## **Consensual security**

The disaster in Iraq is a harbinger for a changing global order, one that increasingly defines national security in terms of global cooperation.

## BY JOHN STEINBRUNER

HE INVASION OF IRAQ WILL likely prove to be a seminal event in the evolution of international security. Legal order has evidently been shattered throughout the country, and the occupying forces have been able to contain but not eliminate the resulting pattern of predatory violence. At the outset of the conflict, the United States forfeited the critical asset of legitimacy necessary to establish and maintain consensual rule, and the continued presence of the United States undermines the indigenous institutions it is attempting to nurture. Similar breakdowns have occurred in other parts of the world, and the consequences have been tolerated over extended periods of time. Somalia is a notable example, as is the Darfur region of Sudan. Because of timing, location, and the entanglement of the United States, however, intractable violence in Iraq will have much stronger global resonance. U.S. forces alone are not likely to be able to master the situation, but neither can they withdraw without intensifying internal violence and extending it into an already volatile region. The

potential consequences of that dilemma are ominous, but for that reason the situation presents opportunity as well as danger. Calamity is sometimes a catalyst for greater wisdom.

Within the United States, disengagement from Iraq promises to be a riveting issue in the forthcoming presidential election, but the formulae advanced for accomplishing that are unlikely to be realistic and even less likely to be constructive. The U.S. political process is still in the early stages of absorbing the magnitude of disaster in Iraq and has not yet acknowledged the probable implications. To have any hope of achieving a tolerable outcome, an effective stabilization and reconstruction process would have to be established and sustained long enough for a viable government to form from a fractured social base-at least a decade presumably, perhaps even a generation. The United States would have to transfer responsibility for that effort to a broadly representative international consortium that might be able to command the consensual cooperation the United States

alone will never be able to achieve. U.S. military capability, which will remain necessary to prevent external incursion and to limit the scale of internal conflict, would have to be subordinated to the authority of that consortium. Intensely reluctant governments would have to be induced to participate in the consortium and would have to be compensated for their efforts. Members whose independence from the United States gives them the greatest potential for commanding acceptance within Iraq would have to be credibly reassured about the use of U.S. military power. Those implications lie well outside the bounds of political acceptability at the moment and will not be prominently discussed during the course of the election. Less demanding alternatives have not yet been exhausted.

With the inauguration of a new administration in 2009, however, the public can expect some process of fundamental reconsideration, whoever is elected. The new U.S. president will undoubtedly begin this reconsideration with the inherited Iraq situation, but his or her thinking cannot be confined to that. If a president is to achieve a viable result during the course of an eight-year term, global implications will have to be addressed, and the fundamentals of policy will have to be engaged.

In the broader context of security policy, the Iraq venture has become a test for those who have argued for primary reliance on national military advantage achieved through adroit utilization of advanced technology, a project they have labeled transformation. They have claimed that opposing military forces can be decisively defeated rapidly and at tolerable cost by superior combined arms operations, as was demonstrated in the initial assaults in Afghanistan and Iraq. They officially intend to use superior military capability preemptively both to prevent the acquisition of weapons of mass destruction by hostile governments and to alter the character of those governments before they present imminent threats of any sort. The less explicit but widely perceived implication is that transformation is to be undertaken exclusively by the United

States, thereby enabling global military dominance. Agony in Iraq vividly demonstrates the central fallacy of that project. Security ultimately depends more on inducing adherence to consensual rules than on wielding coercive force. Global dominance is not a legitimate objective and cannot be expected to command consensus.

Consensual allegiance was the principal determinant of security even during the Cold War and the much earlier era of colonialism, as is better appreciated in retrospect than it was during those times. It is yet more compellingly vital under the circumstances of globalization. The more intense and more consequential interactions now occurring among human societies change the scale and character of threats and make collaboration for mutual protection far more important than competition for national advantage. That emerging fact will require governments to transform the basic purposes and organizing principles of their security policies as well as the resulting international relationships-a fundamental reconceptualization of vital interest.

Conceptual adjustment of that scope is admittedly difficult to achieve, yet some of the reasons why it is likely to be necessary are nonetheless evident. Human societies are organized in separate jurisdictions prone to mutual distrust. Virtually all individuals identify with some segment of the population and not with the species as a whole. Many are actively hostile to those people they set beyond the boundaries of their identity, and the central purpose of security policy has primarily been to provide preferential protection against hostile intrusion. The process of globalization runs across all national jurisdictions, however, and transcends the control of any of them. It also imposes common interests that are potentially more significant than divisive ones to which security policy has traditionally been directed. All human societies face the increasingly demanding problem of acting effectively on behalf of common interests beyond the bounds of their primary emotional and legal affiliations, a process that pits circumstance against sentiment.

