and compromise. Unhappily for the world, we can expect more self-righteous brutality in its Christian, Muslim, and Judaic manifestations. *"The so-called war on terrorism has all the fanaticism of a religious war, coupled with the deadly weapons of a technological age. Those who believe that civilization is barbarism with technical skill are not far off the mark.*

(Islam and the West: dualistic sameness)

#44 TERRORISM/VICTORY MANUAL (BC)
An End to Evil: How to Win the War on Terror. David Frum and Richard Perle (both American Enterprise Institute). NY: Random House, Dec 2003/284p/$25.95.

A recent special assistant to President Bush (Frum) and recent chairman of the Defense Policy Board (Perle) argue that the war on terror "has barely begun." While our enemies plot, our allies dither and carp, and much of our own government remains unready for the fight. "Many in the American political and media elite are losing their nerve for the fight." A strong policy against terror is needed. *"Terrorism remains the great evil of our time, and the war against this evil, our generation's great cause. We do not believe that Americans are fighting this evil to minimize it or to manage it. We believe they are fighting to win—to end this evil before it kills again and on a genocidal scale. There is no middle way for Americans: It is victory or holocaust. This book is a manual for victory."*

Chapters describe the great objectives achieved by topping Saddam Hussein (eliminating a leading sponsor of terrorism in the Middle East, liberating an entire nation and opening the way to a humane and decent civil society, giving potential enemies "a vivid and compelling demonstration of America's ability to win swift and total victory"), the new axis of militant Islam ("an aggressive ideology of world domination"), the war at home (it can't be won here, but it can be lost), how to stop terrorists (deny entry into the US, curtail their freedom of action inside the US through The Patriot Act, deny material and moral support), how to win the war abroad (cut off access to WMDs, deny money and refuge, destroy regimes implicated in anti-American terrorism, discredit extremist Islamic ideology), how to pay for the war (keep taxes low and control domestic spending), the ideological struggle against extremist Islam ("one we are losing—that is, when we bother to wage it at all"), and organizing for victory (reform the FBI, CIA, Pentagon, and State Department). **(winning the war on terror: hardline view)**

OTHER THREATS

#45 SECURITY/ENVIRONMENT (B)
Ecological Security: An Evolutionary Perspective on Globalization. Dennis Clark Pirages (Harrison Prof of International Environmental Politics, U of Maryland) and Theresa Manley DeGeest (U of Maryland). Lanham MD: Rowman & Littlefield, Sept 2003/284p/$70.00;$24.95pb.

The early years of the new millennium are marked by major discontinuities in the ecological relationships and evolutionary processes essential to human well-being. The origins of many of these discontinuities and related insecurities are found in the continuing acceleration of technological, demographic, and environmental drivers of change. This period of acceleration and growing complexity is also characterized by a dearth of theories to anticipate these large-scale changes. *"There is a clear and growing need to use an eco-evolutionary perspective, foresight, and anticipatory thinking in making both domestic and foreign policy."* Chapters focus on ***1) Demographic Change and Ecological Insecurity***: the deepening demographic fault line between falling and graying populations in most developed countries and rising populations in LDCs, rapid urbanization creating mega-cities; ***2) Assault on the Global Commons***: global warming, growing fresh water insecurity, threats to fisheries and marine species habitats, ozone depletion; ***3) Global Energy Insecurity***: dependence of US and most of Europe on foreign oil sources, the Middle East as a cauldron of political instability, energy crisis cycles [see #47]; ***4) Food Insecurity***: factors determining long-term world food production, the overall impact of biotechnology (it could give agricultural production a boost while also squeezing out the marginal livelihoods of hundreds of millions of poor farmers); ***5) Globalization and Biosecurity***: growing large-scale extinction of species, new and resurgent human diseases, antibiotics reshaping the microbial world in unintended ways, the HIV/AIDS pandemic; ***6) Technology and Ecosecurity***: innovation as a double-edged sword, economic globalization; ***7) Ecologically Secure Development***: the much-emulated materialistic way of life cannot diffuse to the bulk of the human race at acceptable environmental cost; a new planetary bargain is needed; ***8) Gov-***

ernance and Ecosecurity: new policies and institutions, based on eco-evolutionary thinking, must reflect the shared values of the entire global community.

Ten steps to enhance ecological security are suggested: 1) close the yawning gap between scientific studies and public policy, especially in the US; 2) develop foresight capabilities and employ a long-term perspective in domestic and foreign policy; 3) develop new institutions beyond the state level to cope with the rapid pace of globalization; 4) create new global public goods to redress the growing imbalance between markets and politics (global public health, universal education, a food buffer stock, stable oil prices); 5) finance these global public goods and a new Marshall Plan for ecologically secure development with instruments such as the Tobin Tax on cross-border financial transactions; 6) manage the course of technological innovation and diffusion with cooperative technology assessment on a global scale; 7) nurture a cooperative approach to worldwide socioeconomic development; 8) nourish a moral dimension to globalization based on eco-evolutionary values; 9) work to overcome the isolationist tendencies now prevalent in US foreign policy; 10) recognize that time is very short.

[ALSO SEE **Outgrowing the Earth: The Food Security Challenge** by Lester R. Brown (W.W. Norton, Dec 2004/ 239p).] **(security and ecology)**

#46 SECURITY/CLIMATE (AB)

National Security and the Threat of Climate Change. CNA Corporation Military Advisory Board. Alexandria VA: CNA Corporation, April 2007/63p. (Call 703.824.2758 for hardcopy or download from SecurityAndClimate.cna.org.)

An Advisory Board of 11 retired high-end US generals and admirals provides an overview of climate change science and geo-strategic impacts and regional impacts of climate change. Four findings: 1) "*Projected climate change poses a serious threat to America's national security*" (in already weakened states, extreme weather events, drought, flooding, sea level rise, etc. will exacerbate underlying conditions for conflict and terrorism); 2) "*Climate change acts as a threat multiplier for instability in some of the most volatile regions of the world*" (many governments in Asia, Africa, and the Middle East are already on edge in terms of providing basic needs; climate change has the potential to create disasters "on a scale far beyond those we see today"); 3) "*Projected climate change will add to tensions even in stable regions of the world*" (developed nations may experience increases in immigrants and refugees, and pandemic disease may lead to increased domestic missions for US military personnel); 4) "*Climate change, national security, and energy dependence are a related set of global challenges*" (solutions to one affect the others).

Five recommendations follow: 1) national security consequences of climate change should be fully integrated into national security and national defense strategies ("failing to act because a warning isn't precise is unacceptable"); 2) the US should commit to a stronger national and international role to help stabilize climate changes at levels that will avoid significant disruption to global security (this will require cooperation and action by many agencies of government); 3) the US should commit to global partnerships that help less developed nations build the capacity and resiliency to better manage climate impacts (some nations most affected have the least capacity, especially in Africa); 4) The Dept of Defense should accelerate business processes and technologies that improve energy efficiency; 5) DoD should assess the impact of climate change on US military installations over the next 30-40 years (numerous bases in the US and overseas will be affected by rising sea levels and increased storm intensity, e.g. Diego Garcia, Guam, and Norfolk VA). [**NOTE**: CNA is a nonprofit institution that conducts in-depth, independent research and analysis. Lead sponsors for this project were the Bipartisan Policy Center and the Rockefeller Family Fund. ALSO SEE **Global Warming and the Energy Transition**, *FS* Mini-Guide #1, Feb 2007.] **(climate change and national security)**

#47 SECURITY/ENERGY (AB)

National Security Consequences of U.S. Oil Dependency: Report of an Independent Task Force. John Deutch (Co-Chair; Institute Professor, MIT), James R. Schlesinger (Co-Chair; former Secretary of Defense and Secretary of Energy), and David G. Victor (Project Director; Stanford U). NY: Council on Foreign Relations, Oct 2006/67p/$15pb.

"*Lack of sustained attention to energy issues is undercutting US foreign policy and US national security.*" Major energy suppliers (e.g. Russia, Iran, Venezuela) have been increasingly willing and able to use their energy resources to pursue their strategic and political objectives. Major energy consumers (notably the US) find their growing dependence on imported energy increases their strategic vulnerability and constrains their ability to pursue a broad range of foreign policy objectives. Dependence also puts the US into increasing competition with other importing countries, notably China and India.

Put simply, the reliable and affordable supply of energy—energy security—is an increasingly prominent feature of the international political landscape. Yet the US has largely continued to treat energy policy as separate from foreign policy. "*The challenge over the next several decades is to manage the consequences of unavoidable dependence on oil and gas that is traded in world markets and to begin the transition to an economy that relies less on petroleum. The longer the delay, the greater will be the subsequent trauma.* For the US, with 4.6% of the world's population using 25% of the world's oil, the transition could be especially disruptive."

"*During the next 20 years (and quite probably beyond), it is infeasible to eliminate the nation's dependence on foreign energy sources.*" Indeed, it is unlikely that the US can make a sharp reduction in its dependence on imports, which currently stand at 60% of consumption. "*The central task for the next two decades must be to manage the consequences of dependence on oil, not to pretend the US can eliminate it.*" The underlying problem is the growing demand for oil worldwide.

Strategy should pursue five types of actions: 1) incentives to slow and reverse consumption of petroleum products (a gasoline tax, stricter and broader fuel economy standards, tradable gasoline permits); 2) encourage efficient, transparent, and fair operation of world oil and gas markets; 3) reduce infrastructure vulnerability to terrorism or natural disaster; 4) promote better management of hydrocarbon revenues, which too often go to a small minority; 5) integrate energy issues into US foreign and national security policy. **(energy as national security issue)**

#48 SECURITY/AGRICULTURE (A)
Countering Agricultural Bioterrorism. National Research Council. Washington: The National Academies Press, 2003/ 169p/$34pb.

Historically, incidents have involved biological attacks directed at plants and animals, and offensive programs directed against agriculture. Since 9/11, the US has changed its perspective on the likelihood of terrorism and its vulnerability to it, including recognition of threats directed at US farms, either at the pre-harvest or post-harvest stages. Technical sophistication would not be necessary for attacks with some threat agents.

