You Never Know(ism)

Benjamin H. Friedman and Harvey M. Sapolsky

here is a new enemy stalking the United States. No one can say what it is. Some call it uncertainty. We call it You Never Know. We know You Never Know is dangerous, but it is hard to say how dangerous. That is the problem. You never know. You Never Know is a powerful enemy. It cannot be defeated. Think you have a handle on uncertainty? Are you sure? You never know.

Planning against You Never Know is difficult. What weapons do you buy to fight it? What organizations do you fund? What plans do you make? The answer tends to be whatever you already have.

That is the catch. You Never Know is phony. It is an antidote for another threat: the threat of no threats. The threat of no threats is not a threat to most of us, who are glad to go unthreatened. But no threats is a threat to those who work to protect us from threats, the military services, defense contractors, defense think tanks, Congress, foreign policy pundits, even security studies programs. Without plausible threats to worry us, they champion merely possible ones by saying, essentially, "You never know."

The real threat is You Never Knowism — the argument that we have to invest heavily to protect ourselves against You Never Know — and the culture of threat this reasoning defends; the celebration of dangers; the concept that the only thing to fear is uncertainty and the unknown, rather than fear itself. You Never Know arguments justify excessive domestic policing, waste, and empire. While it is prudent to prepare for dangers, it is also prudent to recognize the cost of excessive prudence. By focusing on possibility, by taking a precautionary approach to national security, we frighten ourselves and strip resources from more probable threats.

You Never Knowism is a large threat because You Never Know has such important friends. Those who need the threat of You



Fashion for the future.

Never Know guide public opinion about danger. So we all learn to fear You Never Know. But no one worries us about You Never Knowism. That is the goal of this essay — to sound the alarm against You Never Knowism. It seems futile, but it could work. You never know.

The Nature of You Never Knowism

The dirty secret of American national security politics is that we are safe. Americans might be the most secure people in history. But we worry. We are told that our enemies may be organizing our destruction in pockets of disorder, which are growing. We are taught that the world is chaotic, awash in civil war and terrorism, which could strike us "any place, any place with virtually any weapon." We hear that our satellites are ripe for attack, that pirates prey on our shipping, that Iran's nuclear weapons portend disaster, and that China is a growing threat.

At base, however, most arguments claiming America's insecurity rely on implausible scenarios.² The futures these arguments fear are not probable but possible. It is possibility that justifies the defenses

SPRING '06

they advocate. Because you cannot know for certain the odds of this possible danger, this logic says, you must prepare for it. History teaches nations extreme caution. In other words, you never know.

You never know what the Chinese will do if their navy and nuclear arsenal get too big. Although it seems unlikely that Kim Jong Il would fire a missile at the United States — never mind its range — and invite the destruction of his vicious little kingdom, you never know. Terrorists probably will not attack Warren, Vermont, or Cambridge, for that matter, but they might; you never know. So prepare.

You Never Knowism is the guiding ethos of U.S. national security. National security planning documents are rife with it. They evoke a world of swirling uncertainty and rising complexity, a time of unprecedented change, where predictions are impossible but dangers great. They claim that the simple Soviet threat has been replaced by more various and irrational ones, which require capabilities-based planning — building military forces with no particular foe in mind.

The Quadrennial Defense Review (QDR), the defense planning document drafted every four years to guide U.S. defense spending, is only the latest example. Following the National Security Strategy (2002), the National Military Strategy (2004), and the National Defense Strategy (2005), the Review, released in February, states that the United States now faces a hostile mix of terrorists, failed states that we must order, insurgencies, rogue states with missiles, and large militaries like China's.³ Like these prior strategy documents, the QDR does not bother to estimate how probable these threats are and decide to focus on one or another on that basis. It contends simply that "managing risks" compels us to prepare for all of them. It then recommends that we retain the weapons and forces we have, with a few tweaks.

