# The 21st Century Security Environment and the Future of War

COLIN S. GRAY

ome commentators and observers of international affairs—including the author—claim to have a unified theory of strategy, a unified theory of war, and a cunningly connected meta-narrative for the twenty-first century, indeed for all of history. They exult in being reductionists (in the good sense of the term), to be able to say with confidence, "Strategy is really all about . . . . " This point of view endorses the Thucydidean triptych which holds that the primary motives behind diplomatic and belligerent behaviors are "fear, honor, and interest." That triad of genius is worth a library of modern scholarship and social scientific rigor on the causes of war. But beware of the pretentiously huge idea that purports to explain what everybody else, supposedly, has been too dumb to grasp. Ask yourselves, for example, is Philip Bobbitt's 2008 book, *Terror and Consent*, the tour de force that reveals all about twenty-first century conflict, or is it wanting at its core, albeit protected by a great deal of insight and decoration?<sup>2</sup> Or, to tread on riskier ground, when General Sir Rupert Smith writes about "war amongst the people" as comprising the conceptual key to twenty-first century warfare, is this a critically important insight, or is it a case of conceptual overreach?<sup>3</sup>

New-sounding terms and phrases, advanced by highly persuasive people with apparently solid credentials, can usually find a ready audience. To expand on this point, officials and senior military officers are, by profession, problem solvers. They are always inclined to be credulous when presented with apparent novelty, especially when the presentation is done in a welcoming and digestible style. Officials do not want to be told that

their world is complex and difficult. They already know that. Like hope, complexity and difficulty are neither policy nor strategy.

The future cannot be predicted in any useful detail; uncertainty does rule. This author does feel contrarian enough to offer a host of predictions.<sup>4</sup> This fact does not diminish the strength of my conviction that prediction cannot really be done, even though we need to attempt it. Unfortunately, we just do this rather poorly, largely through no fault of our own.

# Defense Planning, Surprise, and Prediction

If you spend a lot of time talking about the future you can forget that you do not really know the subject. It is especially easy to forget one's basic ignorance when one is a defense planner. Why? First, we ask for a lot of funding, a great deal of society's scarce resources, so we need to persuade people that we know what we are doing. In the course of projecting a sense of confidence and assurance we can easily convince ourselves that we are behaving wisely. Second, because we are planning to buy forces for a long period out into the future—think of the 30-year-plus lifetimes of major military platforms—we can acquire the belief that we are constructing our future. Therefore, we control our future by making decisions regarding defense planning and acquisition. Alas, the facts are that the future has not happened, and no amount of planning can make it visible to our gaze today. This incongruence is not to say that we are entirely ignorant about the future. Of course, we are not. It does mean that we would be well-advised not to use the all-too-familiar phrase, "the foreseeable future." The future is not foreseeable, at least not in a very useful sense.<sup>5</sup> The challenge is to cope with uncertainty, not try to diminish it. That cannot be done reliably. Such ill-fated attempts will place us on the road to ruin through the creation of unsound expectations.

Defense planning needs to be based on political guidance, and that guidance should make its assumptions explicit. Sometimes we neglect this, and the oversight can prove costly. Conditions, which is to say contexts,

Colin S. Gray is Professor of International Politics and Strategic Studies at the University of Reading, U.K. His most recent books are *National Security Dilemmas: Challenges and Opportunities* and *Fighting Talk: Forty Maxims on War, Peace, and Strategy.* 

can change, and so should the working assumptions behind policy. You can forget what your assumptions have been if you forgot to make them explicit. Of course, we can alter our political guidance, and the assumptions on which it is based, in a matter of hours. Unfortunately, to change defense realities takes somewhat longer. What this time lag says to the wise person is that, "yes, political assumptions should be fairly permissive and inclusive, but the guidance for defense planning has to be broader still." If we get it wrong politically, which we are near certain to do to some degree, we can make a rapid political adjustment. But to change defense posture typically takes years, even decades.