The NRC Committee on Biological Threats to Agricultural Plants and Animals was asked to evaluate US capacities to deter, prevent, detect, thwart, respond to, and recover from intentional bioattacks. Some findings: 1) an attack is highly unlikely to result in famine or malnutrition, but damage could include adverse public health effects, loss of confidence in the food system, widespread public concern and confusion, and major direct costs to the US economy; 2) there are weaknesses in US defenses against unintentional biological threats, and merely fixing these weaknesses will not adequately protect the US against *intentional* attacks; 3) as of Spring 2002, no publicly available, in-depth, interagency plan had been formulated to defend against intentional introduction of biological agents directed at agriculture; 4) the current inspection program at US borders covers only small proportions of people and goods entering the US; 5) "*our ability to rapidly detect and identify most plant pests and pathogens and some animal pests and pathogens soon after introduction is inadequate*"; 6) the basic biology of many agricultural pests and pathogens is not well understood; 7) "*a large-scale multifocal attack on agriculture could not be responded to adequately or quickly.*"

"The US government should establish a comprehensive plan to respond to the threat." It would integrate elements of deterrence/detection/response/recovery, include domestic and global strategies, establish operational capability in various areas, improve public information and outreach capacities, etc. Near-term priorities for action: 1) train credible spokespersons for classes of threat agents; 2) define legal and jurisdictional authority and lead roles at the federal, state, local, and private levels; 3) establish a categorical priority list of threat agents for planning; 4) develop model scenarios of agricultural bioterrorism attacks. [ALSO SEE the Special Section on ***Agricultural Bioterrorism*** in *BioScience*, July 2002, 569-599 (*FS* 24:10/ 476).] **(US vulnerability to agricultural bioterrorism)**

#49 SECURITY/BIOWEAPONS (B)
The Knowledge: Biotechnology's Advance Presents Dark Possibilities (Cover Feature), Mark Williams (Contributing Writer), *Technology Review*, March-April 2006, 44-53.

"*There is growing scientific consensus that biotechnology—especially the technology to synthesize ever-larger DNA sequences—has advanced to the point that terrorists and rogue states could engineer dangerous novel pathogens.*" A recent report from the Institute of Medicine and National Research Council, **Globalization, Biosecurity, and the Future of the Life Sciences** (National Academies Press, Feb 2006) warns that "It is not at all unreasonable to anticipate that biological threats will be increasingly sought after...and used for warfare, terrorism, and criminal purposes, and by increasingly less sophisticated and resourced individuals, groups, and nations...sooner or later, it is reasonable to expect the appearance of 'biohackers.'" The possibility of terrorists gaining access to high-end technology is worrisome. But few have publicly stated that engineering certain types of recombinant organisms using older equipment cheaply available from eBay and online marketplaces is already feasible. The biomedical community's reaction to all this has been a general denial.

Williams reports on an interview with Serguei Popov, a former lead researcher in the Soviet Union's bioweapons program who is now at George Mason U, concluding that the Russians' achievements tell us what is possible. "*At least some of what the Soviet bioweaponeers did with difficulty and expense can now be done easily and cheaply. And all of what they accomplished can be duplicated with time and money.*"

Garage-lab bioengineering gets easier every year, e.g.: a used DNA synthesizer can be bought from a website for about $5,000; or the components could be assembled for a similar cost, and construction of a synthesizer in this fashion would be undetectable by intelligence agencies. Expertise is growing: there are now >300 US institutions with access to live bioweapons agents and 16,500 individuals approved to handle them.

What measures can mitigate the threats of bioweapons? BioShield (the Bush administration's $5.6 billion plan to protect the US population from WMD attack) will not protect us from genetically engineered pathogens. Radical solutions, like boosting the human immune system through generic immunomodifiers, would take years or decades to develop. "*More immediately, no one has a good idea about what should be done.*" [**NOTE**: A response to this article on p34, ***Assessing the Threat*** by Allison M. Macfarlane of the MIT Science, Technology, and Global Security Working Group, states that it is not really known if these threats are real, and with so much uncertainty surrounding bioweapons, it makes more sense to plan defense programs against more certain threats, notably nuclear weapons. ALSO SEE **Biological Weapons** by Jeanne Guillemin of the MIT Security Studies Program (Columbia UP, Jan 2005/258p).] **(bioweaponeering becoming easier)**

#50 SECURITY/DISEASE (AB)
The Global Threat of New and Reemerging Infectious Diseases: Reconciling U.S. National Security and Public Health Policy. Jennifer Brower and Peter Chalk (both RAND Science and Technology, Arlington VA). Santa Monica CA: RAND, March 2003/146p/$20.00pb.

The US and most of the world today face little danger from direct military assault from an opposing state. This threat has been supplanted with concerns about "gray area" challenges that face the global community. Emerging security threats such as terrorism, drug trafficking, and environmental degradation differs significantly from traditional statecentric paradigms. "*The increasing transnational threat of infectious disease deserves special attention within this context of the evolving definition of security in the post-Cold War era.*" Statecentric models of security are ineffective at coping with issues such as the spread of disease. "*Human security reflects the new chal-*

lenges facing society in the 21st century. In this model, the primary object of security is the individual, not the state." Infectious disease clearly represents a threat to human security. In addition to threatening the health of an individual, the spread of disease can weaken public confidence in government, have an adverse economic impact, catalyze regional instability, and pose a strategic threat through bioweapons. This report seeks a "more comprehensive analysis" of disease and security with two case studies: the AIDS crisis in South Africa and US management of the infectious disease threat.

Roughly 25% of South Africa's adult population is currently infected with HIV. "The true impact of the AIDS epidemic is yet to be felt." The number of HIV infections is still increasing, and deaths from full-blown AIDS are not projected to peak until the 2009-2012 period. *"The disease is responsible for undermining social and economic stability, weakening military preparedness, contributing to increases in crime and lack of capability to respond to it, and weakening regional stability.* Specific effects include creating >2 million orphans and removing some US$22 billion from South Africa's economy.

The US is currently managing the infectious disease threat, but "there are many indications that, if left unchecked, pathogens could present a serious threat to the smooth functioning of the country." In the last half century, almost 30 new human diseases were identified, and antibiotic and drug resistance grew at an alarming rate. This trend applies equally to animal diseases. *"As Americans' exposure to emerging and re-emerging pathogens has grown, the country's ability to respond to infectious disease has diminished in many areas.*" This was recognized in 1992 by the Institute of Medicine, which challenged the nation to respond. But governments at all levels largely failed to do so until 9/11. Specific actions are proposed to address these shortcomings: enhanced coordination between public health authorities at all levels, integrating the private sector into overall public health efforts, a large-scale education and information campaign, augmenting the supply of healthcare workers, developing appropriate emergency plans, and more resources invested to help foreign governments in disease prevention efforts. *Beyond these initiatives, "the US also needs to revisit how it defines security and formulates mechanisms for its provision."* **(infectious disease and national security)**

#51 SECURITY/TERRORISM (AB)
Toxic Warfare. Theodore Karasik (RAND Project AIR FORCE, Strategy and Doctrine Program). Santa Monica CA: RAND, 2002/52p/$16.00pb.

In contrast to chemical weapons (which involve the use of banned substances such as nerve agents), toxic weapons are made from materials that are usually readily and legally available in connection with industrial operations. The most common types of hazardous materials used in toxic weapons are irritants, choking agents, flammable industrial gases, water supply contaminants, oxidizers, chemical asphyxiants, incendiary gases and liquids, industrial compounds, and pesticides. Various forms of toxic waste (oil spills, smoke, refuse, sewage, medical waste) can also be used in toxic warfare. *"Abundant sources of industrial materials and waste are available for use in toxic warfare*" (chemical and pesticide plants, college labs, oil storage tanks, electronics manufacturers, pipelines and propane storage tanks, rail and trucking lines, etc). There have been many toxic warfare incidents in recent years, e.g.: retreating Iraqi forces in the 1991 Gulf War released crude petroleum from production facilities and ignited it to slow advancing coalition forces. *"Toxic warfare merits serious consideration as part of future planning strategies."* The US is not immediately aware of the location of toxic threats, and US forces have no tailored response to toxic force in doctrine. At the tactical level, "US armed forces may not be ready for toxic warfare." And cleanup from a toxic attack may pose a difficult challenge.

Toxic warfare is also a threat for civilians. According to worst case scenarios that companies are required by law to file with the EPA, a single accident at any of 50 chemical plants operating between Baton Rouge and New Orleans could potentially put at risk 10,000 to 1 million people. Experts say that serious security problems also persist to varying degrees at chemical manufacturing centers in Texas, New Jersey, Delaware, Philadelphia, and Baltimore. **(toxic warfare threat)**

#52 SECURITY/COMMUNICATIONS (AB)
Cybersecurity: Who's Minding the Store? Bruce Berkowitz (RAND; Hoover Institution) and Robert W. Hahn (Director, AEI-Brookings Join Center for Regulatory Studies), *Issues in Science and Technology,* 19:3, Spring 2003, 55-62.

As IT becomes more tightly woven into all aspects of everyday life, the public is developing an understanding that disruption of this electronic infrastructure could have dire—conceivably even catastrophic—consequences. Prodigious efforts have been expended over the past decade to make infosystems more secure, yet *"most government agencies have yet to take effective action."* The Bush administration released the National Strategy to Secure Cyberspace in Feb 2003, which has five components: a cyberspace security response system to pool information about threats and attacks, a threat and vulnerability reduction program, an awareness and training program, an initiative to secure government cyberspace for state and federal agencies, and initiatives to cooperate with national security agencies and foreign governments.