The Review adopts the President's preventive war doctrine, first articulated in the National Security Strategy, but applies the doctrine more generally, arguing that preventive action is now the cornerstone of U.S. national security strategy; that we must act to head off risks before they materialize, through attack, military-to-military support, or stabilization missions.⁴

You Never Knowism earns its name from its insistence on planning around what we do not know rather than what we do. It is analysis that makes its failure to figure anything out its main tenet. You Never Knowism claims you can prepare for uncertainty itself. It also refuses to justify plans based on probability and embraces possibility as the tool of argument. The essential element of You Never Knowism is its assumption that it is prudent to act at considerable cost to head off unlikely contingencies.

You Never Knowism is wrong, dishonest, and dangerous. It is wrong because it overestimates today's uncertainty and danger. It is dishonest because it is post-facto justification for a political outcome. It is dangerous because it ignores the large risks of chasing small dangers.

Certainty and Safety

The Cold War was also full of uncertainty. There was plenty we did not know about Soviet intentions. We did not know how to deploy defense dollars to plan against the threat. We did not agree what weapons to buy or what plans to make. We did not know which insurgencies to fight or how to successfully predict the future. After all, almost no one predicted the end of the Cold War. Instead, experts constantly predicted disaster of one kind or another. When it did end, we found that we had vastly overspent, that the Soviet Union was more a house of cards than a genuine superpower.

The claim that the world is becoming more uncertain is one of those trendy notions that we are meant to accept uncritically. In fact, the world is not a roulette wheel of WMDs, insurgents, terrorists, and hostile states, but a stable place, with a few known threats. By any historical measure, Americans are particularly safe. And we live in an especially safe neighborhood. The sorts of security threats that plagued nations since their invention, indeed that necessitated their creation - invasion and civil war - are unthinkable here. Peace and order are spreading. Gross domestic products continue to rise, facilitating government authority in more corners of the earth.5 Both inter-state war and civil war are in decline.6

The insurgencies in Iraq and Afghanistan today pose little danger to the United States homeland. That might change without military pressure, but both can be contained.

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A Sunni state or region in Iraq might harbor foreign terrorists, who now apparently number in the hundreds, but their recent clashes with the insurgents suggest otherwise. If terrorists did remain, they would not be immune from Special Forces raids or airpower based nearby. The Taliban militias and Al Qaeda stalwarts in their midst on the Pakistan-Afghan border might regenerate into a body that exports terrorism without U.S. forces pressuring them from their west. But this alliance can be harassed with intelligence operations and a small ground force.

Terrorists are a serious problem, but they kill fewer Americans than peanuts in most years and in their banner year, 2001, less than one tenth as many Americans as the flu.8 Since September 11, terrorists have pulled off only a series of conventional bombings abroad, which are scary but insignificant relative to bigger killers like floods and driving. Of course, our response to terrorism is justified more by what they might do than what they have done. Everyone speaks of a danger inherent in the spread of both Sunni extremism and weapons technology. The supposed result is that more people are willing and able to kill us in large numbers.

Never mind the fact that accelerated technological change should also produce

medical technologies that help us live longer and create wealth to research those technologies and buy defenses. The more important point is that, for both organizational and technological reasons, even if the desire to destroy the United States is increasing, the capability to do so may not be.

Large-scale terrorism requires not only hatred but organization. By 2001, Al Qaeda had grown into a somewhat competent organization that had training camps, some management apparatus, a nascent weapons program, and a large cadre of people to draw on for attacks. The American war in Afghanistan and worldwide policing shattered this organization, killing many of its leaders and scattering the rest. Today, the words Al Qaeda generally refer to a movement of like-minded individuals — that is, militant Salafist Sunni Muslims - who are at best loosely linked and distributed among decentralized organizations and fellow-travelers spread between Europe and Southeast Asia.9 Their attacks have been conventional and local — mostly organized nearby where they took place. Their perpetrators appear to either lack the organization to prepare attacks far from their homes or, given resource constraints, prefer to focus on achievable domestic aims. The local focus of these attacks bodes well for us, given that

You never know where danger lurks.