Above all else, we dare not rest our defense planning on hope. Although we should not plan against a worst-case scenario, neither should we plan for the best case. While we do not want to encourage hostility, some risk of military over-preparation is prudent and much better than a gamble on under-preparation. Recall a few of the golden rules of defense planning: (1) Try to make small mistakes rather than big ones; (2) be adaptable and flexible so that you cope with the troubles your mistakes will certainly give you; (3) aim to have only minimal regrets in the future.

You cannot predict the future, so do not try, and do not be tempted to believe that there is some wonderful methodology that will enable you to see into the twenty-first century. There is not. How do you prepare for, perhaps against, future warfare? It needs to be done, so complaining about the impossible is of little use. Often a nation's geography and recent past provide reliable guidance as to its future enemies. The domain of uncertainty can be distressingly large, however. If you are not blessed, or cursed, with a dominant enemy, the path of prudence is to cover all major possibilities as well as possible, without becoming overcommitted to one particular category of danger. The temptation is to assert that flexibility and adaptability are not policies, certainly not strategies. Nonetheless, they are often the basis for defense planning when the time, place, and identity of enemies are unknown, or at least uncertain.

Expect to be surprised. To win as a defense planner is not to avoid surprise. To win is to have planned in such a manner that the effects of surprise do not inflict lethal damage. The fundamental reason why we can be surprised tends not to be the sudden emergence of novel factors of menace—for example, an asteroid that threatens to extinguish life on Earth—but rather the consequences of known trends that interact in unexpected ways, resulting in

unanticipated consequences. Of course, there can always be the unexpected event that transforms a stable situation into an unstable one. For example, the 1930s were constituted from trends evident in the 1920s, except for the intervention of the Great Depression in 1929. This unexpected episode produced a German domestic environment that empowered Adolf Hitler.

Trends move together, and even if you think you can identify them you are likely to generate misestimates. Why? Because trends: (1) Interact and become super-trends (e.g., the combined effect of most Islamic powers' modernization deficit, global warming, and overpopulation); (2) can produce a different trend when some new element is suddenly added; and (3) may generate new counter-trends. Complexity denies us the ability to predict reliably, so we need a strategy to cope with complexity, not try to eliminate it. It is worth noting that a trend deemed sufficiently significant to shape the future will not orbit the geopolitical sphere alone; it will attract other trends with its gravitational pull.

# Future Conflict: Some Assertions

This article does advance a stratospheric meta-narrative of the sort that is both beyond argument and is hated by historians and post-modernists. Specifically: (a) The twenty-first will be another bloody century; (b) war and strategy will continue as ever, albeit in new guises, characters of warfare, and unique strategies; (c) and the insecurity or security narrative of the century will be amply explainable with reference to the genius of Thucydides' "fear, honor, and interest." Accompanying these propositions is an assorted set of five very sweeping dicta.

Dictum 1: We know a great deal about future war, warfare, and strategy. What we do not know are any details about future wars, warfare episodes, and strategies. We have 25 centuries of often disputable historical experience upon which to draw. Hew Strachan may not be entirely correct when he claims, "We do not possess sufficient understanding of war itself, its nature, and its character. Today's wars can seem 'new' because in part we have not been addressing them properly." If we do not understand war after 2,500 years, when will we do so? The solution to the problem Strachan cites is to apply the social science ethos, with minimal methodology, and not to rely unduly on theory-averse historians. We need to distinguish clearly between the singular, war, and the plural, wars. We can and should design a general theory of war that explains the subject in terms of answers to six questions.