But three features, taken for granted in most other areas of public policy, are lacking in these initiatives: 1) the assessment of the threat is largely anecdotal, which weakens estimates of potential costs of inaction and the costs and benefits of various policies (government data do not tell us how much is being spent on different kinds of security measures; data on private IT security spending is even less reliable and hard to come by); 2) the strategy lacks a clear link between objectives and incentives (a clear, rational incentive structure is the cornerstone of any effective public policy); 3) the strategy rejects regulation, government standards, and use of liability laws to improve cybersecurity. *"A prudent policy will focus on the most certain threats that have high probability and high potential costs. It will hedge against the less certain, less dire threats."*

A number of options should be on the table for *designing more effective cybersecurity*: 1) better use of standards for software protocols by the government and the private sector; 2) better use of regulations to establish minimal acceptable security standards; 3) changes in liability law to give hardware and software companies some responsibility (thus giving them

an incentive to pay more attention to security issues); 4) most important, more research ("*we need to recognize that we are flying blind at this point in a public policy sense, because we have such a limited understanding of the costs of cybersecurity attacks and the benefits of preventive measures*"; 5) public officials must learn how to balance privacy and security, and do a better job of explaining the balance between these two goals. [ALSO SEE: **Information Technology for Counterterrorism** (National Academies Press, March 2003; *FS* 25:4/171), for further proposals.] **(cybersecurity strategy questioned)**

#53 SECURITY/FAILED STATES (AB)

The Failed States Index, Fund for Peace and Carnegie Endowment for International Peace, *Foreign Policy*, #149, July-Aug 2005, 56-65.

The 2002 US National Security Strategy concluded that "*America is now threatened less by conquering states than we are by failing ones.*" What is a failed state? It has a government that has lost control of its territory or of the monopoly on the legitimate use of force; it lacks the capacity to deliver public services or the authority to make collective decisions; many citizens fail to pay taxes or rely entirely on the black market; many engage in large-scale civil disobedience.

Failed states have made a remarkable odyssey from the periphery to the very center of global politics. During the Cold War, state failure was seen through the prism of superpower conflict, and was rarely addressed. In the 1990s, failed states fell largely into the province of humanitarians and human rights activists. "Now, it seems, everybody cares." The dangerous exports of failed states—terrorists, drug barons, or weapons arsenals—are the subject of endless discussion and concern. Britain has named 46 "fragile" states of concern. The World Bank has identified 30 "low-income countries under stress." The CIA puts the number of failing states at about 20.

To give a more precise picture, the Fund for Peace and the Carnegie Endowment created a global ranking of 60 weak and failed states using 12 indicators: demographic pressures, refugees/displaced persons, group grievance, human flight, uneven development, economic decline, delegitimization of the state, public services, human rights, security apparatus, factionalized elites, and external intervention.

The resulting index provides a profile of the new world disorder in 21C. Overall, "*about 2 billion people live in insecure states, with varying degrees of vulnerability to widespread civil conflict.*" Of the 60 countries, 20 are seen as "critical," the middle 20 are "in danger," and 20 are "borderline." ***The 10 most at-risk countries*** show clear signs of state failure: Ivory Coast, Democratic Republic of the Congo, Sudan, Iraq, Somalia, Sierra Leone, Chad, Yemen, Liberia, and Haiti. ***The next 10 at-risk countries*** are Afghanistan, Rwanda, North Korea, Colombia, Zimbabwe, Guinea, Bangladesh, Burundi, Dominican Republic, and Central Africa Republic. ***States "in danger"*** include Venezuela (21), Guatemala (31), Pakistan (34), Egypt and Ukraine (tied at #38), and Peru (40). ***"Borderline" states*** include Saudi Arabia (45), Turkey (49), Nigeria (54), Philippines (56), Iran (57), Cuba (58), and Russia (59). Comparing the amount of foreign aid countries receive per capita with the index rankings, it was found that "*the countries at greatest risk of collapse often get paltry amounts of aid.*" Little correlation was found with military spending: weak states come with small, medium, large, and super-sized defense budgets. [**NOTE**: A key step beyond seeing all less-developed states as "developing." ALSO SEE **Rebuilding Weak States** (*Foreign Affairs*, Jan-Feb 2005; *FS* 27:4/163, and **State Failure and State Weakness in a Time of Terror** by World Peace Foundation President Robert I. Rotberg (Brookings/WPF, 2003/354p]. **(weak and failed states as global threat)**

#54 SECURITY/REFUGEES (A)

Refugees and Forced Displacement: International Security, Human Vulnerability, and the State. Edited by Edward Newman (Peace and Governance Programme, UNU) and Joanne van Selm (Migration Policy Institute, Washington). Tokyo & NY: United Nations U Press, 2003/391p/$38.00pb.

Newman notes in his introduction that "*the orthodox definition of international security—premised on the military defense of territory—puts human displacement and refugees at the periphery of politics.*" This is wrong because human displacement is both a cause and consequence of conflict within and between societies, and international security in the post-Cold War world no longer solely privileges the state above all other agents. Today, "*individuals and communities are increasingly central in security thinking—legally, ethically, and politically. 'Human security' is a key component of this evolving security discourse.*" Human displacement is a major factor in national and international instability, requiring a model of security that is broad and multifaceted. And refugee flows and displacement are central to post-conflict reconstruction and peace-building. In Bosnia, Georgia, Rwanda, Congo, Palestine/Israel, and many other places, "displaced populations have been the critical element in continuing conflict and instability, the obstruction of peace processes, and undermining attempted economic development. Many refugee challenges were exacerbated by 9/11 (e.g., the source of the Taliban, and their links to al Qaeda, lay in the long-term refugee camps of Pakistan). "*Dispossessed, aggrieved, and rootless populations are a potential breeding ground for radical political movements and terrorism inside and across borders.*" But the 9/11 attacks accelerated the move towards more restrictive asylum and refugee policies.

Essays describe why refugee flows must be seen as a pressing security challenge (humanitarian measures alone are seldom enough), refugee protection policies and security issues (on policy patterns and divergences in developed states), thinking ethically about refugees (as the basis for transforming global governance), early warnings of forced migration (as a way to avoid human suffering and decrease the financial burden on the international community), the need for a protection regime for the world's 25 million internally displaced persons (who would be considered refugees if they were to cross an international border), Guiding Principles on Internal Displacement (spelling out the rights of the displaced, and obligations of states and international actors), the link between human smuggling and asylum (many asylum seekers rely on smugglers to enter rich nations), problems of resettlement/repatriation (efforts are often made without knowledge of the sustainability of return), media images of refugees/asylum seekers (seen as a threat to order and security, e.g. Haitian boat people), and changing roles of NGOs in refugee assistance. **(human security and refugees)**

#55 SECURITY/SMALL ARMS (AB)
The Small Arms Trade: A Beginner's Guide. Rachel Stohl (Senior Analyst, World Security Institute, Washington), Matt Schroeder (Arms Sales Monitoring Project, Federation of American Scientists), and Col. Dan Smith (USA, ret.). Oxford UK: Oneworld Publications, 2007/177p/$14.95pb.

"*Proliferation and misuse of small arms and light weapons is one of the most pressing security threats of the 21C.*" In 2002, the Small Arms Survey estimated some 639 million small arms and light weapons in circulation, including 242 million military firearms, 22 million shoulder-fired rocket launchers, and about 780,000 mortars (about 60% of the total was believed to be in civilian hands). New small arms are readily available: 1,200 companies in >90 countries produce some 8 million new weapons each year, resulting in $4 billion in legal sales and $1 billion in illicit sales. Illicit trade in small arms contributes to terrorism, regional instability, drug trafficking, organized crime, and failed states. Conflicts waged with small arms force millions from their homes every year (in Dec 2005, an estimated 24 million people in at least 50 countries were on the move due to armed violence). In post-conflict societies, small arms often hinder peace-building and humanitarian aid.

Chapters explain the history of small arms (the US Civil War was the proving ground for many technological advances, notably the introduction and mass production of the rifled bore and breech-loaded weapons), the trend toward smaller and lighter ammunition and more efficient rifles with higher bullet velocities, development of assault rifles after WWII (Mikhail Kalashnikov's AK-47, "a staple of modern warfare" originally intended to protect the Soviet Union, became operational in the 1950s; it is cheap to produce, operable in all weather, easy to use, and accurate to 300 meters; some 70-100 million AK series rifles are in circulation—ten times the number of Uzis or M-16s), and man-portable air defense systems (MANPADS) such as Stinger missiles ("ideal weapons for terrorists and insurgents," which can be bought for just a few thousand dollars on the black market and can inflict serious damage on a multi-million dollar plane), policy options to deal with MANPADS (do nothing, protect aircraft, protect airports), new threats from old weapons (IEDs in Iraq, the rocket-propelled grenade), and "Metal Storm" (a new light weapon from an Australian company that spews a curtain of projectiles).

"*Unlike other weapons, no international control system governs small arms—and no single treaty would be able to address the myriad problems of their proliferation and misuse." There is no panacea for this problem. "Reducing the threat posed by small arms requires simultaneous action on many fronts and by many different organizations.*" What is needed is a multi-layered approach: comprehensive programs that control supply, destroy stockpiles, curb misuse, and reduce demand by removing or mitigating abuses that undercut development.

A 2001 UN conference on illicit trade in small arms and light weapons encouraged national arms control policies (which vary enormously), regional initiatives such as that by the OAS, marking and tracing of weapons (to increase transparency and accountability of weapons transfers), international standards for marking and purchaser eligibility, an international treaty on arms brokering, and embargoes against irresponsible groups and governments. [**NOTE**: Lots of technical detail, especially about AK-47s and MANPADS. These "weapons of individual destruction" (the title of Chapter 2) receive far less attention than WMDs, but in many ways are just as troublesome, in part due to their wide dispersal. ALSO SEE **The Global Gun Epidemic** (Praeger, Jan 2006; *FS* 28:8/363), with emphasis on the major role of the US.] **(small arms proliferation)**

#56 SECURITY/PRIVATIZATION (A)
Armies Without States: The Privatization of Security. Robert Mandel (Prof of International Affairs, Lewis and Clark College, Portland OR). Boulder CO: Lynne Rienner Publishers, June 2002/169p/$49.95.

