

Chapter Two

U.S. Views on Strategic Power, Vulnerability, and Restraint

The U.S. attitude toward the idea of mutual strategic restraint with China will reflect U.S. views on China and Sino-American relations, on the use of force in general, and on nuclear weapons, space, and cyberspace in particular. This chapter analyzes these views and draws conclusions about whether the United States could accept limits on its strategic freedom of action contingent on Chinese reciprocity. It also examines whether and how tensions between military-operational and national-strategic objectives could complicate U.S. views on mutual restraint.

At one level, U.S. policy on strategic matters is literally an open book. In the year or so prior to this study, the U.S. Government issued the *National Security Strategy*, *Quadrennial Defense Review*, *Nuclear Posture Review*, *National Space Policy of the United States of America*, and *Cyberspace Policy Review*. Very broadly speaking, these documents reflect U.S. preoccupation with the threat of violent extremism, counterinsurgency campaigns in Iraq and Afghanistan, and turmoil throughout the Middle East and South Asia. China has not been the center of U.S. strategic attention—the proverbial elephant in the corner of the room. It is depicted as a rising giant to be engaged, not an adversary to be countered. If there is a common theme to U.S. policy statements, it is that the United States wants to meet global challenges in partnership with others, including “new centers of power,” among which China looms largest.

Current U.S. Views on China and Sino-American Relations

Most Americans would agree that forging a stable and productive relationship with China is as important as any foreign policy challenge for generations to come—a challenge that calls for a combination of accepting the reality of Chinese power, discouraging its irresponsible use (as defined by the United States), and safeguarding U.S. interests and friends in East Asia. The possibility of armed conflict with China appears remote,

especially with recent improvement in China-Taiwan ties. The United States is preoccupied with more pressing security problems and more likely contingencies: wars in Iraq and Afghanistan, terrorist attacks on the United States, dangers within and surrounding Pakistan, the prospect that North Korea and Iran will both be able to deliver nuclear weapons to the United States and its allies in a few years, and Mexico's deadly battle with drug cartels, to name a few. These external dangers compete on the national agenda with the need to restore U.S. economic strength by balancing the Federal budget and creating jobs in the short term, and by overhauling national infrastructure and reinvigorating public education in the long term. With this agenda, the problem of Sino-American strategic vulnerability is not an urgent U.S. concern.

Strategic vulnerability must even compete for attention in Sino-American relations. Because of China's multifaceted power, spreading influence, and deep interdependence with the global and U.S. economies, Sino-American relations are exceedingly complex, far more so than Soviet-American relations ever were. The bilateral agenda is crowded enough without elevating the importance of strategic issues. Yet this is not necessarily deleterious to the prospects for mutual strategic restraint. The two countries now have an *opportunity* to set conditions for a stable strategic relationship that engenders mutual trust, obviates worst-case planning, averts costly arms races, fosters prudent behavior, prevents miscalculation, and reinforces the kind of relations the United States wants in general with China. Better to begin addressing these matters calmly in today's environment than to wait until conditions are less conducive or until strategic vulnerability and competition make it harder to discuss and set rules. This sentiment appears to lie behind Washington's call for a wide-ranging bilateral strategic dialogue to advance the goal of "strategic reassurance."¹

Strategic matters aside, Sino-American ties are controversial in the United States because of frictions that accompany China's stunning growth and the complex interdependence of the two economies. Americans are concerned with China's failure to allow the yuan to appreciate sufficiently to remedy imbalanced trade, with unsatisfactory Chinese protection of intellectual property rights, and with an array of barriers to the immense and growing Chinese domestic market. As long as the U.S. unemployment rate stays high, China will be regarded, fairly or not, as the chief culprit. Add to this American disappointment with slow Chinese progress on human rights, especially the heavy-handed treatment of Tibet and religious movements, and China is gaining detractors on both the American left and right.

Yet both the political left and right also have interests in improved Sino-U.S. relations—the former to promote peace, and the latter to promote business. There is little stomach in the United States for trying to frustrate China’s rise, encircle it with alliances and forces, or start a Sino-American cold war. Voices a few years back advocating that the United States seize the “unipolar moment,” establish “benevolent hegemony,” and contain China have been drowned out by pragmatic and broad opinion that the United States needs the cooperation of others, including China, to meet 21st-century challenges.² Of late, U.S. economic woes, combined with recognition that the Nation’s prosperity is inextricably linked to the world economy, have settled the matter of whether the United States can or should try to command the international landscape and impose its will. Moreover, China’s relentless growth, manufacturing prowess, and attendant demand for resources are increasingly shaping the global economy as well as the global ecology. In these conditions, theories of great sovereign states vying for relative power and hurtling toward conflict have become inadequate if not obsolete.

An adversarial Sino-American relationship, in President Barack Obama’s words, is not predestined.³ At the same time, China’s increasing power and international influence, perhaps coupled with a mistaken perception of U.S. decline in the midst of the financial crisis, have translated into an increased confidence and assertiveness that are common among emerging great powers.⁴ China is now energetically protecting and pursuing its national interests on issues ranging from sanctions on Iran and handling of tensions on the Korean Peninsula to climate change and coddling of Burma, Sudan, and other odious states. If China is now an American partner, it is hardly a malleable one.