- What is war? (nature)
- Why does war occur? What is it about? (causes, origins, and triggers)
- Does war lead to peace? Does peace lead to war? (consequences)
- What is war like? (nature and experience)
- How is war fought? (character)
- Why is war won or lost? (methods and means)

What is most essential for understanding war and strategy is to maintain the clear conceptual distinction between war and strategy, singular, and wars and strategies, plural. General theory has to educate practitioners, their doctrines, plans, and conduct of command. Current understanding of war and strategy is excellent in its parts, but it has yet to be assembled properly; even Clausewitz leaves something, albeit not much, to be desired. It is important to realize, however, that although we can be educated to cope with the twenty-first century, alas, we cannot be well-trained with correct solutions to security dilemmas that are historically unique in detail, not in kind.

Dictum 2: To advance understanding of war and strategy we need to theorize on the basis of history, without being unduly diverted by the singularity of events. Social scientists are skilled, sometimes overskilled, theorists, while historians most typically are not. But a little theory goes a long way. Social scientists need to be mindful of Clausewitz's caveat for strategists concerning the perils that attend passing "the culminating point of victory."

Dictum 3: The contexts of future war are all-important. Everything we do or attempt is shaped, even driven, mainly—but not wholly—by its contexts. This may sound so obvious as to be banal. But the authority of context is a big idea that we neglect at our peril.

Contextual analysis works, indeed is essential, for the understanding of any period: past, present, and future. In order to make this discussion concrete, imagine that you have to explain the relevant world for North Atlantic Treaty Organization (NATO) defense planners in, say, 1960, 1980, and 2020. How would you go about this task? It is helpful to specify the following seven contexts: political, social-cultural, economic, military-strategic, technological, geographical, and historical. Obviously, the further into the future you try to peer, the fuzzier the picture becomes.

One can assemble and rank data in any order, but these seven contexts arguably are sufficient for analysis and understanding. For the profession, or trade, of strategic theorist, "methodology creep" is the equivalent of what we mean in policy and strategy by "mission creep." What can be a problem is the awkward fact that future conflict will not truly have seven or more distinctive contexts; rather it will have one mega-context that combines all elements to produce outcomes unpredictable from single-trend analyses. Every context is on the team for future conflicts and they all play together, but in ways that will be too complicated to anticipate. By analogy, we may have excellent intelligence on the ingredients a chef has assembled, but we do not know what dish he plans to produce from them. This challenge is akin to forecasting the "most likely" events in ten years based on today's circumstances, and so forth. Once you have a grip on context you need to cope with the highly inconvenient fact that contingency may overrule what context suggests. More specifically, different people make different decisions in the same context. Personality and nature, not only nurture, can really matter.

Dictum 4: "Stuff happens" (as Donald Rumsfeld said). To quote a wonderful example of a triple error, there are three glaring mistakes in just three sentences of *The National Security Strategy of the United Kingdom:* Security in an Interdependent World. The document states, "There is a very low risk of military attack on the United Kingdom in the foreseeable future. Our ability to forecast emergencies and catastrophic events, and reduce their impact, is improving. But the security landscape is increasingly complex and unpredictable." Not one of these three claims is correct. (1) The future is not foreseeable; (2) virtually by definition, although catastrophe might be anticipated, it is not likely to be predictable; and (3) the security landscape is probably no more complex and unpredictable than it has ever been in the past. We will certainly be surprised in the future, so it is our task now to try to plan against the effects of some deeply unsettling surprises. The key to victory here is not the expensive creation of new conceptual, methodological, or electro-mechanical tools of prediction. Rather it is to pursue defense and security planning on the principles of minimum regrets and considerable flexibility and adaptability. Also, probably of most significance, we need to conduct our defense and security planning in the light of its vulnerability to future history wrecking its assumptions.

In the 1990s, RAND forwarded the idea of assumption-based planning. All too often, we have not really been aware of the assumptions that drove, or supported, our strategic and policy choices. If we choose to make a big decision, the bigger it is the worse the results are likely to be if we get it wrong. Big ideas tend to equal big errors in practice. A few examples spring to mind: the age of major interstate war has passed; "war amongst the people" is the future of conflict; China will prove to be a generally cooperative (somewhat) junior partner in global governance with the United States; and, until commentators were run over by some old-style geopolitics in August 2008, Russia is finished as a superpower and possibly even as a great power. Many believe that these claims are wrong, but no one can know today for certain. The most significant point is that we cannot know whether great-power wars are passé. But if we get it wrong, and in doing so act with confidence to express such a view in military posture, the negative consequences could be dire.