In the post-Cold War era, the zest for privatization has spread rapidly. Most have hailed it as a major step forward, contrasting its benefits sharply to the failures of bloated, government bureaucracies. Such unrestrained admiration has caused many countries to apply this management system in virtually every sector, even security. This book provides a comprehensive exploration of the global privatization of security and violence: "*a growing tendency of individuals, groups, and organizations to rely on private security forces rather than on the state's police and paramilitary formations.*"

Three trends are especially worthy of notice: 1) the spread of military armaments to the population at large ("*more military weapons are in the hands of private citizens than in the hands of national governments*"); 2) the growth of formally organized private security groups—companies, vigilante squads, militia, transnational criminal groups, self-defense forces, and survivalist enclaves (while national armies have shrunk by about 20%, private groups providing security have expanded so that they outnumber most national armies); 3) growing involvement of these private security providers in global turmoil (worldwide revenues for the industry were estimated at $56 billion in 1990, with growth to $202 billion in 2010).

Chapters explore private security and the state system, causes of the privatization trend (a cutback on Cold War uniformed officers, in particular, left a glut of people with military expertise looking for meaningful work; also, rising demand for private security providers in both rich and poor nations), the projected consequences of privatization (weakening individual feelings of mutual responsibility, the "self-promoting" effect of fostering perceived insecurity, widening the rich-poor gap, creating a "might-makes-right" social order, hollowing out of the state), a taxonomy of private security services, case studies, Western government use of private security outfits (where missions do not warrant loss of lives or do not enjoy substantial domestic political support; the state thus bears little public accountability for undesirable consequences), private security in the US (today there are >10,000 security companies employing 1.5 million guards—nearly triple the 554,000 state and local police officers; in the UK, there are 7,850 private security firms employing >162,000 people, compared to 142,000 public police), private security in South Africa ("there are now 10 times more private police than public police"), complexities surrounding privatization (ambiguous definition, mixed track record of effectiveness, absence of societal consensus, lack of clarity about what to do), and possible policy options.

"*Few if any feasible and effective alternatives exist to increased reliance on private security providers.*" Greater

transparency is by far the most popular proposal, utilizing home-state governments as the primary source of regulation. But prevailing security forecasts for the next few decades indicate that the kinds of unstable predicaments calling for security privatization are likely to increase. Thus, "*the long-term prognosis for the global survival and spread of private security providers appears bright.*" Ultimately, "a concerted move to bolster and reclarify the social contract between rulers and the ruled about mutual security responsibility appears to be a crucial prerequisite to transforming the privatization of security into a truly constructive force." [**NOTE**: Well-balanced treatment of a very important but oft-neglected trend. ALSO SEE **Corporate Warriors: The Rise of the Privatized Military Industry** by P.W. Singer (Cornell U Press, 2003/330p) and **The Security Economy** (OECD, Aug 2004/154p) on the growing security industry.] **(privatization of security)**

#57 SECURITY/HOMELAND (AB)

The Forgotten Homeland: A Century Foundation Task Force Report. Co-Chairs Richard A. Clarke (former national coordinator for security) and Rand Beers (former senior director for terrorism, Nat'l Security Council). NY: Century Foundation Press (dist. by Brookings), Sept 2006/315p/$15.95pb.

America chose to respond to 9/11 in large part by waging overseas wars, following a policy to "fight them over there, rather than here." But fighting some terrorists overseas does not preclude others from coming to the US. Indeed, "*by fighting in Iraq, the US has increased the motivation of many potential terrorists to attack Americans at home. Also, the Iraq experience has increased the skills of many terrorists.*"

Refocused on our domestic preparedness by the mismanagement of Katrina, what should we now do? "*There is much to be done to secure America at home and these measures should be considered neither optional or deferrable.*" Chapters make proposals for: 1) homeland security in cities and states (metro areas should be the primary unit for planning, funding, and training); 2) counterterrorism policy for our own backyard (build and inspire a culture of "first preventers"); 3) a health medical response system (build syndromic surveillance systems in all major metro areas and hospital surge capacity); 4) the private sector (focus on high impact targets and assuring continuity of essential systems); 5) chemical plant security (provide liability protection and terrorism insurance premium reductions for facilities certified as being compliant); 6) energy infrastructure (increase system resiliency and recovery speed); 7) cyber security (reinstate the position of cyber czar; develop a synoptic view of the condition of key cyber nodes and systems); 8) emergency response (reestablish FEMA as an independent cabinet-level agency; involve the private sector in planning); 9) aviation security (explore countermeasures for airlines against shoulder-fired missiles [see #55]); 10) nuclear terrorism (develop a comprehensive strategic security plan); 11) America's waterfront (double annual Coast Guard funding); 12) recreating our borders (end "whack-a-mole" responses that relocate major crossing points without reducing overall flow); 13) civil liberties (appoint regional liberty protection boards to work with state and local law enforcement); 14) funding ("*a prudent budget for homeland security would be at least $73 billion as opposed to $50 billion*").

[ALSO SEE **Protecting the Homeland 2006/2007** (Brookings, May 2006 *FS* *28:8/360) and **The Edge of Disaster: Rebuilding a Resilient Nation** by Stephen Flynn (Random House, Feb 2007).] **(homeland security neglected)**

#58 SECURITY/CIVIL LIBERTIES (AB)

Before the Next Attack: Preserving Civil Liberties in an Age of Terrorism. Bruce Ackerman (Prof of Law and Pol. Sci., Yale U). New Haven CT: Yale U Press, April 2006/227p/$26.

How can we deal with the political panic that will predictably ensue from another terrorist attack? We panicked after 9/11, and the Patriot Act resulted—a grab bag of provisions, some good, some bad, some trivial. Passed in response to a largely undefined treat from a poorly understood source, Patriot was used as a symbol to reassure the country that Washington was determined to step up the fight against terrorism. Yet 9/11 was merely a pinprick compared to the devastation of a suitcase nuclear bomb or an anthrax epidemic. The next major attack may kill and maim 100,000 innocents, and the resulting political panic could leave behind a wave of repressive legislation far more drastic than the Patriot Act. A downward cycle threatens: after each successful attack, politicians will come up with a new raft of repressive laws to ease our anxiety and promise more security, only to find a different terrorist band strikes a few years later. "*Even if the next half century sees only 3 or 4 attacks on a scale that dwarfs 9/11, the pathological political cycle will prove devastating to civil liberties.*" The root of the problem is democracy itself, with close elections tempting politicians to exploit the spreading panic by being "tough on terrorism" and depicting civil libertarians as softies.

To counter this threat, we need an *emergency constitution* that allows effective short-term measures to stop a second strike—but which firmly draws the line against permanent restrictions. Governments should not be permitted to run wild in the aftermath of a terrorist attack. An emergency constitution can be enacted by Congress without formal constitutional amendment, adapting our inherited system to meet distinctive challenges of the 21C. It would impose strict limits on unilateral presidential power. Presidents will not be authorized to declare an emergency on their own authority, except for a week or two while Congress considers the matter. Emergency powers should then lapse unless a majority of both houses votes to continue them—but only for two months. The president must then return for reauthorization, requiring a supermajority of 60%. After two months more, a majority of 70% will be needed, with 80% for every two-month extension. Thus, except for the worst terrorist onslaughts, this "supermajoritarian escalator" will terminate use of emergency powers in a relatively short period, and force the president to think before requesting more extensions unless a truly compelling case can be made.

Chapter 7, ***If Washington Blows Up?,*** considers the need for absolutely clear rules of succession for the Senate, the House, the Supreme Court, and the president. [ALSO SEE **Protecting Liberty in an Age of Terror** by Philip B. Heymann and Juliette N. Kayyem of Harvard U (MIT Press, Nov 2005/194p).] **("emergency constitution" needed)**

See page 33 for information on ordering copies of Mini-Guides #1 and #2

PROMOTING PEACE

#59 PEACE/HUMAN RIGHTS (AB)

The Human Right to Peace. Douglas Roche (Senate of Canada; Chairman, Middle Powers Initiative, Canadian Pugwash, and UN Disarmament Committee). Toronto: Novalis <www.novalis.ca>, Oct 2003/271p/$24.95pb;US$19.95pb.

In the 20th Century, at least 110 million people were killed in 250 wars. This is six times the number of war-related deaths in the 19th Century. More than 6 million people have died in war since the end of the Cold War, when security should have been improved. The 21st Century offers few prospects for improvement; in 2001 alone, 37 armed conflicts were fought in 30 countries, and >600 million small arms are in circulation around the world. Some hold that war is a reality, and that those who want to end it are mere idealists. But we are not predestined to violence; rather, war comes out of our culture—the way we are socialized to interact with one another. "*The central idea of this book is that the culture of war can and must be changed into a culture of peace.*" Those who engage in peace work are the true realists of our time, while today's idealists are those who think the war culture can be sustained without a worldwide calamity. Morality and pragmatism have intersected: what we have long known we *should* do, we now know we *must* do to survive. "Humanity has no other option."

Topics discussed: the cultural roots of violence, effects of the violence in Afghanistan and Iraq, why "just war" theory is outmoded (we now have machinery to keep the peace), the critical relationship between disarmament and development, the massive lie that nuclear weapons bring security, the potential "terrorist catastrophe" if WMDs are used in this new era of suicidal terrorism, the idea of "a culture of peace" (first used at a 1989 conference, and promulgated by UNESCO's Federico Mayor in the 1990s), peace as a "sacred right" (work toward the "right to peace" grew into a major diplomatic effort in the 1990s), the UN Programme of Action on a Culture of Peace (adopted by the General Assembly in 1999), essential messages of peace in Islam and all religions (and the fundamentalist opposition in all religions), the 1993 Declaration of a Global Ethic, and peace education as a necessary investment in future generations. An Appendix presents the 1997 Declaration by Federico Mayor on ***The Human Right to Peace***. [**NOTE**: A wise and important book. **(promoting a "culture of peace")**

#60 PEACE/WAR PREVENTION (A)

War No More: Eliminating Conflict in the Nuclear Age. Robert Hinde (Cambridge U) and Joseph Rotblat (London UK; Nobel Peace prizewinner). Foreword by Robert S. McNamara. London & Sterling VA: Pluto Press, Oct 2003/228p/$17.95pb.