Nonetheless, the emerging consensus view in the United States is that it is worth trying to obtain China’s cooperation in tackling global problems while being vigilant toward Chinese misconduct, especially in East Asia. In essence, the United States is predisposed to Sino-American partnership, contingent on China behaving as a “responsible stakeholder” in the global system.⁵ Coupled with awareness of national vulnerability, this predisposition is conducive to U.S. pursuit of Sino-American mutual strategic restraint. At the same time, uncertainty about how China will use its newfound power will cause the United States to approach Sino-American strategic relations warily and conditionally.

East Asian stability is of pivotal concern in U.S. considerations of its global interests, with Europe at last peaceful and the Middle East so unstable. It is easy to see how an increasingly strong and demanding China

could destabilize East Asia but harder to envision how it could do so in other regions, which it can influence but not dominate. Indeed, it is in Asia in particular far more than in global affairs in general that Chinese and U.S. goals could be at odds, with China suspected by Americans of wanting to become the dominant East Asia power at the expense of U.S. influence and interests. The United States is determined to continue to play a prominent and stabilizing role in this vital region, but many Americans see China as wanting to marginalize the U.S. position. While it is possible to imagine an East Asia that accommodates both China's growing power and a robust role for the United States, Americans are not inclined to regard Chinese regional aims as benign, especially in light of increased Chinese assertiveness vis-à-vis its neighbors and U.S. presence.

From the U.S. perspective, there are three potential problems that China could create in East Asia. The first is the use or threat of force to gain control over Taiwan, or at least to pressure Taiwan into a union on Chinese terms. The second is Chinese use or threat of force to settle territorial disputes on its terms and to assert a privileged position, if not virtual sovereignty, in the South China and East China Seas. The third is that the relentless growth and extension of Chinese power, even if not misused, could destabilize the region, perhaps causing Japan to remilitarize, act unilaterally, and possibly acquire nuclear weapons.

The combination of a vital U.S. interest in the economic and political stability of East Asia and the potentially destabilizing effects of unchecked Chinese power will require the United States to maintain its regional military presence and security relationships. There is no strategic or political argument about this within the United States. Far from receding with the end of the Cold War, U.S. military activities and ties in East Asia have continued and expanded in some respects, largely in response to regional anxiety about China. It is a matter of simple geography that U.S. presence in support of its interests in a region of vital importance stands within waters that China believes are key to its security, continued growth, and future.

Unlike in the Cold War, U.S. and Chinese forces will increasingly occupy the same western Pacific space, each considering it to be strategically important and keeping a sharp eye on the other. Repeated U.S. efforts to engage China in sustained military-to-military dialogue and practical cooperation have been rebuffed or canceled in retaliation for U.S. arms sales to Taiwan. Prospects for cooperation instead of rivalry between U.S. and Chinese military forces are dimmed by PLA suspicion that the United States seeks to contain and encircle China. Under these conditions, the

potential for competition, confrontation, miscalculation, incidents, and even hostilities in East Asia will condition U.S. attitudes toward concepts of strategic restraint with China. U.S. views toward China and competitive dynamics in East Asia make mutual restraint important but difficult to achieve.

U.S. Defense Attitudes and Efforts

The possibility of a U.S. military conflict with China may be remote, but outside East Asia, military conflict has been more common than peace since the end of the Cold War. The United States has been involved in five wars involving Kuwait, Serbia, Iraq, Afghanistan, and Libya. With the exception of the invasion of Afghanistan in the aftermath of 9/11, the United States entered or started these conflicts without having been attacked. It has organized and led international coalitions, some grand and some small. Major U.S. military operations in Iraq lasted 8 years, and in Afghanistan, 9 years and counting. (The other three ended quickly owing to decisive application of U.S. capabilities.)

A number of observations about U.S. attitudes toward force that bear on this study can be mined from this history. First, the United States is willing to go to war if its interests are threatened, even if it has not been attacked. Contrary to earlier conventional wisdom, Americans are not averse to taking—much less inflicting—casualties, and they have considerable stamina. Second, the United States is sensitive to both domestic and international political demands to act within multilateral coalitions, unilateralism having been discredited by the U.S. invasion of Iraq. Third, notwithstanding early difficulties adjusting to counterinsurgency (COIN), U.S. forces have proved very capable and have earned national confidence and international respect. No country wants to test U.S. expeditionary and strike capabilities. Fourth, the United States has threatened escalation to strategic warfare only when necessary to deter an enemy (Iraq) from using nonnuclear “weapons of mass destruction” against U.S. forces.⁶ Fifth, and related, it is sufficiently confident in its ability to prevail with conventional forces that it has deemphasized the military value of nuclear weapons.