SPRING '06 5

there is no evidence of sleeper cells in the United States, as the FBI has grudgingly reported.¹⁰

The trend of unconventional weapons proliferating to non-state actors remains a hypothesis. ¹¹ The few events that support it, like the 2001 anthrax mailings and Tokyo subway attacks, killed small numbers of people. Difficulties in employing these weapons are usually understated. Using chemical weapons to kill hundreds of people outdoors would probably require good weather, several passes in a plane or helicopter, and leave enough time for most intended

case, these weapons were apparently built with limited life components that would by now likely have deteriorated, leaving the weapons useless. 14 The most prudent worry is that terrorists might acquire fissile material and hire engineers competent to build a homemade nuclear weapon, which could be smuggled into the United States. But even this scenario is less likely than we think. It requires a number of risky steps. A nuclear terrorist must find a source and buy fissile materials, design, and other components, smuggle them across borders, assemble the weapon, and then deliver the weapon to its target, which will

target, which will likely be another location, probably across borders. None of these steps is impossible, but the existence of multiple failure points drives down the odds of success, especially for groups that lack training and hierarchy. 15

State failures are often said to threaten the United States. But history is rife with failed states, and only one, Afghanistan, has created serious problems for us. It matters more who

and what is in a state than whether it fails. There are some states, like Pakistan, whose potential collapse might endanger the United States, but these cases are rare.

What about rogue states? Without Libya and Iraq, we have gone from four or five to two or three. Syria is run by thugs, but they threaten mainly their own dissidents, Israel, Lebanon, and Iraq, not the United States proper. North Korea probably has nuclear weapons and Iran may within a decade, but even given their frightening leaders (note that Iran's odd President is only partially in charge and may not last), it is difficult to imagine a scenario where these leaders feel undeterred enough to use these weapons. Nuclear weapons may help assure the survival of these regimes, emboldening



Arleigh Burkeclass destroyer vs. uncertainty.

victims to flee. Biological weapons are potentially deadlier, but making and especially weaponizing them is a mean feat for most nations, and probably beyond the capability of today's terrorist groups. Moreover, our robust (16% of GDP) health care system is an excellent defense against biological weapons. The system is dual-use and highly capable of detecting outbreaks.

Nuclear weapons are a greater concern. ¹² Terrorists almost certainly cannot steal and use nuclear warheads, which are well-guarded worldwide, and unusable without delivery systems and, in most cases, activation codes. Worries about Russia's smaller tactical nuclear arsenal are common, but popular stories about these weapons being lost appear exaggerated at best. ¹³ In any

6 BREAKTHROUGHS

them to fund terrorists or proliferate weapons technologies. But their survival is already insured by the difficulty in occupying large nations who would prefer otherwise, as we see in Iraq. It is not clear how much added mischief a nuclear deterrent allows. These regimes are worth some worry, some defense spending, and plenty of spying, but they are basically in a box, nuclear weapons or not. The cost of keeping them there is modest.

China and Russia are not democracies. but they are also no longer Communist states with significant expansionary aims and revolutionary ideologies that attract adherents abroad. Aside from Taiwan, neither state has much motive for war with the United States. China may never rise to the point where it can spend half of what we now do on defense — it now spends about one tenth.¹⁶ Today, China threatens just Taiwan, and that only concerns us because we claim to defend it. China may soon worry Japan into spending more than 1% of its GDP on defense, but one must assume several implausible occurrences before this threatens Americans. The much ballyhooed coming conflict over energy resources should be tempered by the fact that oil is a global commodity. China's oil explorations reward American consumers.

The point about these threats is not just that they are not nearly as dangerous as we are told, but that we know plenty about them. We know enough to use intelligence operations to hunt terrorists in Pakistan. We can argue about whether a Chinese threat is coming, but we know that today it is not as pressing as other things. We know that destroyers do not have much to do these days, no matter how many pirates they catch, but Marines do. We know that the terrorists cannot kill very many of us unless they acquire biological or nuclear weapons, and we know where fissile materials are. We know that we could chase terrorists and fight our two wars, even while saving a large percentage of our defense dollars, if we cut the Navy and Air Force's budgets.

We know enough to make choices that reward the taxpayer for winning the Cold War. The problem is that we have chosen to fight You Never Know not because it is such a grave threat, but because it is a convenient one.