THE DEFINING FEATURE OF GLOBALIZAtion is a spontaneously occurring increase in the scope, range, and intensity of human interactions. If it is indeed occurring as now commonly imagined, and if we were able to measure it with precision, we would presumably observe that commodities, money, and information have all been flowing in recent years over greater distances at increasing volume with increasing velocity; that these transactions involve an increasing proportion of the world's population; and that they affect the social attitudes on which national jurisdiction is based. Some part of those expectations we can observeexponential increases in international financial transactions, for example, and more linear increases in commodity trade. Other aspects are considerably more obscure, but most of those who study the matter nonetheless believe that economic activity in particular is globalizing and is escaping the effective control of any national government.

The highly inequitable pattern of growth associated with the globalizing economy is also fairly evident: Gains in standards of living are heavily concentrated among the affluent, while population increases are occurring almost exclusively among the poor. The empirical relationship between equity and legitimacy is not well understood, nor is the empirical connection between economic equity and civil violence. It is prudent to assume, however, that these relationships are important even though they are not well measured. The process of globalization poses a threat to national governments because it escapes national borders and because it appears to be undermining social consensus on which political legitimacy and social cohesiveness depend.

Moreover, whether or not it is considered a defining characteristic, the term globalization also refers to the increasingly evident fact that aggregate human activity affects basic features of Earth's ecology, most notably the atmospheric concentration of greenhouse gases on which all forms of life depend. Without the warming effect of those gases—which absorb and re-radiate infrared radiation emitted from Earth's surface-Earth would be too cold to support organic life. But as with several other features of the physical universe, this benign, enabling effect occurs only within specific limits. Increases beyond historical limits in the atmospheric concentration of greenhouse gasses that are occuring as a result of human activityespecially energy generation-are capable of altering global weather patterns to an extent that might threaten the viability of many, if not all, contemporary societies. At the moment, effects of that sort can be credibly outlined, but scientists cannot precisely specify their exact character, probability, timing, or magnitude. If ever they can be specified to exacting scientific standards, the momentum of the effects in question is likely to make them irreversible as a practical matter. That situation requires standards of prudence and international coordination far beyond historical antecedents.

NATIONS BASE THEIR PREVAILING SECUrity policies, which were forged primarily during the Cold War, on principles of active confrontation. Despite the rhetorical accommodation that occurred in the aftermath of that period, they have not fundamentally altered these legacy policies. The countervailing deterrent operations of U.S. and Russian nuclear forces still dominate international security arrangements in operational reality, if not in public consciousness. Although the United States and Russia have declared reductions in the inventories of those forces. they are essentially as lethal as they ever have been and as actively deployed. Both countries continuously maintain several thousand nuclear weapons on alert status, and they are programmed to initiate massive bombardment within minutes and to complete it within hours. As an objective matter, that situation presents what is by far the greatest physical danger to both of the societies in question and to all others as well. According to the doctrine of deterrence, the threat provides decisive protection against deliberate assault, but it also creates the possibility of a catastrophic accident-a significant fact that is heavily discounted by disciples of the doctrine.

With regard to conventional forces, the active confrontation associated with the Cold War has disappeared, leaving U.S. forces embedded in their alliance arrangements with dominance over any military operation large enough to contest sovereign control over national territory. The traditional principle of confrontation remains in the sense that U.S. forces pose an implicit threat to any country not formally allied, are not credibly balanced by any independent force, and are not reliably restrained by any formal agreement. This presents an inherent security problem to all countries outside of U.S. alliances. Most of those countries plausibly judge that cross-border aggression is not likely to occur on the scale experienced during the last century, in significant part because any such exercise would threaten economic performancethe dominant imperative of the globalization era. Nonetheless, some countries do have reason to worry.

Within the United States, and to a lesser extent within its alliances, public fear of terrorism inspired by the events of September 2001 replaced concern for these traditional forms of threat-massive nuclear bombardment and cross-border aggression. The rest of the world shifted its focus less dramatically, but most nations generally accept that addressing smaller scale, more broadly dispersed forms of violence will become an increasing priority of security policy. Most of the violence in Iraq and elsewhere arises from unresolved problems of civil conflict, and most terrorism is embedded in one or more of those conflicts. If one credits what its leaders say, even Al Qaeda's violence is intended to contest control over the Islamic world, which it considers to be its legitimate territory.