Dictum 5: Thucydides is alive and well, alas. If the twenty-first century will deliver a radical transformation in the character, let alone the nature, of world politics, the burden of plausibility has to lie with those who would assert such a bold claim. There are those who insist that "fear, honor, and interest" still rule, that all politics is about power (domestic and foreign), and that the most important security and defense facts regarding the twenty-first century pertain to evolution in the distribution of power, which is to say the terrain of capabilities, influence, and intentions. In the interest of brevity and clarity, what follows are some of the principal features of the security environment in this new century.

- On balance, fortunately for world order, America's hegemonic status and role will persist.
- Assessed materially, China will not be a credible near-term peer competitor for power and influence; she cannot spend enough to overcome the US lead. But China does not, and will not, accept the position of prominent member of a posse for world order led by the American sheriff. Considerations of guess what?—fear, honor, and interest—will ensure a conflictual relationship between Washington and Beijing. Both sides currently recognize this.
- Warfare is quite likely between China and America over Taiwan, though not about Taiwan. Significant Asian states will join one side or the

other, formally or otherwise. India and Japan are near certain to be in the US camp against China, though should America weaken as a counterweight to a modernizing China, they may well form a new super-regional, anti-Chinese camp of their own.

- Russia is far from satisfactorily restored to its people's and leaders' vision of its proper role in the world. Yet again, if one considers Russia in the light of Thucydides's "fear, honor, and interest," one would not stray too far from the path of prudent prediction. Russia is a greatly dissatisfied state. Yes, it wants to be prosperous, but it also wants much of its erstwhile empire restored, even if as imperium only. It has irredentist claims, explicit, implicit, and in most cases not even denied, in all directions from its geopolitical core. Events in the Caucasus in 2008 should have provided the clarification needed by some minds in the West that previously were confused over Russia's intentions. Russia intends to recover as much of the status, territory, and influence of the erstwhile Soviet Union as it can. Should the United States and NATO decide to resist the new Russian assertiveness they have just two choices, resistance now or resistance later. Both courses of action would be dangerous, with probably the resistance later option posing the greatest peril. The future crisis, most likely over Ukraine, would be played out in the historical context of a Russia educated by NATO over Georgia in 2008 to believe that when it pushes forcefully it succeeds. All the while Russian policy is driven by aspirations and assumptions fueled steroidally by energy revenue, temporarily diminished at this writing. Moscow is not going to settle for the role of a responsible, cooperative, high stake-holding power that is on an American-led team in the guest for world order.
- Unfortunately, while Russia is playing a rough game of competitive international politics and coercive geoeconomics today, to its west there is only a weakened, half-transformed, much-expanded NATO, and a notably flabby post-modern nonstate in the European Union (EU). The NATO connection is of extraordinary security significance for Europe, largely because so much of Europe does not do "hard power" any more. The over-bureaucratic quasi-state of the EU—Napoleon's revenge—shares a continent with a Russia that is emphatically not post-modern, not post-military, and not post-geopolitical in its approach to international politics and security. Since 1991 the United States has led, or misled, the NATO alliance on a geopolitically adventurous policy journey of eastward

expansion. Unfortunately, what appeared geopolitically as manifest destiny to Washington translated as crass opportunism to Moscow. This divergence was predictable and, indeed, was predicted. Scarcely less unfortunate than the US-NATO *drang nach Osten* itself was the fact, painfully revealed as such in 2007-08 over Estonia and then Georgia, that NATO had neglected to develop a strategy to protect its new members and clients in the East.<sup>12</sup>

• It is possible that the current loose strategic alliance between China and Russia will mature into a full security marriage, but this is uncertain. These nations share a strong dislike for most western values—though they agree that it is healthy to be wealthy—as well as US hegemony, but they do not share much else.