In the course and as a consequence of these wars, the United States has been spending nearly as much on defense as the rest of the world. It has military-technological supremacy, has forces hardened and honed by experience, is unrivaled in capabilities for regular warfare, and has sufficient conventional strike power to defeat any state. It has also expanded and improved its capabilities for irregular warfare, including large and superb Special Operations Forces. The U.S. military is in a league of its own in

computer network–based command, control, communications, computers, intelligence, surveillance, and reconnaissance (C⁴ISR) systems, giving it both an advantage and a vulnerability. Although the emphasis since 9/11 has shifted from capabilities for decisive regular warfare to COIN, the United States is and will remain prepared for a wide spectrum of contingencies globally—as it must be, given the high uncertainty about what sorts of conflicts it will face and where. At present, there is a yawning gap between U.S. and Chinese military capabilities, especially in the ability to deploy and sustain combat forces far from national borders. While the United States expresses concern about China’s military enhancement programs, U.S. investment (over \$100 billion per year) in developing and acquiring improved capabilities is approximately 10 times that of China, which effectively assures stronger U.S. military capabilities for many years to come.⁷

Although the superiority of U.S. Armed Forces across a range of contingencies is not in doubt, three factors could affect their ability to respond to the growth in Chinese military capabilities in the western Pacific: downward pressure on U.S. defense spending, growing Chinese antiaccess capabilities, and higher U.S. priorities elsewhere.

The *National Security Strategy* issued in 2010 by the Obama administration makes explicit that U.S. security depends on the restoration of national economic strength.⁸ Shrinking the Federal budget deficit will require some combination of politically painful cuts in domestic programs, entitlements, *and* defense spending. Pentagon spending, off-limits since 9/11, is now fair game. Even with reductions on the order of \$400 billion over the next decade (as requested by President Obama), the U.S. defense budget would still be roughly three times more than Chinese official defense spending. However, with heavy demands of spending due to current operations and rising personnel costs, investment in major platforms and weapons systems—that is, increasingly expensive naval and air forces—are especially inviting targets. Thus, pressure on the Defense Department’s budget could disproportionately fall upon capabilities of particular importance to countering expanding PLA capabilities.

The second problem in maintaining U.S. military superiority in the western Pacific is the growing difficulty of operating near China and its growing array of extended-range sensors and weapons. As will be covered in depth elsewhere in this book, U.S. strike forces that depend on aircraft carriers and air bases in the region are falling within range of Chinese short- and medium-range ballistic and cruise missiles. Increasing the numbers and improving the range and accuracy of these missile forces are

high priorities in Chinese military investment, as are the extended-range sensor and communications systems that will enable the PLA to locate, track, and target U.S. forces far from China—potentially farther away than the range of U.S. carrier-based airpower. Of particular concern is the PLA's antiship ballistic missile (ASBM) with maneuverable guidance that, when supported by extended-range sensors, can potentially strike and disable U.S. aircraft carriers that would come to Taiwan's defense.⁹ In light of these developments, a 2010 Pentagon report to Congress assesses the cross-Strait military balance to be shifting in China's favor.¹⁰

As China's short- and medium-range ballistic missile arsenal grows, the United States will find it difficult to defend and thus employ its surface naval forces and land-based air forces in the western Pacific. In parallel, the PLA is building a large attack submarine fleet and seeking capabilities to degrade the C⁴ISR networks that enable U.S. forces to surge and conduct integrated operations against China and its forces, which explains Chinese interest in the means to attack U.S. computer networks and satellites. What Chinese missiles, submarines, and network attacks have in common is that defense against them becomes less cost-effective as the scale and sophistication of offensive capabilities grow.¹¹ These developments will raise the difficulty, cost, and risks to the United States of intervening in the event that China attacks Taiwan. Finally, the PLA's strategy of striking suddenly and confining the conflict in time, geographic scope, and weaponry is designed to limit the ability of the United States to bring its full conventional power to bear.

The third factor contributing to the potential for military instability in the western Pacific is that China and the United States are both able to commit resources to countering the other's forces in the region in roughly the same volume. Given the size of the annual U.S. and Chinese defense budgets—about \$600 billion and \$150 billion, respectively—this is counterintuitive.¹² Even if U.S. defense spending is flat (in constant dollars) and Chinese defense spending grows by 10 percent annually, it would take about 15 years for China to close the gap in annual spending; by then, the United States would have outspent China on defense by a factor of 2 (roughly \$12 trillion to \$6 trillion), thus accumulating more capabilities.

However, unlike China, the United States must allocate its defense resources to meet *worldwide* security interests and responsibilities and must prepare for a full spectrum of military contingencies. Continued upheaval in Arab and other Muslim lands from North Africa to South and Central Asia, compounded by terrorist and nuclear proliferation threats, will likely keep those areas the main theater of U.S. defense. If the next two

decades resemble the last two, the biggest claimant on U.S. forces and resources will not be U.S. Pacific Command (USPACOM) but rather U.S. Central Command (USCENTCOM). By a RAND estimate, of the portion of the Pentagon's budget that can be attributed to meeting global requirements, USPACOM demands account for about 20 percent, compared to 60 percent for USCENTCOM.¹³ So great is the requirement for U.S. military capabilities and resources in the greater Middle East that even a 25 percent increase in capabilities for USPACOM in response to the growth in Chinese capabilities would result in USPACOM requirements still less than half those of USCENTCOM. And of course, the prospect of reduced overall U.S. defense spending on the order of \$400 billion over the coming decade makes such a shift problematic, as long as Middle East unrest remains a major challenge.