Most informed analysts recognize that unresolved or unmitigated chronic civil conflict generates a threat to global order that could be increasingly serious, even if the conflicts themselves remain contained. That threat could become truly compelling if the extreme antagonism generated in unresolved conflicts converges with instruments of mass destruction. Mercifully, that has not yet occurred, despite rampant speculation. The more advanced barriers to this type of disaster that are technically possible, however, have not been constructed, and have not yet even been specifically designed. Meanwhile, nations barely acknowledge the looming security implications of global warming—a source of threat of yet larger scale and yet more Active monitoring of weapons arsenals, development efforts, and deployment patterns would become the principle method of protection. This would involve the organized exchange of information to set and enforce basic standards of behavior—a technique that can

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radically different character than the traditional concerns.

It is, of course, virtually impossible to determine with any confidence how these fundamental changes in the scale and character of primary security threats might play out over an extended period of time. There are many outcomes that can plausibly be imagined, yet there are some commonsense suggestions as to how it *ought* to play out. Aspirations are easier to formulate than predictions.

Security policy responsive to the emerging circumstances of globalization would make the defense of global legal order its primary objective and would therefore elevate common interest over national advantage. Why? Because the coordination required to operate a global economy across divided jurisdictions can only be achieved by equitable legal principles that can command sufficiently broad allegiance to make enforcement possible. With global economic coordination a priority, nations would need to adjust their thinking on other matters of national importance. They would have to subordinate all forms of confrontation to direct collaboration and, in particular, subordinate the practice of deterrence to reassurance, which has always been a companion principle.

be extremely powerful if appropriately applied, in part because it would provide the legitimizing context for any use of force. Security relationships in such an arrangement would generally be inclusive rather than divisive, and would transform the legacy policies of confrontation among the United States, Russia, China, and India, in particular. Territorial sovereignty would remain, but its protection would primarily be a common enterprise.

Those who can only think of what history has so far revealed will undoubtedly find that image of general security transformation to be implausible. Those with some sense of what globalization means are likely to find it more interesting. Wherever on the spectrum of receptiveness one might fall, however, most would concede that any transformation of security policy that does occur is unlikely to be an exercise of general design and is more likely to be the emergent result of reactions to specific problems. Of the many broad issues that might play a catalytic role in an evolutionary process of transformation, four are especially significant: the management of nuclear explosive materials, the oversight of biotechnology, the regulation of space activities, and the mitigation of global warming. These can and will be seen as

separate issues, but there are significant connections between them.

NUCLEAR EXPLOSIVES. "Nuclear explosive material" refers to any combination of radioactive isotopes that can generate an explosive chain reaction. There are nine principal isotopes that have this characteristic, of which uranium 235 and plutonium 239 are the most extensively produced and applied. Governments have assertively and exclusively subjected these two explosive isotopes to national jurisdiction more than any other human-produced commodity. They manage them with separate national accounting and physical security systems that are largely opaque to each other. As a result, the U.S. government's estimate of the total number of nuclear weapons in existence has an uncertainty range of 5,000, and the estimate for total explosive materials is even more uncertain.

Each single weapon and each amount of material equivalent to a weapon (48 kilograms of uranium 235 and 10 kilograms of plutonium 239 for the bare sphere critical masses) is of strategic significance given the devastation that can be caused in an urban area. During the Cold War, when deterrence was embodied in upwards of 10,000 weapons in each of the two principal opposing arsenals, uncertainty about a single weapon appeared to be insignificant. If we assume that a dedicated terrorist might attempt to gain access to a nuclear weapon or an equivalent amount of explosive material, then managerial control of every single unit becomes a matter of high priority. Current national accounting and physical security systems cannot assure control of every single unit, particularly not the internally burdened system that Russia inherited from the Soviet Union.

Given inherent uncertainties about historical production of explosive nuclear isotopes, it would take decades for an advanced accounting and physical security system to know that each unit of material is under control, and many specialists believe that standard can never be achieved. Governments could achieve much higher standards than now prevail, however, if they gave managerial control greater priority than deterrence. They could substantially improve protection against terrorist diversion and virtually eliminate the risk of a catastrophic operational accident while still preserving all of the deterrent effect that is reasonably required. That the nuclear weapons states have not made this adjustment since the end of the Cold War and the advent of globalization is an indictment of their stewardship that could readily become a massive political scandal.