Biologist/psychologist Hinde and nuclear physicist Rotblat (cofounder of the Pugwash Conference and author of 24 books) insist that "*if our civilization—indeed the human species—is to survive in this nuclear age, war of all types will have to be abolished and peaceful means found to solve disputes.*" War is no longer acceptable: war anywhere in today's world is likely to have widespread repercussions, modern war leads to millions of displaced persons, it is incredibly expensive and wastes resources, and nearly every instance of war is morally wrong.

To bring war to an end, we need to understand it better. Chapters discuss the nuclear peril ("*the threat of nuclear weapons being used in combat has increased dramatically following the new doctrines of the G.W. Bush administration*"), chemical warfare, biowarfare, radiological warfare or dirty bombs, infotech warfare, "conventional" weapons (which have become more dangerous), and factors that make war more likely (the political system and its leaders, terrorism, cultural factors, resource scarcity, globalization, poverty, aggression).

Pros and cons of ways to eliminate war: ***1) Democracy***: "chief among the elements alleviating the risk of war," because it emphasizes peaceful norms of behavior; ***2) Deterrence***: a show of strength may once have been adequate, but such a policy can lead to escalation; ***3) Sanctions***: in general, they seem an ineffective way to prevent war, partly due to the difficulty of getting full international compliance, and the many unscrupulous individuals such as arms dealers who evade them; ***4) Arms Control***: "*international agreements to prohibit WMDs, and the means to verify adherence, are essential; the manufacture, dissemination, and possession of arms must be regulated*" [see #61]; ***5) International Law***: a potentially powerful tool for minimizing the incidence of war [see #62]; ***6) Intervention and Conflict Resolution***: early warning and early action are important [see #63/64]; ***7) Promotion of International Well-Being***: poverty and environmental degradation provide a basis on which war is readily fomented [see #70]; ***8) Education for Peace***: "*improvements in education can make a major contribution to decreasing violence both within and between countries*"; ***9) Peacemaking Organizations***: the UN [see #72], regional and inter-governmental organizations, NGOs, religious groups, reconciliation commissions, grassroots organizations. [**NOTE**: Outstanding overview.] **(ideas on how to end war)**

#61 PEACE/ARMS CONTROL (A)

The Future of Arms Control. Michael A. Levi (War Studies, King's College, London) and Michael E. O'Hanlon (Senior Fellow, Brookings Foreign Policy Studies). Washington: Brookings Institution Press, Jan 2005/190p/$44.95;$18.95pb.

"*Arms control, for decades a key tool of American foreign policy, is nearly moribund today.*" It is still important because dangerous technologies abound, and no practical strategy exists that can safeguard them. Arms control—coordinated international effort to regulate the development, production, and use of the world's threatening technologies—is imperative. But the old ways of pursuing it are mostly obsolete, and the very definition of the term requires reinterpretation. "*A new arms control framework designed for a new world is urgently needed.*"

Some seek to return to Cold War arms control, while others would abandon it altogether. But the alternatives to some sort of arms control—military action and interdiction carried out unilaterally or by coalitions—are not up to the task of controlling dangerous arms. All-out invasions to overthrow offending regimes are hugely difficult and risky—in some cases even more so than Iraq in 2003. An enduring and effective arms control strategy must steer clear of pitfalls and zero in on the paramount security challenge of catastrophic terrorism.

Four imperatives: ***1) Arms Control Needs Priorities***: "modern arms control should, as its central organizing principle, attempt to prevent the spread of nuclear materials and biological pathogens; most other purposes are secondary at

best" (it is important not to overload the agenda); ***2) Arms Control Should Produce Transparency and Early Warning***: in a rapidly globalizing world, dangerous technology can spread more quickly and more quietly than before; ***3) Arms Control Should be a Complement to Military Force***: use of military force to destroy illicit weapons or overthrow a regime may now be more practical and desirable than during the Cold War (states that refuse to provide transparency should be held to account); ***4) Arms Control Must Address the Security of Nations That Do Not Have WMDs***: collective security offers a sound alternative to the unrealistic goals of abolishing nuclear weapons (at least in the coming decades); a new arms control strategy would directly address the chief security worries of many non-Western countries (notably small arms).

New goals to guide future arms control: 1) prevent the spread of dangerous technologies, focusing on terrorists and states that might aid them; 2) create political predicates for action to contain or reverse proliferation (the world needs to keep the most dangerous technologies away from the most dangerous actors); 3) improve security from war and terrorism for peoples and states not actively hostile to the US ("*arms control will not succeed unless all peaceful countries possess a viable vision for enhancing their security*"). [**NOTE**: A 26-page Appendix describes the status of 21 arms control treaties and related accords.] **(arms control: new framework)**

#62 PEACE/INTERNATIONAL LAW (AB)
International Relations—The Path Not Taken: Using International Law to Promote World Peace and Security. Thomas J. Schoenbaum (Visiting Research Prof, GWU Law School). NY: Cambridge U Press, May 2006/320p/$70;$29pb.

States are still central to international society. They are rational actors with interests, and seek to further those interests. But "*there has been a paradigm shift in how states view their interests*." State interests fall in three categories: 1) individual state interests; 2) interests rooted in cooperation with allied states; and 3) interests held in common with all of international society. The presence and at times dominance of categories 2 and 3 create a new paradigm that calls for new thinking, e.g. a broadened definition of security. International law and institutions are essential not only to categories 2 and 3, but also to category 1. They must become the focal points of foreign policy and international relations for all countries, consciously employed to create a new global order. Individual state interests have converged with the collective interests of humanity.

Topics include bad ideas of the 20C (nationalism, racism, imperialism, social Darwinism, class struggle, *realpolitik*), the state of the world today, new theories of international relations, the expansion of international actors beyond states, reinventing the UN [see #72], international political economy (multilateral cooperation is the hallmark of growing economic prosperity), environmental protection (progress in the past 35 years "has occurred largely without the participation of the US [which] has either been obstructionist or passive"), climate change policy after 2012 (a new regime requires US leadership), ocean governance (the US has a greater interest in ocean policy than any other nation, yet remains outside the UNCLOS treaty regime), international crimes, and reforming international human rights. **(international law for a new global order)**

#63 PEACE/CONFLICT PREVENTION (A)
Conflict Prevention: Path to Peace or Grand Illusion? Edited by David Carment (School of International Affairs, Carleton U, Ottawa) and Albrecht Schnabel (Peace and Governance Programme, UNU, Tokyo). Foundations of Peace Series. Tokyo & NY: United Nations U Press, 2003/296p/$31.95pb.

In response to the recent record of traditional peacekeeping, policymakers have begun to re-examine conflict prevention as an ideal instrument for creation of peace. The main message of those involved in conflict prevention is obvious: "*compared to conflict management, it seems less costly in political, economic, and human terms to develop institutional mechanisms that prevent tensions from escalating into violent conflict, to employ early warning mechanisms...and facilitate capacity building.*"

While much has been written about the merits of conflict prevention, little has been said about its feasibility. This book evaluates the institutional record and identifies current trends in conflict prevention practice. Chapter topics include key deficiencies in current thinking (especially too much emphasis in narrowing the meaning of conflict prevention), examples of successful preventive diplomacy (it works best when the threat is real), case studies of Kosovo and Macedonia, evaluating success and failure in Cambodia and Bosnia, regional institutions at the forefront of conflict prevention (EU, NATO, OSCE), how early warning can be improved, the significant gap between UN analysis and action, and conflict prevention in the Americas. [ALSO SEE **Blood on the Doorstep: The Politics of Preventive Action** by Barnett R. Rubin (Century Foundation, Oct 2002/256p).] **(conflict prevention trends)**

#64 PEACE/CONFLICT RESOLUTION (A)
Constructive Conflicts: From Escalation to Resolution (Third Edition). Louis Kriesberg (Prof Emeritus of Sociology, Syracuse U). Lanham MD: Rowman & Littlefield, Jan 2007/435p/$34.95pb.

Social conflicts are an inherent part of human life, but they vary in their destructiveness. This book analyzes why some struggles deteriorate terribly and become highly destructive for all parties, while others do not. A series of stages is posited, through which struggles tend to move: ***1) Bases***: the underlying conditions for emergence of a conflict; conditions for an infinite number of conflicts are always present, but relatively few become manifest, and fewer still become destructive; ***2) Manifestation***: the initial conflict stage when a struggle becomes manifest by one or both sides expressing beliefs and mobilizing supporters: (many strategies can prevent a conflict from becoming manifest, e.g.: intimidation, promoting shared identity, or ameliorating hurtful conditions); ***3) Escalation***: often a lengthy phase, in which each side increases its efforts and rallies support; ***4) De-escalation***: such a transition eventually occurs in every struggle, arising from changes in the relationship between adversaries, or from changes in the external context; coercive and non-coercive methods can help de-escalate conflicts; ***5) Termination***: every conflict ends, in some cases with a creative, mutually beneficial outcome (but outcomes are rarely symmetrical, and only gradually become evident; what seems the end of a conflict often marks change to a renewed conflict).

Chapters elaborate on each of these stages, as well as varieties of conflicts and conflict strategies, mediation and

negotiation, strategies to maximize constructive transformations, long-term and indirect consequences (many consequences are not anticipated or given much attention), variations in adversary relations (numbers, degree of integration and shared norms, and the degree to which one side dominates another). Concludes that constructive ways of waging conflicts are more important than ever. We are not doomed to endless and all-pervasive destructive struggles; we may not escape them all, but we can certainly reduce and limit them. Awareness that conflicts can be waged constructively is increasing, as well as how to do so (e.g., avoiding destructive overreaching, nonviolent actions, reframing enactments, and problem-solving meetings). [**NOTE**: Highly detailed and clearly an authoritative statement.] **(conflicts: constructive vs. destructive)**

#65 PEACE/STABILIZATION (A)

In the Wake of War: Improving U.S. Post-Conflict Capabilities. Independent Task Force Report No. 55. NY: Council on Foreign Relations, 2005/53p/$15pb (dist. by Brookings).

The Task Force, co-chaired by Samuel R. Berger (National Security Advisor to President Clinton) and Brent Scowcroft (Natl. Security Advisor to Presidents Ford and G.H.W. Bush), had 25 other members, including Sen. Chuck Hagel, former Sen Bob Graham, and Fareed Zakaria of *Newsweek*.