In contrast, over the last 15 years, China's defense modernization has focused primarily on the need to develop weapons, doctrine, and training to counter a prospective U.S. military intervention in a conflict over Taiwan, with most other missions being treated as "lesser included cases." China's resolution of most of its land border disputes and improved relations with most of the countries on its borders have greatly reduced the potential for a major land war, a shift reflected in PLA emphasis on modernization of its naval, air, and missile forces. As a result, while the United States must prepare for myriad missions around the world, the Chinese military emphasizes building the capability to fight and win local wars, with a potential Taiwan conflict as the central focus. This is beginning to change somewhat as China's expanding national interests prompt a reconsideration of appropriate military roles, but most of the new missions being discussed (such as peacekeeping, humanitarian assistance and disaster relief, and noncombatant evacuation operations) do not require expensive new capabilities. (The exception would be if China decided to make a serious effort to contest U.S. naval dominance, which is unlikely over the next 10 to 15 years.)

Assuming the above spending projections, and assuming China does not seek to build large expeditionary forces for contingencies in other regions, China should be able to devote equivalent resources as the United States to military capabilities for the same region and the same contingency. Chinese defense spending is already at rough parity with USPACOM's claim on U.S. defense spending, and the former is growing rapidly, while the latter is not growing at all.

For all these reasons, it will be difficult for the United States to stop the erosion of the ability of its forces to prevail over Chinese forces near

China, especially in a conflict that follows the PLA's script of a brief, intense, and confined conflict. This puts pressure on the United States to consider its escalation options, both to strengthen deterrence and to frustrate the PLA's strategy of a short and confined war—pressure that could affect U.S. attitudes toward strategic restraint. While the United States is most unlikely to consider using nuclear weapons if conventional defense falters, it may be hesitant to say so lest it weaken deterrence by relieving Chinese fears of nuclear war. This may cause the United States to be reticent about acknowledging mutual nuclear deterrence or accepting mutual nuclear restraint.

Options to take out satellites and computer networks on which the PLA increasingly relies for targeting U.S. intervention forces will be of growing military interest to U.S. military planners. Even as U.S. political leaders may be interested in constraining China from attacking the United States in space and cyberspace, U.S. military commanders may be interested in enabling forces to attack the PLA in those same domains. This tension between tactical exigency and strategic caution will weigh on U.S. attitudes about mutual restraint.

Generally speaking, the United States tends to be coy about its military options, both to bolster deterrence and to plant doubts in the opponent's mind. Because of the wide spectrum of threats and unpredictability it faces, the U.S. military is disinclined to exclude options. This attachment to flexibility is an operational strength as well as a strategic one: whereas the Chinese want a conflict to go according to the PLA's blueprint, the Americans want to confront the Chinese with uncertainty about the direction a conflict could take and their ability to control and confine it. The U.S. preference to keep military options open and to be mum about plans may become even more evident as trends in conventional force balances tip toward China, perhaps causing reluctance to be specific about strategic restraint.

U.S. Attitudes and Policies Regarding Strategic Capabilities and Vulnerability

Guarded by two vast oceans, the United States has been the world's least vulnerable power for 200 years. Yet its citizens have experienced heightened vulnerability in the period of greatest American power. From 1950 to 1990, they lived in the shadow of Soviet nuclear capability to destroy their country, offset by their own country's ability to destroy the Soviet Union. For most Americans and their leaders, this vulnerability became increasingly abstract after the fears of the 1950s, culminating in the

Cuban missile crisis of 1962. Americans' sense of vulnerability returned abruptly on September 11, 2001, and since then, even failed minor terrorist attacks, such as the 2009 Christmas Day and 2010 Times Square scares, have heightened national anxiety.

Fear of the threat of terrorist attack has been accompanied by a general sense of increased U.S. vulnerability due to unprecedented exposure to the outside world: the spread of weapons of mass destruction and long-range ballistic missiles, infectious diseases, drugs, porous borders, international crime, and, of late, cyber attack. The perception and reality of vulnerability, despite unmatched power, could predispose the American people and their government in favor of policies designed to contain and reduce vulnerability.

U.S. strategic vulnerability, policy, and potential interest in mutual restraint vary from domain to domain.

Nuclear

In the words of President Obama, the U.S. Government is “taking specific and concrete steps to reduce the role of nuclear weapons while preserving [U.S.] military superiority, deterring aggression and safeguarding the security of the American people.”¹⁴ While this policy is allowed by U.S. conventional military superiority, it is motivated mainly by the objective of retarding the proliferation of nuclear weapons. Fundamentally, it reflects growing U.S. comfort with the idea that the sole purpose of nuclear weapons should be to deter the use of nuclear weapons—thus, that only nuclear retaliation is permissible.¹⁵

At this juncture, the U.S. Government is not prepared to declare universally that the “sole purpose” of nuclear weapons is to deter nuclear attack. But it has stated that it “will work to establish conditions under which such a policy could be safely adopted.”¹⁶ The United States also has proclaimed that a world without nuclear weapons is its ultimate objective. Because that world is such a remote possibility, U.S. goals, broadly stated, are twofold: further strategic arms reductions, and restraint in using nuclear weapons among those countries that possess them. In parallel, the U.S. military's interest in nuclear warfighting has waned since the disappearance of the Soviet threat to Europe. U.S. conventional capabilities now offer alternatives to using nuclear weapons for some strategic missions, potentially including long-range conventional strike options with extraordinary precision owing to advanced sensor and guidance technologies.¹⁷

Nuclear weapons do not figure prominently in U.S. thinking about war with China, as they did in regard to the Soviet Union, mainly because China is less threatening to U.S. vital interests than the Soviet Union was.