It is technically feasible to devise a common accounting and physical security system for all nuclear weapons and materials that over time would approach the standard of assuring control over every single nuclear unit while reliably preserving exclusive national jurisdiction over the details of weapons design and location. Advanced information technology would support such a system. It is reasonable to expect that fear of terrorism will drive insistent political demand for such an arrangement. It is also reasonable to presume that achieving such an arrangement will require nations to terminate active nuclear force operations. That would be a dramatic improvement in safety that can be achieved with little if any reduction in the underlying deterrent effect.

BIOTECHNOLOGY. The second of the candidate catalytic issues-protective oversight of biotechnology-is comparable in terms of the magnitude of danger posed but fundamentally different in most other respects. Progress in the fundamental science of molecular biology enables, in principle, a range of extremely consequential interventions in basic life processes. These promise the eradication of at least some of the common diseases that have long plagued human societies. Depending on how it is utilized, however, the same basic knowledge can be used for devastating destruction as well as for powerful therapies, the former being generally easier than the latter. New applications threaten the creation of diseases substantially more destructive than those that have naturally evolved. Scientists now widely acknowledge that possibility, which was generally doubted a decade ago. The inherent power of molecular biology gives human society as a whole an enormous stake in how the science is applied, and that transcendent interest almost certainly means that independent oversight procedures will have to be devised for the fundamental research process itself. Societies apply oversight to virtually all matters of high social consequence. No one is allowed to manage large sums of money without audit. No single individual is ever allowed exclusive control over a nuclear weapon. Governments or independent bodies will have to develop robust oversight procedures for those areas of biological research that pose large inherent danger.

To be effective, oversight procedures would have to be globally applied and, thus, would have to be globally devised. Biomedical research is globally distributed and has achieved a degree of momentum that exceeds the ability of any sovereign entity or limited coalition to exercise control. The research cannot be isolated from daily life to the extent that the production of explosive nuclear isotopes can be and has been. With no serious prospect of exercising exclusive national control over the biomedical research process, inclusive international collaboration is the only realistic option. When practicing scientists, the general public, and the governments that attempt to serve them all absorb the implications, as they will eventually, devising mutually protective oversight procedures will be a powerful incentive for security collaboration.

Some suggest that a nihilistic terrorist dedicated to mass destruction would logically choose an advanced biological pathogen as the agent of choice. Though this threat is currently exaggerated, the barriers to access for pathogens are nothing like what they are for nuclear weapons and explosive nuclear isotopes. They will have to be made more significant.

SPACE ACTIVITIES. At the moment, assets in space do not directly threaten mass destruction on Earth; the 1967 Outer Space Treaty prohibited the deployment of weapons that would, and that rule has not recently been contested. Space assets do contribute substantially, however, to nations' emerging capabilities to undertake sudden precision attacks at very long range. The United States dramatically displayed this capability in November 2003, when an unmanned Predator aircraft destroyed a car traveling in the Yemeni desert that was said to be carrying a leading terrorist figure. U.S. officials controlled the aircraft remotely and are believed to have used space communications relays and navigation services.

Neither Yemen nor any other nation protested the summary execution of an alleged terrorist outside sovereign jurisdiction, without a trial or any other documented form of deliberation, but repeated exercises of that sort would certainly be contested, especially by the United States, if other nations acted similarly. The potential for that type of capacity to spread will assuredly lead to demands for legal regulation, and those demands will predictably focus on the utilization of space assets. Those assets may not be necessary for all forms of coercive intrusion, but in principle they provide greater reach and greater menace. Given the inherent vulnerability of space assets, they also provide a natural target for retribution.

In recent years the United States has officially articulated an extremely provocative doctrine of space development, asserting the intention to dominate the military use of space for decisive national advantage and to deny comparable capability to any other country. It has rejected efforts by virtually the entire international community to initiate negotiations on rules that would prevent the introduction of conventionally armed weapons in space, suggesting that it intends itself to introduce such weapons. Although the declared U.S. aspiration for space dominance is unrealistic in technical and economic terms, nations appreciate the potential scope for advanced forms of coercion along these lines, and such operations will eventually generate international demands for legal regulation. Since protective regulation is in the U.S. interest and is likely to emerge from formal negotiations on the subject, such talks will provide an occasion for

working out more advanced principles of security collaboration.