Military combat operations require advance planning and substantial commitment of money and manpower. "The same is true for the subsequent phase of conflict, commonly called nation-building, and known inside the Pentagon as 'stabilization and reconstruction.' *The failure to take this phase of conflict as seriously as initial combat operations has had serious consequences for the US, not just in Iraq but, more broadly, for international efforts to stabilize and rebuild nations after conflict.*" Violence following the official end of a conflict can pose substantial new challenges, e.g. failure to implement a full rebuilding effort in Afghanistan after Soviet withdrawal in 1989 created a power and security vacuum that ultimately gave sanctuary to the Taliban and al Qaeda. In Iraq, pre-war inattention to post-war requirements left the US ill-equipped for public security and governance demands in the aftermath. "*Failing states or those that are emerging from conflict will remain a significant feature of the international landscape for the foreseeable future*," as will the need for the US and others to address this problem. "*The US can no longer afford to mount costly military actions and then treat peacekeeping with anything less than the same seriousness of purpose.*"

As the world shrinks, this has become urgent. "*Peacekeeping and reconstruction should be seen as conflict prevention done late.*" Many recommendations are made: 1) leadership (the president must make stabilization/reconstruction capability a top foreign policy priority); 2) military challenges (stability operations are a strategic priority for the armed forces); 3) the civilian challenge ("unity of command among civilian agencies is desperately needed"; the State Dept should lead all civilian efforts, with USAID operating field-level programs); 4) international financing (a standing multinational reconstruction Trust Fund under the auspices of the G-8 nations would allow more flexible and timely disbursement of funds); 5) the United Nations (peacekeeping was not envisioned in the original UN Charter, but the UN has been increasingly involved in stabilization missions now straining the organization; a primary UN focus should be promoting "best practices"); 6) regional organizations (there is a pressing need to increase the overall number of well-trained and well-equipped peacekeepers within the African Union, NATO, etc.) [**NOTE**: An important and urgent statement.] **(post-conflict reconstruction capacity)**

#66 PEACE/MANAGING SPOILERS (A)

Challenges to Peacebuilding: Managing Spoilers During Conflict Resolution. Edited by Edward Newman (Director of Studies on Conflict/Security, UNU-Tokyo) and Oliver Richmond (Centre for Peace/Conflict Studies, U of St. Andrews, UK). Tokyo & NY: United Nations U Press, 2006/329p/$37pb.

Despite some remarkable successes in peacemaking since the end of the Cold War, it is clear that traditional thinking about the conduct and outcomes of peace processes may be in question. There have been some notable failures, and even where peace processes seem to have come to fruition (e.g., Northern Ireland), it is evident that reaching an agreement is far from enough if implementation is problematic.

Many cease-fires and peace agreements give way to renewed and often escalated violence. Or progress is often incremental, in some cases spanning decades. Given the huge material and human costs of a failed peace process, the consolidation of peace processes and dealing with threats to implementation are crucial areas for analysis. "*This volume explores the factors that obstruct conflict settlement by focusing on the phenomenon of 'spoilers' and 'spoiling': groups and tactics that actively seek to hinder, delay, or undermine conflict settlement through a variety of means and for a variety of motives.*"

Chapters explain the definition of spoiling behavior used here, dynamics of spoiling, terrorism as a spoilers' tactic, the role of diasporas in peace processes (such groups can wield key influence in creating or hindering international pressure), "new wars" and spoiling (more wars today are intrastate and marked by state failure and ethnic/religious conflict, with much higher civilian casualties), and case studies of Northern Ireland, the Basque conflict, Bosnia/Herzegovina, Colombia, Israel/Palestine, Cyprus, and Kashmir. **(peacemaking and "spoilers")**

#67 PEACE/RECONCILIATION (A)

Reconciliation in Divided Societies: Finding Common Ground. Erin Daly (Prof of Law, Widener U) and Jeremy Sarkin (Prof of Law, U of Western Cape, South Africa). Foreword by Archbishop Emeritus Desmond Tutu. Philadelphia: U of Pennsylvania Press, Jan 2007/323p/$65.

Man countries are transforming themselves, sloughing off the shackles of colonialism, communism, military dictatorship, and/or racism. Reconciliation was Nelson Mandela's mantra as he directed South Africa's transition from apartheid to democracy. "*Since the mid-1990s, there has been a dramatic increase in reconciliation-speak throughout the world.*" Countries as diverse as Algeria, Canada, El Salvador, Namibia, Nicaragua, and South Africa have enacted laws to promote reconciliation. Dozens of other nations have inaugurated prominent reconciliation commissions in recent years, including Chile, Morocco, and Sierra Leone. Still others have permanent reconciliation ministries. And, increasingly, international peace agreements include provisions to mandate them. "*Reconcilia-*

tion embodies the possibility of transforming war into peace, trauma into survival, hatred into forgiveness; it is the way human beings connect with each other, against all odds." It is never achieved, but is an ongoing process that nurtures itself.

Every country has its own political, social, cultural, ethnic, and linguistic cleavages. No country can duplicate another's reconciliation process: what worked in one place may not work in another, and what has not yet worked may still succeed. Economic resources are a huge boon to reconciliation initiatives. One or more strong charismatic leaders can be helpful. Effective government institutions are necessary to keep the peace. *To promote reconciliation, "as many individuals, groups, and institutions as possible, both in and outside the country, should be included in the process.*" People must *believe* in reconciliation, and believe that official efforts are legitimate. The role of the media is paramount: reports of progress encourage people to participate in the process; while reporting atrocities goads people to commit them. **(reconciliation process)**

#68 PEACE/CIVIL WAR PREVENTION (B)

10 Imperatives for Peace, John Richardson (Prof of Intl. Devel., American U), *The Futurist*, 40:6, Nov-Dec 2006, 14-17.

For some 35 years after Sri Lanka's independence from the British in 1948, this tropical nation existed in a state of relative peace. But escalating conflict and terrorism engulfed the island in 1983, leading to two civil wars between the Sinhalese ethnic majority and Tamil separatists. Based on studying these civil wars, Richardson proposes *a proactive strategy for preventing deadly conflict and terrorism* that could be relevant to Palestine, Sudan, Afghanistan, and especially Iraq. ***1) Maintain Public Order***: social turbulence must be prevented from escalating into deadly conflict; order is a prerequisite to success for all other development policies. ***2) Forgo Polarizing Political Rhetoric and Tactics***: polarizing rhetoric has a tendency to "blow back" on the user; ***3) Meet the Needs and Aspirations of Young Men***: this should be the first priority of national development policies and of programs funded by international donors (alienated, unemployed young men with nothing to lose are naturally drawn to militancy); ***4) Developing Countries Need Internal Security Forces***: police and paramilitary should be professional, apolitical, and generously funded (military forces have a relatively minor role in preventing or controlling deadly conflict); ***5) Development Policies to Meet Basic Needs***: people have fundamental needs and aspirations, and are predisposed to violence when they feel disheartened about their lives and future prospects; ***6) Good Governance***: democratic institutions empower citizens to learn about effective policy through communication, competition, and trial and error; ***7) Middle Path Development Policy***: represent diverse points of view and aim between capitalism's efficient but Darwinian precepts and socialism's egalitarian but stultifying precepts; ***8) Successful Development is Good for Business***: MNCs and associations should play a more active role in supporting successful development policies; ***9) Give Sufficient Weight to a Long-Term View***: too short time horizons cause many development failures; ***10) Consider Nonmilitary Options Before Military Options***: realistic and rigorous analysis of costs is needed before proceeding down the slippery slope of military action. **(security and development)**

#69 PEACE/HOLISTIC VIEW (A)

The Challenge of Cultural and Religious Diversity and Peacebuilding in an Interdependent World, Linda Groff (Prof of Pol Sci & Futures Studies, California State U-Dominguez Hills), *Futures Research Quarterly*, 21:4, Winter 2005, 23-54.

"*The greatest challenge facing humanity today is how we are going to learn to live together.*" A more peaceful world in the future requires a dynamic, whole-systems worldview that honors both our unity and independence, and our racial, ethnic, cultural, religious, and national diversity. Rather than focus on the "clash of civilizations," we need to encourage a dialogue of civilizations, including a dialogue of religions. *Proposals to improve this dialogue*: 1) a curriculum on global issues and other countries, cultures, and religions for all students, starting at an early age and continuing through university education; 2) interactive centers and museums in cities, honoring cultural/religious diversity; 3) more training in intercultural communication, peacebuilding/conflict resolution, and nonviolence skills; 4) reverse the growing rich/poor gap at every level.

A holistic, integrative view of peace involves: 1) peace as absence of war and physical violence; 2) eliminating structural violence and working for social justice and human rights; 3) eliminating patriarchal values and institutions on all levels; 4) holistic intercultural peace focusing on common human cultural and spiritual needs which unite and motivate human life; 5) holistic Gaia peace of humans with Earth, our life support system, stressing the need to be caretakers; 6) holistic inner-outer peace, adding inner peace to the five types of "outer peace" (above). Unfortunately, "*the current obsession with military policies and expenditures to fight terrorism has taken attention away from the many other aspects of peace that need to be addressed.*" **(improving dialogue; promoting peace)**

#70 PEACE/ANTI-POVERTY (A)

Reducing Poverty, Building Peace. Coralie Bryant (Chevy Chase MD; Prof and Director, Economic and Political Development Prog., Columbia U) and Christina Kappaz (Chicago). Bloomfield CT: Kumarian Press, 2005/215p/$24.95pb.

We used to talk about the presence of a third world inside the first, and a first world inside the third. These terms are now obsolete. Are we not all "developing"? New thinking is sorely needed about the similarities among poverty issues in rich and poor places, and thus about the potential of similar programs to effectively redress poverty—thinking that dispenses with the labels "developing" and "developed." Cross-border movements of capital, labor, refugees, and even terrorists means that we all now live in "developing" countries. Many options are available for effective action in reducing poverty in all countries: micro-enterprise development, microcredit and savings, social action funds, locally appropriate farm technology, community schools, preventive health programs, self-help housing, and land trusts.