The 2010 U.S. *Nuclear Posture Review* (NPR) calls for “strategic stability” with China, as well as with Russia.¹⁸ This could be read as acknowledgment of mutual deterrence with China.¹⁹ This implied willingness to live with vulnerability to Chinese nuclear retaliation reflects a judgment that a U.S. nuclear response to Chinese conventional aggression is not needed and not a credible threat as China improves the survivability of its retaliatory force. Residual U.S. reservations about a universal nuclear no-first-use policy, according to the NPR, make no reference to China, which could be inferred to mean that the United States already recognizes de facto Sino-American mutual nuclear restraint and does not feel a need expressly to reserve the option of using nuclear weapons first against China.

The NPR’s implicit acquiescence regarding China’s nuclear deterrent has evoked no domestic public concern or political criticism. This suggests that the United States as a whole is not particularly troubled by the ability of the Chinese to deter a U.S. nuclear attack, given that the United States can be confident of its ability to deter a Chinese nuclear attack. Even as American concern has grown about improved Chinese military capabilities in the western Pacific, there is little or no apparent interest in relying on nuclear threats to deter Chinese conventional aggression.

The United States is much more concerned about Iranian and North Korean nuclear weapons, as evidenced by its development of a missile defense system specifically intended to block those threats. Although there is not unanimity in the United States that missile defense should not apply to China, the capabilities currently programmed will not be able to defend the country against a missile force of the sort and size China is committed to have, much less a force that China *could* have. This tends to confirm that the United States accepts mutual deterrence as the way to mitigate its vulnerability to Chinese nuclear weapons, even if it has not said so.

Space

While not a matter of great public interest, the U.S. Government is seriously concerned about the vulnerability of satellites, on which the country increasingly depends. The 2010 *National Space Policy* declares that “free access to [space] is a vital national interest.”²⁰ Presumably, then, foreign interference with U.S. use of space would be considered a hostile strategic act to be prevented.

Given its stated expectation that space will be a “contested environment,” the United States wants to make satellites more resilient and redundant, including the use of commercial and foreign space capabilities.²¹ However, satellites are hard to defend and expensive to replicate. Therefore, deterrence figures importantly in U.S. thinking about how to mitigate

vulnerability to attacks on satellites. In fact, the policy issues a thinly veiled retaliatory warning that “the United States views its space assets as a vital national interest . . . [and] will respond accordingly to attacks on them.”²² This posture is consistent with U.S. development and possession of an ASAT capability. While the United States does not preclude retaliating for a Chinese ASAT attack by means other than in kind, a reciprocal deterrence policy, as well as equivalent retaliation, has advantages of credibility, proportionality, and legitimacy.

Although U.S. policy calls for enhancing American advantages in space, it does not aim to deny others the use of space for “peaceful purposes.” By implication, the United States does not rule out denying others the use of space for nonpeaceful purposes. Evidently, U.S. use of space to support military operations is deemed to be “peaceful,” whereas U.S. adversaries’ uses of space for military operations against U.S. forces receive no such benefit of the doubt. This implies that U.S. ASAT weapons could be used in wartime even in the absence of an attack on U.S. satellites—for example, if an enemy is using space nonpeacefully—and thus, not only for deterrence.

Generally speaking, because the United States relies more than any other country on satellites while knowing it cannot adequately protect them, it would prefer to make space a sanctuary from warfare. On this point, the *National Space Policy* is clear: “We believe it is in the interest of all space-faring nations to avoid hostilities in space.” While it has not ruled out being the first to use ASAT weapons, the United States is clearly worried about the harm that could result from ASAT conflict and escalation. Of course, U.S. acceptance of mutual strategic restraint in space—implying a pledge not to use ASAT weapons first—would be in conflict with keeping open the option of halting an enemy’s use of space for nonpeaceful purposes.

In no case is U.S. ambivalence about ASAT capability more apparent than in regard to China. In contrast to the nuclear domain, where new nuclear states are the main concern, China is considered the principal (and still growing) threat to U.S. satellites.²³ Yet China’s increasing reliance on satellites to target U.S. forces and guide Chinese weapons in the event of conflict could cause the U.S. military to want to take out Chinese satellites, certainly if the Chinese had attacked U.S. satellites but perhaps even if they had not.

Notwithstanding some ambiguity and possible tension regarding ASAT weapons in U.S. declaratory policy, the overarching U.S. interest is to maintain its access to space, both in peacetime and wartime and for both

military and economic purposes. Given China's development of ASAT weapons, the United States could find itself deterred from initiating attacks on satellites, even in hostilities with China. Presumably, it would have no inhibition in using ASAT weapons in retaliation for attacks on U.S. satellites; indeed, it has essentially warned that it might do so. Thus, U.S. interests might best be served by mutual deterrence and mutual restraint in space.

The same space policy statement also reveals the U.S. Government's interest in expanded partnership with commercial providers of space assets and services.²⁴ This implies that the United States has a growing stake in and commitment to the security of not only government satellites, but also all satellites that serve important national functions. Greater reliance on commercial providers to meet government needs in space also means it will become increasingly difficult to draw a line separating U.S. official use of space and commercial use of space. Thus, the absence of an escalatory firebreak in the event of ASAT weapons use could weigh in favor of U.S. support for mutual restraint.