The future political context is all-important. It is this context that gives all military matters their meaning. What do we think we know about the political context of 2020 or 2030? Pick your year or decade. The answers we give are important for what we do now. Britain's Chief of the Imperial General Staff in 1914 said that he had not marked 4 August of that year in advance as being a date of special significance. Surprise happens. Let us step back from the predictions just offered in order to cite a few possible alternative futures.

- The United States remains the hegemon, the world leader, resented by some, but not effectively or credibly challenged militarily.
- The world system again becomes noticeably bipolar, with the US-led team facing a Sino-Russian team. More and more countries pick sides.
- The long-anticipated condition of multipolarity arrives; this formulation is nineteenth century Europe redux, or nearly so. The major players are, in order: the US alliance; China; Russia; India; Japan; EU-Europe; and Iran and Brazil. In shifting combinations these great powers would play the age-old game of power politics. Actually, "power politics" contains an obvious redundancy, because all politics is about power. Politics, domestic and foreign, is about the vanity of politicians: Who gets power, when, and how—and what they do with it.

# Military Implications

Future warfare holds unlimited possibilities for the United States and NATO that are primarily a political matter. Because the political context can

alter rapidly, the military story for the alliance has to be proofed against the effects of surprise insofar as possible, with two caveats: Beware of undue reductionism, and beware of undue presentism. The former caution advises one to place at some discount the proposition that future warfare will be, for example, primarily war amongst the people. Even if, indeed particularly if, you happen to believe the reductionist claim in question, you have to hedge your conviction. The latter caveat, against "presentism," advises that you have not seen the future just because you do see the present. Strategic history likes to be ironic and paradoxical.<sup>13</sup>

When we find what we believe is the answer, someone changes the question. Just when we appeared to have solved the challenge of how to defeat a multiechelon Soviet invasion of west-central Europe that problem went away. Or, just as some of us have rediscovered the path to sensible counterinsurgency (COIN) doctrine and practice, our societies put an end to the military effort. This has not happened yet, but the process of COIN disengagement is under way. In the current major cases of COIN, the donor nation electorates are right to be skeptical and intolerant.

Five broad thoughts are offered on the military implications of this discussion.

- Military science, what Clausewitz probably meant by the "grammar of war," has been moving quickly on us. 15 Now and in the future we have no less than five interdependent geographies for warfare: land, sea, air, space, and cyberspace. Strategies and doctrines for best practice currently are highly debatable for all five venues, most especially for space and cyberspace, arenas for which we lack adequate strategic theory to help guide practice. 16 There is an ongoing debate of some parochial acerbity between the advocates for ground power and airpower, and navies are struggling to hold their own against land-focused demands for resources. 17
- Ithas become commonplace to draw a simple reduction ist distinction between regular and irregular warfare. This distinction is both useful and meaningful, but it can do much violence to a messy, untidy reality. Many conflicts witness both regular and irregular styles of combat, sometimes simultaneously. The future does not belong to small wars of an irregular kind; alas, it belongs to both regular and irregular warfare. Both interstate wars and insurgencies assuredly will scar this new century. Because NATO countries have to be prepared for the full spectrum of warfare, the challenge is to strike an effective and sustainable balance between capabilities for

regular and irregular warfare. As a general rule, it is a good idea to try to confine military operations to those situations where one enjoys major asymmetrical advantages. For example, the more likely it is that airpower could decide a war, albeit probably not by its own unaided effort, the more likely we are to win decisively and rapidly. We cannot always pick our fights, but when we engage in a war of discretion there is a lot to be said in favor of hesitation if the war's most probable character does not favor our strengths.