Poverty, along with security, is now a major international concern. Poverty, violence, and war interact, creating patterns of reinforcing stress. Most recent wars have taken place where poverty is most severe. And they have worsened that poverty, and taken far larger numbers of civilian lives than in earlier wars. Yet there is room for hope. We live in times of unprecedented opportunity to do more, and to do it effectively. And poor people are more literate and organized. The Internet has

facilitated much of this change, easing the costs of building networks and making information widely available. Thousands of new NGOs are also making a difference.

Chapters discuss who is poor and where (1.2 billion people live on less than $1 a day), war as the probable major driver of poverty today, poverty as capability deprivation, relationships between poverty and war, increasing access to assets, how institutions enable or impede poverty reduction, instituting legal frameworks for the poor ("legal environments matter"), what has been learned about poverty policies, strengthening implementation to achieve results (participatory development, building policy coalitions, the Consensus Workshop Method), the UN Millennium Development Goals, performance indicators, policy incoherence (military spending undermining development), reducing poverty as positive peace building (most poverty reduction work has not included attention to peace building), and creating political will to move in new directions. [**NOTE**: Valuable for questioning the outdated "developed/developing" terms. Both authors were formerly with the World Bank.] **(peace and anti-poverty linkages)**

#71 PEACE/TEXTBOOK (B)

Peace and Conflict Studies. David P. Barash (Prof of Psychology, U of Washington) and Charles P. Webel (Executive Faculty, Saybrook Graduate School, San Francisco). Thousand Oaks CA: Sage Publications, 2002/570p/$87.95.

A textbook based on the premises that war is one of humanity's most pressing problems, that peace is almost always preferable, and that "peace can and must include not only the absence of war but also establishing positive, life-affirming, and life-enhancing values and social structures." But there are no simple solutions: "*most aspects of the war-peace dilemma are complex, interconnected, and poorly understood.*" The 21 chapters are in four parts: ***1) The Promise of Peace, the Problems of War***: the meanings of peace (conservative, liberal, and radical left viewpoints), peace movements in the US and Europe, the meanings of wars, the special significance of nuclear weapons; ***2) Reasons for Wars***: individual level (aggression, instincts, attractions of war), group level, state level, decision-making level, conflicting ideologies, poverty as a cause and restraint; ***3) Building Negative Peace***: preventing war by diplomacy and conflict resolution, "peace through strength" pro and con arguments, disarmament and arms control, economic conversion, international organizations (the UN, NGOs, MNCs), international law, the dream of world government, ethical and religious perspectives; ***4) Building Positive Peace***: human rights, ecological well-being, economic well-being, nonviolence, personal transformation. [**NOTE**: A back-cover blurb by Johan Galtung pronounces that "this book will be the introductory text in peace and conflict studies for years to come."] **(peace studies introduction)**

#72 PEACE/U.N. ROLE (A)

The United Nations, Peace and Security. Ramesh Thakur (Senior Vice-Rector, UNU; Asst Secy-General of the UN). NY: Cambridge U Press, July 2006/388p/$80; $32.99pb.

Explores the UN as the principal provider of international security and the principal site of engagement with the great debates of the day on issues of peace and security. Chapters are in four parts: ***1) An International Organization for Keeping the Peace***: pacific settlement and collective security (on the trend toward broader international instruments to settle disputes), peacekeeping as "a circuit breaker in a spiraling cycle of violence," the US retreat from multilateralism; ***2) Soft Security Perspectives***: human security (the reality of human insecurity cannot be wished away: for many poor people, "soft threats" such as hunger and lack of safe water are a far greater risk than "hard" threats), human rights and civil society ("UN leadership on human rights has helped to change public policy discourse"), international criminal justice (establishing the ICC as a permanent and universal court is a major advance in international law), the limited utility of sanctions ("they inflict undeniable pain on ordinary citizens while imposing questionable costs on leaders"); ***3) Hard Security Issues***: the nuclear threat (the NPT faces a crisis of confidence and compliance born of growing strain on verification/enforcement; Washington has strengthened the attraction of nuclear weapons for others while weakening the restraints of global norms and treaties), global terrorism (defeating it requires both military and police action, and nation-building), Iraq's challenge to world order, sovereignty as responsibility; ***4) Institutional Developments***: reforming the UN, the role of the Secretary-General.

Observers of the UN can be divided into two groups: the romantics (who see the UN as the answer to all world problems and never wrong) and the cynics (who see the UN as a symptom of world problems, suffering from exaggerated claims and inept leadership). Still, "*the UN remains our one and best hope for unity in diversity in a world in which global problems require multilateral solutions.*" Of course the UN is an international bureaucracy with many flaws, and a forum often abused by governments. And, too often, the UN has failed to tackle urgent collective action problems. **(security and the UN)**

HINDSIGHT, 1977 - 1990

These brief abstracts on the intertwined concerns of security, peace, nuclear weapons, and terrorism, are derived from longer abstracts published during the first 12 years of *Future Survey*, from 1979 to the end of the Cold War. The 36 items, arranged chronologically, are selected from about 900 items published during this period, with special emphasis on thinkers and ideas that are still relevant today.

- **Redefining National Security.** Lester R. Brown (Worldwatch Institute). Washington: Worldwatch Paper 14, Oct 1977/46p. A purely military definition of "national security" is ever less adequate as nonmilitary threats grow ever greater. Princeton's Richard H. Ullman makes a similar argument in ***Redefining Security*** (*International Security*, 8:1, Summer1983). (H-1)
- ***A Peril and a Hope***, Victor F. Weisskopf (Prof of Physics, MIT), *Physics Today*, 1978 (reprint: *Bulletin of the Atomic Scientists*, Jan 1979). Stockpiling nuclear arms is "the first and foremost problem of our time," and the reduction and eventual abolition of nuclear weapons must have absolute priority. (H-2)
- **The Effects of Nuclear War.** U.S. Congress, Office of Technology Assessment. Washington: USGPO, 1979/151p. Examines several levels of nuclear attacks, warning that an all-out war could kill tens of millions of people, and reduce the survivors to a medieval economy. Indirect long-term effects of starvation, disease, and economic disruption could be even more damaging than the immediate blast impacts. (H-3)
- **Bibliography on World Conflict and Peace.** Elise Boulding (U of Colorado) *et al.* Boulder CO: Westview, 1979. More than 1,000 entries in 26 major categories focus on the structures and processes of conflict and peacemaking at every level. (H-4)
- **Terrorism and the Liberal State.** Paul Wilkinson (University College, Cardiff UK). NY: New York U Press, 1979/257p. On the growth and implications of international terrorism. The problem of terrorism is not going to disappear, and the issues it raises will increasingly dominate social thought. (H-5)
- **Terrorism: Threat, Reality, Response.** Robert Kupperman (US Arms Control and Disarmament Agency) and Darrell Trent (Hoover Institution). Stanford CA: Hoover Institution Press, 1979/480p. Future threats from increasingly sophisticated and interlocking terrorist groups are certain to increase. (H-6)
- **Crazy States: A Counterconventional Strategic Problem** (with a new introduction). Yehezkel Dror (Hebrew U of Jerusalem). Millwood NY: Kraus Reprint, 1980 (first published by Lexington Books, 1971). Global conditions increasingly point to proliferation of violent nations and sub-national groups. (H-7)
- **International Terrorism: An Annotated Bibliography and Research Guide.** Augustus R. Norton (Dept of Defense) and Martin H. Greenberg (U of Wisconsin-Green Bay). Boulder CO: Westview, 1980/218p. About 1000 entries, covering terrorist tactics, strategies, countermeasures, etc. (H-8)
- **Disarmament: The Human Factor.** Edited by Ervin Laszlo (UNITAR) and Donald Keys (Planetary Citizens). Elmsford NY: Pergamon, 1981/164p. Essays from a 1978 symposium at UN headquarters on neglected human factors of disarmament, new approaches to international security, the necessary global education for long-run salvation. (H-9)
- **The Fate of the Earth.** Jonathan Schell (*The New Yorker*). NY: Knopf, 1982/244p (also in *The New Yorker*, Feb 1, 8, and 15, 1982). A passionate best-seller warning about the 50,000 nuclear warheads in the world and possible events leading to extinction, or "the murder of the future." Also see Schell's follow-up, **The Abolition** (Knopf, 1984/173p). (H-10)
- **Common Security: A Blueprint for Survival.** Independent Commission on Disarmament and Security (Olaf Palme, Chairman). NY: Simon & Schuster, 1982/202p (excerpts in *The New York Times*, 2 June 1982, A10). Warns that trends in armaments development and proliferation suggest "the world may be headed for catastrophe" and that preventive action is urgently needed. The Commission strongly supports the goal of general and complete nuclear disarmament. (H-11)
- **Alternative Methods for International Security.** Edited by Carolyn M. Stephenson (Colgate U). Washington: University Press of America, 1982/243p. Essays include Elise Boulding on the present insecurity, Robert Johansen on seven models of national security policy, Patricia Mische on a viable world security system, Kenneth Boulding on stable peace, and Bruce Russett on four key elements for peace. (H-12)
- **Brittle Power: Energy Strategy for National Security.** Amory B. Lovins (Rocky Mountain Institute) and L. Hunter Lovins (RMI). Foreword by Adm. Thomas H. Moorer. Andover MA: Brick House, 1982/486p. Outgrowth of a 1981 report to the President's Council on Environmental Quality, warning that the US undermines its foundations by building a brittle energy system easily shattered by accident or malice. This growing threat to national security is especially noted for LNG facilities, oil and gas facilities, power stations/grids, and nuclear power facilities. Original and massively documented. (H-13)
- **The First Nuclear World War: A Strategy for Preventing Nuclear Wars and the Spread of Nuclear Weapons.** Patrick O'Heffernan, Amory B. Lovins (RMI), and L. Hunter Lovins (RMI). NY: William Morrow, 1983/444p. As the number of nuclear weapons in the Third World proliferates, so does the probability of use. Necessary tasks: redefining national security, nuclear disarmament, and allowing the dying nuclear power industry to expire by ending tax breaks/subsidies. (H-14)
- ***Frightened for the Future of Humanity***, *The New York Times* (Op-Ed), Sunday, 24 April 1983. A statement signed by 70 Manhattan Project scientists who worked on developing the atomic bomb, on the occasion of the 40th anniversary of the Los Alamos Laboratory. "We are appalled at the present level of the nuclear armaments," and urge leaders of the US and USSR to agree on reduction, with the ultimate goal of total elimination of such weapons. (H-15)
- **Peacekeeping: Appraisals and Proposals.** Edited by Henry Wiseman (U of Guelph). Elmsford NY: Pergamon/International Peace Academy, 1983/461p. UN peacekeeping has been extended in use and expanded in function and complexity, but has been applied to only a few conflicts since 1946. Many improvements can be made. (H-16)
- **Whole Earth Security: A Geopolitics of Peace.** Daniel Deudney (Worldwatch Institute). Washington: Worldwatch Paper 55, 1983/93p. "Security" pursued only on national terms is increasingly obsolete. A new security system can be constructed that avoids a monolithic world regime and destabilizing military competition among leading states. (H-17)
- ***Nuclear Winter: Global Consequences of Multiple Nuclear Explosions***, R.P. Turco, O.B. Toon, T.P. Ackerman, J.B. Pollack, and Carl Sagan, *Science*, 23 Dec 1983, 1283-1292. The famous "TTAPS" paper on long-term effects of nuclear war, such as severely reduced light levels and subfreezing land temperatures caused by fine dust and smoke. Also see a companion paper on ***Long-Term Biological Consequences of Nuclear War***, by Paul R. Ehrlich and 20 others (pp 1293-1300), and a 1990 TTAPS update, ***Climate and Smoke: An Appraisal of Nuclear Winter*** (*Science*, 12 Jan 1990, 166-176). (H-18)
- **Toward Nuclear Disarmament and Global Security: A Search for Alternatives.** Edited by Burns H. Weston (U of Iowa). Boulder CO: Westview, 1984/746p. A reader to be used as a basic text in peace studies and national security studies, with essays on facing up to nuclear extinction, rethinking basic assumptions, overcoming distrust, etc. (H-19)