Cyberspace

In no strategic domain is the United States more concerned about vulnerability and yet more vague about intent than in cyberspace. This is partly because U.S. capabilities, activities, and plans in this domain are secret for technical reasons. But it is also because the United States wants to keep open all its options, including offensive ones, but at the same time does not want to lend legitimacy to cyber war.

The President himself has declared that "America's economic prosperity in the 21st century will depend on cyber-security."²⁵ More specifically, according to then-Deputy Secretary of Defense William J. Lynn III, "Cyber-attacks offer a means for potential adversaries to overcome overwhelming U.S. advantages in conventional military power and to do so in ways that are instantaneous and exceedingly hard to trace. Such attacks may not cause the mass casualties of a nuclear strike, but they could paralyze U.S. society all the same."²⁶

While the President has stated that protecting cyberspace will be a national security priority, Deputy Secretary Lynn correctly observed that "offense has the upper hand" in cyberspace. This implies that the United States must rely on deterrence to limit its vulnerability to attacks on important computer networks. The United States has stressed that retaliation for such attacks need not be in the form of reciprocal attacks. However, the threat and execution of equivalent retaliation have the advantages of credibility, proportionality (depending on scale), and legitimacy. Thus, if only

as a deterrent, the United States should be capable of conducting substantial cyber attacks on a wide range of adversary networks.

In its clearest statement to date about its doctrine on cyber security, the U.S. Government has in effect equated cyber attack with physical attack—both potentially being an act of war. Consistent with this standard, the United States warns that it may respond with means of its choosing, which could mean conventional retaliation. This could be viewed as escalation (even though a cyber attack could actually do more harm overall). Therefore, the U.S. warning can also be interpreted to mean retaliation in cyberspace. Statements from Beijing depicting this U.S. position as dangerous indicate that the warning was heard and thus may be heeded.

Apart from deterrence, the United States could be interested in operations against foreign computer networks for several reasons: to gather intelligence, neutralize threats, and capitalize on an opponent's reliance on such networks in support of military operations against U.S. forces. This suggests an acute U.S. quandary akin to the one it faces in space, in which China again figures prominently. Former Defense Secretary Robert Gates surely had China in mind when he spoke of a "huge future threat."²⁷

Given the difficulty of defending U.S. cyberspace against such threats, deterrence could be critical. Yet Chinese strategy calls for the PLA to rely increasingly on computer networks—"informationization," to use their term—to defeat U.S. forces, which impels the United States to consider initiating cyber war in the event of war. This places the United States on the horns of a dilemma: whether to threaten retaliation in order to deter Chinese cyber attacks, implying restraint in initiating such attacks, or to exploit its own prowess in these technologies for operational advantage.

Simply stated, the United States would like to have it both ways: mutual restraint in attacks on networks critical to the Nation, its population, and its economy, but without foreclosing military options to conduct and possibly initiate attacks. Put differently, U.S. interests would be optimized by being able to limit cyber war to the battlefield, thus advantaging U.S. forces in combat without the risk of escalation to the strategic level. While the U.S. dilemma can be stated simply, its resolution is exceedingly complex.

Differences in Civilian and Military Perspectives

Strong civilian control over the armed forces has been a constant throughout U.S. history, with the uniformed military as committed to it as their political superiors and the American public are insistent upon it.

Strong civilian control applies in peacetime, crisis, and conflict. Although forces and their commanders must be able to operate with flexibility and speed, especially in today's fluid and information-rich hostilities, war aims are set, plans reviewed, strategy approved, and risks weighed by the civilian chain of command.²⁸

The well-developed principles and practices governing U.S. civilian-military relations do not preclude differences in perspectives on priorities, options, risks, targeting, forces engaged, and so on, within established intent and constraints. Though rarely public, such differences are to be expected. After all, the military has a professional and constitutional duty to advise policymakers, and their advice would be less objective, credible, and valuable if it was skewed to align with what policymakers already thought or wanted to hear. In addition, military leaders are obliged to provide unvarnished assessments and judgments of military matters to Congress, whether or not these converge with administration policies.

It is therefore not surprising that U.S. military commanders may have different perspectives than U.S. policymakers on necessary capabilities and preparations for military contingencies involving China. The commanders have been charged with deterring or defeating Chinese aggression at the lowest possible cost and without prejudging choices that are rightly the civilian leadership's to make. In view of what is arguably a worsening conventional military balance in the western Pacific, military commanders may be inclined to hold open (if not expand) escalation options, for deterrence or victory.

This is unlikely to revive the U.S. military's interest in fighting a nuclear war, but it could lead to a preference to wage war in space or cyberspace—if not as strategies, then as natural extensions of military operations. Given their narrower focus, commanders may be less sensitive than policymakers to the risks of national harm that could come from hostilities in these domains. Consequently, military leaders may be less inclined than political leaders to embrace mutual strategic restraint with China, particularly in space and cyberspace.

The U.S. military can be counted on to fall in line with civilian policy. But the civilians have to take operational military views and requirements seriously. If the admirals and generals advise that there are operational risks to foreclosing options to attack satellites and computer networks that enable the PLA to operate against U.S. forces, policymakers will need to be confident that such risks are outweighed by the risks of escalation. In the end, political leaders, mindful of the totality of national interests at stake,

will have to balance the advantages of disabling satellites or computer networks that enable Chinese warfighting against the dangers that such attacks could lead to general war in space and cyberspace, where the United States is vulnerable.