The Politics of You Never Knowism

Against these historically small dangers, we spend over \$500 billion a year on our military. American defense spending accounts for half the world's - more if you count homeland security and veterans. The next biggest spenders, Russia and China, each spend around \$60 billion on their military.¹⁷ Aside from our active duty Army (500,000), we have 200,000 Army Reserves and 330,000 Army National Guardsmen, a second army bigger than Britain's — the Marines — and a third smaller but more highly trained one — the Special Forces — which is growing rapidly. We have the world's two best air forces, a Navy with no rival approaching its strength, and a Coast Guard bigger than most navies. We spend more money researching and developing new weapons and defenses than any other state spends on its entire military budget. We have more than 10,000 nuclear weapons, 2,000 of which will remain ready to fire in minutes for the foreseeable future. We are far ahead of any state in using space for military purposes like global positioning and surveillance. We have 15 intelligence services, which rely on technology other states can only covet. We spend \$50 billion a year on homeland security and have organizations in every state that claim to provide it.18 To outfit this behemoth we have a massive defense industry. To inform it we have consultants, think tanks, some federally funded, and legions of university researchers bankrolled by government grants.

The mismatch between these forces and the threats they confront creates You Never Knowism. In a democracy, government expenses require justification. Threats justify budgets, so strategies sell threats. Our strategy documents are rationalizations of spending, not its guide.

You Never Knowism is a product of politics. People advance You Never Know reasoning because of their personal and organizational incentives. They may not see their actions as dishonest. Members of organizations, especially governmental ones, tend to believe in them. They do not believe their organization's interests are separate from the public interest. Moreover, organizations that provide security might get used to exaggerating. What was once self-interested dishonesty becomes organizational culture.

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SPRING '06

It is an old adage that we always plan to fight the last war. But the U.S. military services are happy to fight the next one provided it is consistent with their organizational health and sense of mission. Organizations are myopic. Created to accomplish something, they generally stay at it. Those that protect us develop methods of protection that require threats. They champion threats to protect their mission. The Red Cross sells disaster to fill its blood banks. U.S. Customs and Border Protection sells immigrants and terrorists to patrol against. Defense think tanks need enemies to write essays about.

The media also benefits from a sense of alarm. Disinclined to mix alarmist predictions with probability about their occurrence, journalists convey You Never Knowism. Reporters rely on sources with known positions, the reliable "experts" who promote particular organizations and interests.

Because everyone involved in national security focuses on the elimination of threats rather than their probability, and because media convey these views, the public develops an exaggerated sense of danger.19 The famous military-industrial complex is not a conspiracy, but an alignment of political self-interests that promotes an enemy and expenses to confront it. This process occurs not by conscious design but through

incidental construction of collective belief.²⁰ Truth about security falls victim to a free rider problem — we all want it slightly, but not enough to protect it from distortion.21 We are left with an unbalanced debate. The status quo has a powerful hold over our view of dangers. It makes an ideology.

Managing Uncertainty: What We Know About What We Don't Know

You might agree that You Never Knowism exaggerates dangers and uncertainty and that it is generally dishonest. But you could still argue that You Never Know is sensible policy. After all, national security is an uncertain and dangerous realm, and states cannot be too careful.

This reasoning is faulty. Uncertainty or ignorance is not sufficient grounds for precaution and costly defenses. Decisions about dangers and defenses must be made by considering costs and benefits. Decisions should weigh the probability of danger, the cost of its realization, and the effectiveness and cost of countermeasures.

Even in matters of national security, uncertainty is not so pervasive as to be the basis for decision, as we have seen. Nor can it be. No matter how much strategists claim to prepare for the unknown, the actual steps taken are based inevitably on knowledge estimated probability and costs. There is no other way to plan.

precautionary principle.

Beyond the



When the Pentagon buys platforms like the DD(X)Destroyer or the V-22 Osprey and calls them capabilitiesbased, meaning that they are deployed without any particular enemy in mind, they are not serious. To the extent these weapons have relevance; it is to confront known enemies. The same holds when the Department of

8 BREAKTHROUGHS Homeland Security tells all Americans to prepare safety kits and evacuation routes for disaster, without identifying the type or odds of disaster. If this advice makes sense, it is not because of uncertainty or possibility, but because some threats are costly and probable enough to merit defensive actions. The truth is that this advice is a political reflex meant to assuage anxieties created by terrorism and floods, which have little rational justification unless you live in an area where a particular costly disaster — earthquakes in California, floods in New Orleans — is plausible.