- **Thinking About the Unthinkable in the 1980s.** Herman Kahn (Hudson Institute). NY: Simon and Schuster, 1984/250p. Dismisses seeking total worldwide disarmament or a total nuclear freeze, describes five categories of "outbreak scenarios," and proposes a long-range antinuclear policy to make nuclear weapons seem to be unusable and decrease the prestige of owning them. Kahn's seminal **Thinking About the Unthinkable** (1962) broke the ice on thinking about nuclear war. (H-20)
- **There Are Alternatives! Four Roads to Peace and Security.** Johan Galtung (International Peace Research Institute, Oslo). Nottingham UK: Spokesman Press, 1984/221p. Four roads to be pursued together: conflict resolution, a stable balance of power, disarmament, and alternative security policies. Proposes a Ministry of Peace in all countries, to permit integrated views and integrated actions, and a UN Peace Program. (H-21)
- ***Nuclear Disarmament by the Year 2000***, Mikhail Gorbachev, *The New York Times*, 5 Feb 1986, A13. Full-page ad by the USSR Embassy in Washington proposes complete elimination of nuclear weapons by 2000. A follow-up, ***For a Comprehensive System of International Security*** (*NY Times*, 21 March 1986, A18-19), proposes an all-embracing military, political, economic, and humanitarian security system. (H-22)
- **The World Encyclopedia of Peace.** Editors-in-Chief: Ervin Laszlo (UNITAR) and Jong Youl Yoo (Inst. of Intl. Peace Studies, Kyung Hee U). Elmsford NY: Pergamon, 1986/c.2000p in 4 vols. Vols 1/2 have >500 entries from 350 experts in >40 countries, on such topics as alternative defense, conversion to peace, and deterrence. Vol 3 provides texts of 70 major peace treaties since 1870. Vol 4 offers a bibliography of >1000 items and a directory of >200 journals. (H-23)
- **How Peace Came to the World.** Edited by Earl W. Foell and Richard A. Nenneman (*The Christian Science Monitor*). Cambridge MA: MIT Press, 1986/257p. The *Monitor's* Peace 2010 contest elicited some 1300 essays on how a peaceful world could be attained by the early 21C. Selected essays and excerpts cover awakening through disaster, improved US-USSR relations, influence of non-superpowers, improving the machinery of peace, change of consciousness, etc. (H-24)
- **Blundering into Disaster: Surviving the First Century of the Nuclear Age.** Robert S. McNamara (Washington). NY: Pantheon, 1986/212p. Five alternative long-term visions to minimize risk of great power conflict: East-West reconciliation (not a substitute for other actions), banish all nuclear weapons (Gorbachev's proposal [H-22] is not feasible because fear of cheating would remain), substitute defense for offense (Reagan's Star Wars is too expensive), strengthen deterrence (would accelerate the arms race), and reducing US/USSR warheads to a few hundred each. (H-25)
- **Preventing Nuclear Terrorism: The Report and Papers of the International Task Force on Prevention of Nuclear Terrorism.** Edited by Paul Leventhal (President, Nuclear Control Institute) and Yonah Alexander (CSIS). Lexington MA: Lexington Books, 1987/472p. An independent panel of 26 experts from 9 countries assessed vulnerabilities of nuclear programs to terrorist acts, the likelihood of such acts (small but growing), and many proposals for improved security. (H-26)
- **Terrorism and Global Security: The Nuclear Threat** (Second Ed). Louis René Beres (Purdue U). Boulder CO: Westview Press, 1987/156p. First published in 1979; considers how the US sparks terrorism, causes and forms of nuclear terrorism, hardening targets, softening adversaries, and redefining national interests as part of a larger overall strategy to curtail all forms of international violence. (H-27)
- **America the Vulnerable: The Threat of Chemical and Biological Warfare.** Joseph D. Douglass Jr (McLean VA) and Neil C. Livingstone (National Security Program, Georgetown U). Lexington MA: Lexington Books, 1987/204p. We are entering an era when even small nations or terrorist groups may be armed with chemical or biological weapons of mass destruction; 13 scenarios show possible CBW usage. (H-28)
- **Fateful Visions: Avoiding Nuclear Catastrophe.** Edited by Joseph S. Nye Jr, Graham T. Allison, and Albert Carnesale (all JFK School, Harvard U). Cambridge MA: Ballinger, 1988/299p. Ten visions grouped in five clusters: radically reduced vulnerability (by abolishing nukes or reducing them to near zero), radically reduced reliance (no first-use policy), superpower accommodation, radical increase in the relative power of one superpower, and transforming the world system. (H-29)
- **Coexistence, Cooperation, and Common Security**. Edited by Joseph Rotblat (U of London) and Laszlo Valkki (Lorand U, Budapest). NY: St. Martin's Press, 1988/349p. Papers from the 36th Pugwash Conference on preventing the spread of nukes, nuclear-free zones, unilateral initiatives, reducing threat perceptions, and a proposed World Peace Initiative by Hans-Peter Durr (U of Munich), that would be cast into several hundred projects aimed at urgent global problems. (H-30)
- **The GAIA Peace Atlas: Survival into the Third Millennium.** Edited by Frank Barnaby (former director, SIPRI). Foreword by Javier Perez de Cuellar. NY: Doubleday, 1988/271p(8x11″). Chapters on the roots of peace and conflict, keeping the peace, the emerging global community, the struggle for peace, choices for humanity, short-term steps to survival, and redirection to a sustainable future (peace education, conversion of the military industry, eradicating the roots of war, a new economics for sustainability, etc.). A rich feast of ideas. (H-31)
- **National Security: The Economic and Environmental Dimensions.** Michael Renner (Senior Fellow). Washington: Worldwatch Institute Paper 89, May 1989/78p. Growing reliance on force is reducing national security, as pursuit of military power undermines economies of both rich and poor countries. Environmental security offers a more fruitful basis for cooperation and security among nations. (H-32)
- **American National Security: Policy and Process** (Third Ed). Amos A. Jordan (President Emeritus, CSIS), William J. Taylor Jr (CSIS), and Lawrence J. Korb (Brookings). Foreword by Sen. Sam Nunn. Baltimore MD: Johns Hopkins U Press, 1989/636p. The "national security" term came into wide usage only since WWII, signifying protection against physical assault in the narrow sense, and, more broadly, protection of vital economic and political interests. As the US enters an increasingly challenging era, it needs a viable grand strategy. Basic elements include setting priorities for US commitments and greater attention to nontraditional security concerns. (H-33)
- ***Redefining Security***, Jessica Tuchman Mathews, *Foreign Affairs*, Spring 1989, 162-177. Former director of the National Security Council's Office of Global Issues asserts that "the 1990s will demand a redefinition of what constitutes national security," and that "the driving force of the coming decades may well be environmental change," as humanity rapidly alters the basic physiology of the planet. (H-34)
- **The Conquest of War: Alternative Strategies for Global Security.** Harry B. Hollins, Averill L. Powers, and Mark Sommer (all Alternative Defense Project, NYC). Intro by Kenneth E. Boulding. Boulder CO: Westview, 1989/224p. War has outlived its usefulness, and less costly means must be found to resolve conflicts. The authors examine UN peacekeeping, the Clark-Sohn Plan (**World Peace through World Law**, 1958), minimum deterrence, etc. An integrated common security system could offer a wide range of benefits for all. (H-35)
- ***Ten Minutes to Midnight***, *The Bulletin of the Atomic Scientists*, 46:3, April 1990, p3. The Cold War is over and the risk of global nuclear war ignited in Europe is significantly diminished. "This is the greatest opportunity in four decades to create a safe, sustainable world." Accordingly, the hands of the *BAS* clock, reflecting the state of international security, have been turned back from 4 minutes to 10 minutes to midnight. The back cover of this issue summarizes the history of the "doomsday clock," since it first appeared in 1947 at 7 minutes to midnight. Since then, it has fluctuated from 2 minutes (1953) and 3 minutes (1984) to 10 minutes (1969, 1990) and 12 minutes (1963, 1972). Today it's at 5 minutes [see #1]. (H-36)

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