The need to balance civilian control with military agility is especially critical during operations. In regard to nuclear weapons, civilian control has always taken precedence over military need. Only the President can order the use of nuclear weapons, whatever the conditions, objectives, or targets. An issue that civilian and military leaders must now confront is how tightly to control attacks on satellites and computer networks. Conflict in both space and cyberspace is highly unpredictable, so much so that attacks in these domains could be considered indiscriminate in their effects. This suggests that tight civilian control should also be exercised over such escalatory decisions or when civilian harm could result, even at some cost in operational agility. While this should be workable in regard to attacking satellites, it could be increasingly problematic as computer network operations for C⁴ISR become inextricably woven into the fabric of military routine.

U.S. Armed Forces already operate according to a paradigm that balances battlefield needs with requirements to avoid civilian harm and unwanted escalation. Authority to strike targets with weapons that could cause collateral damage is not delegated as freely as authority for decisions with purely military effects. Likewise, actions that escalate or could trigger enemy escalation are taken up the chain of command in proportion to the degree of risk. Decisions to use nuclear weapons are so fateful that only the President can take them. Decisions to use ASAT or cyber weapons may take if not Presidential, then at least high-level civilian, approval.

At the same time, the requirement for control needs to be balanced with U.S. military commanders' needs for operational and tactical flexibility, which will become increasingly important in the face of improving Chinese capabilities in the western Pacific. As protocols are set for managing conflict in space and cyberspace, differences between military and civilian perspectives on mutual restraint in these domains can and must be reconciled.

Without adequate controls, Sino-American mutual strategic restraint could break down in the event of conflict. Confidence in compliance with Sino-American understandings governing warfare in strategic domains, especially in space and cyberspace, may be more justified for the U.S. side than the Chinese one, where limits on the PLA's freedom of action are at least not transparent and at most not tight. An advantage for the United

States in engaging Chinese civilian and military leaders on matters of strategic restraint is to sensitize them to the importance of strict control.

Conclusions and Key Issues

In principle, the United States may be—in the authors' view, ought to be—ready to accept Sino-American mutual nuclear restraint if coupled with similar reciprocal restraint in space and cyberspace, depending on the terms. Doing so would serve U.S. interests in mitigating growing strategic vulnerabilities, in fostering a constructive relationship with China, and in enabling the United States to concentrate on various other national security priorities.

At the same time, the United States has many problems with China: unfavorable trade, exchange rate, and intellectual property rights; discord over global climate change; and disappointment with Chinese efforts to prevent nuclear proliferation to Iran and reverse proliferation to North Korea. Therefore, it will not want to become a supplicant for mutual strategic restraint, especially if China is resistant to the concept. Instead, the United States should call to the attention of Chinese leaders that strategic vulnerability is a shared and growing problem and offer an integrated framework for tackling it cooperatively and comprehensively.

If China proves to be interested in mutual strategic restraint, the United States needs to consider and manage potential implications for deterrence, military-operational requirements, regional stability, and security of allies. These concerns are neither unmanageable nor of an order that should keep the United States from exploring with China ways to avoid catastrophic conflict in strategic domains.

Overall, the United States is not in the mindset of regarding China's rise as necessarily coming at its expense, given its stake in China's economic success and its belief that it needs Chinese cooperation to meet its most serious security challenges, notably stemming nuclear proliferation and thwarting violent extremists. It also recognizes that such problems as the insecurity of energy supplies, climate change, and financial stability cannot be solved if the United States and China are at loggerheads.

While the United States can see how its own goals can be advanced by a productive relationship with China, it is less sure of China's goals, especially in East Asia. If and as threats to U.S. interests in the Middle East and South Asia subside, the United States can devote more attention to East Asia and China. Given its uncertainty about Chinese aims, how China responds to U.S. overtures of expanded military contacts and dialogue on strategic matters will have a major effect on U.S. policy toward China. In

particular, if the United States advances ideas for Sino-American strategic restraint, a positive Chinese reaction would reinforce the U.S. predisposition to find common ground with the rising power. If China rejects such ideas, a more adversarial U.S. policy could emerge.

Notes

¹ James B. Steinberg, “China’s Arrival: The Long March to Global Power,” keynote address at the Center for a New American Security, Washington DC, September 24, 2009, available at <www.cnas.org/node/3415>; Al Pessin, “Gates in Beijing to Discuss U.S. Concerns about China’s Military,” *Voice of America*, January 8, 2011; “China-U.S. Joint Statement,” January 20, 2011, available at <www.gov.cn/misc/2011-01/20/content_1789008.htm>.

² William Kristol and Robert Kagan, “Toward a Neo-Reaganite Foreign Policy,” *Foreign Affairs* 75, no. 4 (1996), 18–33; Charles Krauthammer, “The Unipolar Moment,” *Foreign Affairs* 70, no. 1 (1990), 23–34.

³ “President Barack Obama at Town Hall Meeting with Future Chinese Leaders, Museum of Science and Technology,” White House Press Office, 2010.