- It has been rare in history for a new geography to be added to the elite short list of environments for warfare. Now there are two such new geographies, space and cyberspace, and we are becoming ever more dependent upon them both. Thus far, at least, we have not taken space or cyber system vulnerability as seriously as we shall have to. It is a law of war: The greater the dependency on a capability, the higher the payoff to an enemy who can lessen its utility, in effect turning our strength into a weakness.
- Too many people have become unduly fixated on the challenge posed by terrorism. Of course, we need a core competency against terrorists. Terrorists can succeed, however, only if the counterterrorists beat themselves by over-reaction. Principally, counterterrorism is a mission for the afflicted nation's security services, not for soldiers. Terrorism does not threaten our civilization, but our over-reaction to it could do so. Terrorists do need to be hunted and thereby kept off balance, dealt with as criminals, and sometimes even shot on sight according to the permissive tenets of irregular warfare. But the contexts that create such people require attention from political, social-cultural, and economic measures that can be crafted and applied only by the societies in question, not by outsiders. We know this. We can only help, and then not very much. Ironically, it is easy for us to do more harm than good when we attempt to fight terrorism abroad. Compared to interstate conflict, terrorism—even terrorism armed with weapons of mass destruction—is a minor menace.
- Nuclear proliferation is here to stay. We say that we endorse the abolition of nuclear weapons.<sup>19</sup> We do not mean it, for the excellent reason that a world of zero nuclear arms could not be monitored or verified, at least not by our side, which is not to deny that zero would be far easier to monitor than the presence of "some" weapons. Given that the principal nuclear "secrets" are secrets no longer, even a supposedly nuclear-free world would be a world wherein (a) the country that concealed a handful of weapons could be a winner, and (b) nuclear rearmament races would be

a certainty. By all means let us try to slow, arrest, and occasionally reverse nuclear proliferation. But do not place substantial bets on the prospect of a reduced number of nuclear-equipped parties in the future. Also, we need to recognize that our current conventional superiority obliges our enemies to seek asymmetrical offsets. The more effective are NATO's conventional arms, the more likely it is that regional great powers would choose to emphasize a nuclear-based deterrent and defense. If you do not believe this, you are in effect claiming that, say, China or Iran would choose to be defeated in conventional war, rather than raise the stakes through nuclear escalation. That would be a heroically optimistic assumption. Deterring the desperate and risk-tolerant is far from reliable.

### **Conclusion**

What can we visualize on the threat board? The following challenges are projected.

- Great power rivalry.
- Adverse climate change.
- Resource rivalries and shortages (food, water, and energy).
- Overpopulation.
- Disease pandemics.
- Jihadi terrorism and insurgencies.
- Nuclear proliferation.
- The "unknown unknowns" (the things to worry about if we know about them, for example, asteroids).<sup>20</sup>

Also, obedient to the pressure of presentism, one might wish to add "global economic meltdown" to the list of challenges. Trends and perils come in bundles and interact with nonlinear consequences. Military power, unfortunately, is highly relevant to many of the possible consequences of the existing trends. The future is unpredictable, and our present security condition may well become a great deal worse than it is today. The glass is not only half empty; it is also half full.

This grand review concludes with two specific notes of caution. First, NATO-Russian relations are an accident waiting to happen. Recall Vladimir Putin's *cri de coeur* on 25 April 2005: "The collapse of the Soviet Union was a [the] major geopolitical disaster of the century." These are words to ponder. Second, the Sino-US rivalry, even possibly extending to

active hostility and belligerency, is ordained by the logic of the balance of power as well as by the fundamentals of competitive statecraft summarized ca. 400 BCE by Greek general and historian Thucydides, "fear, honor, and interest." Have a nice century!<sup>21</sup>