You Never Knowism is an application of the precautionary principle. This idea, primarily associated with environmental regulation and prominent in Europe (and Cambridge), says that we must act to head off uncertain dangers before they arrive. Its most prominent version was articulated in an environmental conference document, called the Wingspread Statement, which says: "When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not established."²² In other words, we should work to prevent uncertain dangers.

Cass Sunstein demonstrates that the precautionary principle does not make sense by its own terms.²³ The principle fails to acknowledge that decisions about danger, whether they regulate health risks or arm against a state, cannot deal with one risk alone. Because resources are always limited, efforts to head off a particular danger take resources away from others. After all, wealth is the greatest risk reducer we have.²⁴ If we took the precautionary principle seriously, we would have to take cautions against all the dangers a particular decision touches, including the danger of taking resources away from other dangers. But even doing nothing creates dangers. That means the principle prevents all action and inaction, a theoretical impossibility. What people must mean when they evoke precaution, according to Sunstein, is that government ought to act to head off catastrophic dangers, not merely uncertain ones. It should do so however, only when prevention does not create other catastrophic risks and when the probability of catastrophe meets some low threshold. This principle is consistent with cost-benefit analysis.

Everyone would agree to head off even remote dangers if the cost of doing so was near zero, but that situation is rare. Risks compete for attention. Ideal decision-making considers all of them. But organizations entrusted with combating particular risks cannot make such choices.

The Alaskan Division of Homeland Security and Emergency Management, for example, aims to protect Alaska from terrorists. It tells Alaskans that they can help prevent a terrorist attack by looking out for various suspicious people like "joggers who stand or stretch for an inordinate amount of time" and "individuals who carry on long conversations on pay or cellular telephones." It does not say to look out for snow or agencies wasting tax dollars by encouraging paranoia.

One might argue that national security dangers, though generally overstated, are so inherently uncertain and potentially costly that they require extreme caution even under a sensible approach to danger like the anti-catastrophe principle. But this argument does not escape the failure of precautionary reasoning. Even defenses against uncertain and costly dangers must be weighed against the dangers of excessive defenses.

The idea that national security addresses a particularly dangerous realm finds support, at least in its application to state threats, from the academic doctrine called realism, particularly its starker variant, offensive realism. Its leading advocate, John Mearsheimer, argues that states cannot cooperate and must fear each other, because intentions are unknowable.26 States worry about what other states can do to them. based on geography and capability, rather than on what they intend. The stakes - national extinction — make the international realm a fearful one, says Mearsheimer. Any hint of uncertainty is enough to force states to assume the worst and prepare for war.

The flaw here is the explicit assumption that intentions are unknowable.²⁷ This assumption might have been a useful model for thinking about high-stakes decisions in the nineteenth century, but even then states knew quite a bit about each other. What frightens states is what they do know or assume about each others' intentions, not what they do not. States give away intentions by words and deeds. Intentions may also be assumed from geographic, military,

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SPRING '06



Are there enough of these?

or normative facts that cause states to feel more or less vulnerable and therefore take provocative or reassuring actions. The point is that perceptions of intentions are variable. European states today trust that their neighbors' intentions are benign. They know. The United States could destroy Israel, but Israel knows that we do not intend its destruction. Iran frightens Israel because it leaders hold certain values and say things indicating they want Israel destroyed.

The fact that intentions are generally known allows states to focus on known dangers and take a wait and see approach to uncertainty, keeping down defense spending. The best approach to true uncertainty is intelligence, which helps states to gauge the cost and probability of supposed dangers before taking more costly action. ²⁸ Knowledge allows prioritization of risks. That prioritization is an essential element of strategy and precisely what You Never Knowism avoids.

You Never Knowism relies on flawed logic. But because it is generally a cover for politics, defeating You Never Knowism requires more than reason. It requires changing the politics that create it.