⁴ China started taking increasingly assertive positions on such matters as climate change, financial stability, and economic recovery in 2009.

⁵ Robert B. Zoellick, interview by the National Committee on the United States and China Relations, “Whither China: From Membership to Responsibility?” September 21, 2005. The Obama administration has not endorsed the “responsible stakeholder” term, but its approach is broadly compatible.

⁶ Warning issued by U.S. Secretary of State James Baker to Iraqi Foreign Minister Tariq Aziz during Gulf War, 1990.

⁷ Derived from a combination of Defense Intelligence Agency, Office of the Secretary of Defense, and RAND estimates.

⁸ Lest there be a perception that the U.S. military will resist defense savings, Chairman of the Joint Chiefs of Staff Admiral Mike Mullen explicitly endorsed the idea that restoring U.S. fiscal balance is a high national-security priority. See Department of Defense, *National Military Strategy* (Washington, DC: Department of Defense, 2011).

⁹ Department of Defense, *Military and Security Developments Involving the People’s Republic of China* (Washington, DC: Department of Defense, 2010).

¹⁰ *Ibid.*

¹¹ The offense-dominant nature of ballistic missiles and cyber warfare is addressed elsewhere. As for antisubmarine warfare (ASW), finding and tracking of submarines remain difficult in open oceans—even for the United States—though are less difficult in restricted, shallow, or coastal waters and going into and out of port. As China’s submarine fleet grows in size and operates in significant numbers farther from Chinese ports, U.S. ASW will be hard-pressed to keep pace. The United States can counter this by expanding its own submarine force; however, U.S. (nuclear) submarines are much more costly than Chinese (mostly conventional-propulsion) submarines. See Andrew S. Erickson, Lyle J. Goldstein, Andrew R. Wilson, and William S. Murray, eds., *China’s Future Nuclear Submarine Force* (Annapolis, MD: Naval Institute Press, 2007).

¹² *Military and Security Developments Involving the People’s Republic of China*, 43.

¹³ Paul Davis et al., *Developing Resource-Informed Strategic Assessments and Recommendations* (Santa Monica, CA: RAND, 2008).

¹⁴ Barack Obama, “Statement on the Release of the Nuclear Posture Review,” White House Press Office, April 6, 2010, available at <www.whitehouse.gov/the-press-office/statement-president-barack-obama-release-nuclear-posture-review>.

¹⁵ In this book, a declaratory doctrine of no first use of nuclear weapons against a particular country is treated as the equivalent of declaring that the “sole purpose” of nuclear weapons vis-à-vis that country is to deter its use of nuclear weapons—the latter being an expression used in the 2010 U.S. *Nuclear Posture Review*. Both terms carry the implication that nuclear weapons may be used only in retaliation for nuclear attack (against oneself or one’s allies). If there is a distinction between the two formulations, it would be that “sole purpose” is not an *obligation or pledge* but instead an *intention* not to use nuclear weapons first under extraordinary circumstances—for example, preemptive attack with knowledge that the adversary intends to launch a first strike. Because we mean no first use as an unequivocal pledge, we use that expression. The authors thank Elaine Bunn for drawing their attention to this possible misunderstanding.

¹⁶ Department of Defense, *Nuclear Posture Review* (Washington DC: Department of Defense, 2010).

¹⁷ For a thorough and balanced treatment of U.S. global precision strike conventional programs, see Elaine Bunn and Vincent Manzo, *Conventional Prompt Global Strike: Strategic Asset or Unusable Liability?* Strategic Forum No. 263 (Washington, DC: National Defense University Press, 2011).

¹⁸ *Nuclear Posture Review*.

¹⁹ We do not interpret the language of the *Nuclear Posture Review* regarding China as equivalent to acceptance of mutual deterrence. If that is what was intended, the document would have said it more clearly.

²⁰ William J. Lynn III, “Remarks on Space Policy,” U.S. Strategic Command Space Symposium, Omaha, NE, November 2010, available at <www.defense.gov/speeches/speech.aspx?speechid=1515>.

²¹ *Ibid.*

²² *Ibid.*

²³ Gregory L. Schulte, remarks, *Securing Space Assets for Peace and Future Conflict* conference, National Defense University, November 30, 2010, available at <www.defense.gov/spr/docs/20101130%20DASD%20Remarks%20on%20Securing%20Space%20Assets%20at%20NDU.pdf>.

²⁴ *Ibid.*

²⁵ Barack Obama, “Remarks by the President on Securing our Nation’s Cyber Infrastructure,” White House Press Office, May 2009, available at <www.whitehouse.gov/the_press_office/Remarks-by-the-President-on-Securing-Our-Nations-Cyber-Infrastructure/>.

²⁶ William J. Lynn III, “Defending a New Domain: The Pentagon’s Cyberstrategy,” *Foreign Affairs* 89, no. 5 (September–October 2010).

²⁷ Robert M. Gates, “Remarks at the Wall Street Journal’s 2010 CEO Council,” November 2010, available at <www.defense.gov/transcripts/transcript.aspx?transcriptid=4720>.

²⁸ The National Command Authority exercises control from the President through the Secretary of Defense directly to the combatant commander. The Joint Chiefs of Staff, including the Chairman and Vice Chairman, advise the President and Secretary of Defense but are not in the operating chain of command.