#### NOTES

- 1. Thucydides, *The Landmark Thucydides: A Comprehensive Guide to* The Peloponnesian War, Robert B. Strassler, ed. (New York: The Free Press, 1976), 43. For historical and strategic theoretical contexts, see Athanasios G. Platias and Constantinos Koliopoulos, *Thucydides on Strategy: Athenian and Spartan Grand Strategies in the Peloponnesian War and Their Relevance Today* (Athens: Eurasia Publications, 2006).
  - 2. Philip Bobbitt, Terror and Consent: The Wars for the Twenty-First Century (London: Allen Lane, 2008).
  - 3. Rupert Smith, The Utility of Force: The Art of War in the Modern World (London: Allen Lane, 2005).
  - 4. Colin S. Gray, Another Bloody Century: Future Warfare (London: Phoenix, 2006), Chapter 1.
- 5. Colin S. Gray, Fighting Talk: Forty Maxims on War, Peace, and Strategy (Westport, Conn.: Praeger Security International, 2007), 155-57.
  - 6. Hew Strachan, The Changing Character of War (Oxford, U.K.: Europaeum, 2007), 28.
- 7. Carl von Clausewitz, *On War*, Michael Howard and Peter Paret, eds. and trans. (Princeton, N.J.: Princeton Univ. Press, 1976).
  - 8. Ibid., 566-73.
  - 9. Gray, Another Bloody Century, Chapter 2.
- 10. Cabinet Office, *The National Security Strategy of the United Kingdom: Security in an Interdependent World* (Norwich, U.K.: Her Majesty's Stationery Office, 2008), 10.
  - 11. Smith.
- 12. See Stephen Blank, "Web War I: Is Europe's First Information War a New Kind of War?" *Comparative Strategy*, 27 (May/June 2008), 227-47.
- 13. Strategic history has to be ironic and paradoxical because those qualities are in the very nature of strategy. This argument is central to Edward N. Luttwak, *Strategy: The Logic of War and Peace* (Cambridge, Mass.: Belknap Press of Harvard Univ. Press, 2001).
- 14. The U.S. Army-Marine Corps Counterinsurgency Field Manual: U.S. Army Field Manual No. 3-24, Marine Corps Warfighting Publication No. 3-33.5 (Chicago: Univ. of Chicago Press, 2007).
  - 15. Clausewitz, 605.
- 16. Interesting attempts at space power theory include Everett C. Dolman, *Astropolitik: Classical Geopolitics in the Space Age* (London: Frank Cass, 2002); and John J. Klein, *Space Warfare: Strategy, Principles, and Policy* (Abingdon, U.K.: Routledge, 2006). On cyberspace see Martin C. Libicki's fine achievement in *Conquest in Cyberspace: National Security and Information Warfare* (Cambridge, U.K.: Cambridge Univ. Press, 2007).
- 17. See David E. Johnson, Learning Large Lessons: The Evolving Roles of Ground Power and Air Power in the Post-Cold War Era (Santa Monica, Calif.: RAND, 2007).
- 18. Secretary of Defense Robert M. Gates offers the contestable statement that "[f] or the foreseeable future, this [strategic] environment will be defined by a global struggle against a violent extremist ideology that seeks to overturn the international state system." *National Defense Strategy* (Washington: Department of Defense, June 2008), 2.
- 19. For a fairly thorough analysis of the question of nuclear abolition, see George Perkovich and James M. Acton, *Abolishing Nuclear Weapons*, Adelphi Paper 396 (Abingdon, U.K: International Institute for Strategic Studies, 2008).
- 20. Asteroids are worthy of worry on our part. See Duncan Steel, *Rogue Asteroids and Doomsday Comets: The Search for the Million Megaton Menace that Threatens Life on Earth* (New York: John Wiley, 1995); and Mark Bucknam and Robert Gold, "Asteroid Threat? The Problem of Planetary Defense," *Survival*, 50 (October/November 2008), 141-56.
- 21. The worldview expressed in this article is notably, perhaps worryingly, congruent with that which inspires Robert Kagan, *The Return of History and the End of Dreams* (London: Atlantic Books, 2008).