One solution is competition with a budget ceiling. Because dangers have organizational advocates, budgetary pressure should force organizations to discredit threats that their rivals promote. The more public these fights, the better. The public ought to see the sides of the argument to form judgments. This process can never work perfectly, of course. For historical reasons, certain organizations, such as the Air Force or the Navy, have a bureaucratic advantage even if the risks they confront are remote. Nonetheless, competition would help expose which monsters are based on less plausible You Never Knows.

Just as we do not trust the claims of Audi or Ford without comparing at least those of BMW or Toyota, we ought to pit the Army against the Air Force, and the Department of Homeland Security against Medicare. No formula tells us how to maximize safety, but skepticism, toward both what we are told to fear and the defenses we are sold to confront it, is a good start.

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NOTES:

- ¹ The National Strategy for Homeland Security, p. vii, http://www.whitehouse.gov/homeland/book/.
- ² For another critique of the logic of those the authors call "uncertainty hawks," see Carl Conetta and Charles Knight, "Inventing Threats," *Bulletin of the Atomic Scientists*, Vol. 54, No. 2 (March/April 1998), pp. 32-36.
- ³ These documents are all accessible on the Department of Defense's website: www.defenselink.mil/pubs/. The National Defense Strategy demonstrates the typical language about uncertainty: "Uncertainty is the defining characteristic of today's strategic environment. We can identify trends but cannot predict specific events with precision. While we work to avoid being surprised, we must posture ourselves to handle unanticipated problems we must plan with surprise in mind."
- ⁴ The National Security Strategy, in remarks attributed to the President, puts it this way, "As a matter of common sense, and self-defense, America will act against emerging threats before they are fully formed... History will judge harshly who saw this coming danger but failed to act." National Security Strategy of the United States of America, p. 1, http://www.whitehouse.gov/nsc/nssintro.html.
- ⁵ John Mueller, *Remnants of War* (Ithaca, Cornell University Press, 2004), pp. 176-178.
- ⁶ According to a recent University of Maryland study, the total number of armed conflicts in the world has fallen from 51 in 1991 to 20 in early 2005. The number of ongoing civil wars, the dominant form of modern warfare, peaked in 1991 and has been in decline since, with only eight or eleven (depending on how you count) ongoing in early 2005. Intrastate war has declined more precipitously. Monty G. Marshall and Ted Robert Gurr, *Peace and Conflict 2005* (Center for International Development and Conflict Management, University of Maryland, 2005), pp. 11-14.
- ⁷ A proposal for this sort of over-the-horizon strategy appears in Barry R. Posen, "Exit Strategy: How to Disengage from Iraq in 18 Months," *Boston Review* (January/ February 2006), pp. 7-10.

10 BREAKTHROUGHS

- ⁸ John Mueller, "A False Sense of Insecurity?," *Regulation*, Vol. 27, No. 3 (Fall 2004), p 42. An inveterate but lonely critic of You Never Knowism, Mueller regularly exposes the American tendency to exaggerate security dangers. See, for instance, "Simplicity and Spook: Terrorism and the Dynamics of Threat Exaggeration," *International Studies Perspectives*, Volume 6, No. 2 (May 2005), pp. 155-73.
- ⁹ A partial list includes Indonesia's Jemaah Islamiah, the Islamic Movement of Uzbekistan, Algeria's Salisfist Group for Preaching and Combat, the Moroccan Combatant Group, Ansar al-Islam and Al Qaeda Iraq or Al-Qaeda in the Land between the Two Rivers.
- ¹⁰ Brian Ross, "Secret FBI Report Questions Al Qaeda Capabilities," ABC News Online, March 9, 2005, http://abcnews.go.com/WNT/Investigation/ story?id=566425&page=1.
- ¹¹ We avoid the term "weapons of mass destruction," because it collapses the lethality of the weapons it subsumes and confuses policy discussion. On the silliness of this term, see Gregg Easterbrook, "Term Limits: The Meaningless of 'WMD'," *The New Republic*, October 7, 2002, pp. 22-25; Owen R. Cote, Jr. "Weapons of Mass Confusion," *Boston Review*, Vol. 28, No. 29 (April/May 2003) pp. 26-27.
- ¹² Their poor cousins dirty bombs are mostly hype. While it is possible to cause an explosion that spews enough radioactive material to create high enough levels of background radiation such that large swaths of city become uninhabitable, like the area surrounding Chernobyl, the ability of terrorists to create a cloud of radioactive particles just the right size to float over large areas is doubtful.
- ¹³ Richard Miniter, "Baggage Claim: The Myth of 'Suitcase nukes'," *Wall Street Journal*, October 31, 2005; Center for Nonproliferation Studies, "Suitcase Nukes: A Reassessment," September 23, 2002, http://cns.miis.edu/pubs/week/020923.htm.
- ¹⁴ Center for Nonproliferation, "Suitcase Nukes."
- ¹⁵ As we discuss below, any sensible approach to danger considers both the likelihood and cost of low-probability dangers, and on the basis of the latter argues for investment in relevant intelligence operations and non-proliferation activities. But nuclear terrorism does not justify the traditional U.S. defense budget or telling people in Iowa to stock emergency supplies.
- 16 The Military Balance: 2005-2006, (London: International Institute for Strategic Studies, 2005), p. 271. China officially spends \$25 billion on its defense budget, but IISS estimates true spending at \$62.5 billion. These numbers are complicated by purchasing power parity. The United States defense budget is \$490 billion for fiscal year 2006. Including homeland security (\$50 billion), another supplemental appropriation for war (\$70 billion), and Veterans Affairs (\$71 billion), we are spending more than ten times what China spends on defense. In the next few decades, China will struggle to devote funds to its military because of a stagnating agricultural sector, pressure for more social spending due to urbanization, bad debt in the financial sector, a likely slow-down in exports, and an aging labor force. Keith Crane et al., Modernizing China's Military: Opportunities and Constraints, (Santa Monica, CA: RAND, 2005), pp 42-43.

- ¹⁷ The Military Balance: 2005-2006, (London: International Institute for Strategic Studies, 2005), p. 158, 271.
- ¹⁸ Note that homeland security spending (\$50 billion) is counted separately from the budget of the Department of Homeland Security (\$41 billion). Department of Homeland Security, "Budget-in-Brief, Fiscal Year 2006," www.dhs.gov/interweb/assetlibrary/Budget_BIB-FY2006.pdf.
- ¹⁹ For a more detailed discussion of the politics of risk see Harvey M. Sapolsky, (ed.), *Consuming Fears: The Politics of Product Risks*, (New York: Basic Books, 1986).
- ²⁰ This is the view expressed in Steven P. Rosen, "Testing the Theory of the Military-Industrial Complex," in Steven P. Rosen (ed.) *Testing the Theory of the Military Industrial Complex*, (Lexington, MA: Lexington Books, 1973), pp. 23-24.
- ²¹ Stephen Van Evera, "Why States Believe Foolish Ideas: Non-Self Evaluation by States and Societies," January 10, 2002, p. 14, http://web.mit.edu/polisci/research/vanevera/why_states_believe_foolish_ideas.pdf.
- Wingspread Statement. http://www.gdrc.org/u-gov/precaution-3.html. This is the same reasoning that underlies President Bush's preventive war doctrine.
- ²³ Cass Sunstein, Laws of Fear: Beyond the Precautionary Principle, (New York: Cambridge University, 2005).
- ²⁴ Aaron Wildavsky, "Richer is Safer," *Public Interest*, No. 60 (1980), pp. 23-29.
- ²⁵ http://www.ak-prepared.com/homelandsecurity/responsibleawareness.htm.
- ²⁶ John Mearsheimer, *The Tragedy of Great Power Politics* (New York: W.W. Norton, 2001).
- ²⁷ Stephen Walt is mainly dissenting from the idea that intentions are not knowable when he proposes the balance of threat theory. Stephen M. Walt, *The Origins of Alliances* (Ithaca, Cornell University Press, 1987).
- ²⁸ The idea of using information gathering as strategy to deal with uncertain dangers can be found in Sunstein, p. 120. A similar strategy, labeled information harvesting, is proposed by Kenneth A. Oye, "The Precautionary Principle and International Conflict over Domestic Regulation: Mitigating Uncertainty and Improving Adaptive Capacity" (August 2004), p.8.

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SPRING '06 11