GLOBAL WARMING. During the past decade, the Intergovernmental Panel on Climate Change forged consensus within the scientific community on the basic features of global warming. The panel's consumption, but that would require a global policy initiative of unprecedented scope and consequence. In addition to introducing incentives for greater efficiency, governments and industry would have to develop to the level of market viability those technologies capable

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scientists determined that the concentration in Earth's atmosphere of those carbon gas molecules that absorb and re-emit infrared radiation has been increasing as a result of aggregate human activity since the Industrial Revolution and that the average surface temperature of Earth has increased by 0.4-0.8 degrees Celsius during the past century as a result. They estimate that this temperature would increase an additional 1.5-6 degrees Celsius if the current pattern of carbon dioxide emission continues for an additional century. They note that these temperature changes are very large and very rapid in comparison to the geological record and are in principle capable of triggering fundamental changes in Earth's climate pattern. Again, current science cannot establish with confidence the exact character, magnitude, timing, probability, or consequence of those changes but can warn that they might be catastrophic for human societies. And as also previously noted, by the time a catastrophic threat could be identified with precision and confidence, the process generating it is likely to be irreversible on any timescale of human interest.

It is technically feasible to mitigate the inherent danger by changing the prevailing pattern of energy generation and of providing energy in the amount required to support equitable economic development, and they would have to assertively deflect the current trajectory of global energy markets to induce these technologies' adoption. The increase in concentrations of carbon dioxide in the atmosphere would have to be halted by 2050 at a level of 450 parts per million or below to achieve a prudent standard of protection. There are only five basic technologies that could plausibly provide carbon-free energy in amounts sufficient to meet this standard while also accommodating rising global demand to the extent required to support basic standards of equity: wind, solar, biomass, carbon sequestration, and nuclear fission. All will presumably have to be developed and applied to some extent, although advocates of the favored option, carbon sequestration, have yet to demonstrate its long-term viability and might not be able to meet the burden of proof that should be imposed.

The significance for security policy rests primarily on the degree to which the response to global warming depends on nuclear power generation. Global energy requirements might in principle be achieved by some combination of the other methods, but that CONTINUED ON P. 55.

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cannot be assumed at the outset. Officials will have to seriously consider (and probably undertake) a dramatic expansion of nuclear power. That in turn will require radical revision of current reactor designs, fuel cycle management practices, and fundamental security relationships. Expanding nuclear power generation under other circumstances would be unsustainably dangerous, especially in the context of prevailing deterrent practices and confrontational security relationships. The incentive and opportunity for hostile diversion of nuclear explosive isotopes could not and would not be tolerated. The safe expansion of nuclear power generation in response to global warming would require intimate collaboration among China, the European Union, India, Japan, Russia, and the United States that can be expected to include top officials in all of the governments concerned. When these parties absorb all of the technical and institutional implications of negotiations, they will give strong impulse to the conceptual transformation of security policy.

DEALING WITH IRAN'S EFFORTS TO PROduce nuclear materials is likely to be the focus of this transformation's important initial stages. Iran is entangled in the internal violence in Iraq and simultaneously presents the most immediately troublesome threat of nuclear weapons proliferation. Recent reports indicate that Iran did conduct a clandestine nuclear weapons design effort before terminating it in 2003. Although it denies any intention to acquire nuclear weapons, it continues to defy a U.N. resolution demanding that it suspend its efforts to enrich uranium and produce plutonium, thereby providing potential justification for an attack on the facilities in question before they are able to produce a sufficient amount of material to fabricate nuclear weapons. U.S. forces could carry out such an attack without undertaking the burden of a ground invasion, and the Iranian president's

inflammatory political statements appear to invite it. The lessons emerging from Iraq clearly suggest, however, that this course would be a disaster for all concerned. It would retard but not destroy the Iranian program and would presumably provoke an extended process of terrorist retaliation. Again, credible danger provides a strong incentive for devising constructive alternatives.

The formula for an alternative is readily apparent. It would involve an agreement by Iran not to engage in uranium enrichment or plutonium production on sufficient scale to enable fabrication of nuclear weapons and to document its compliance with those restrictions by accepting International Atomic Energy Agency monitoring under the Additional Protocol. In exchange, Iran would receive legally binding U.S. security assurances, ratified by the international community generally, that it would not be attacked if it did not initiate attack. Compliance with those assurances would be documented in some manner roughly comparable to Iranian documentation of the materials production restrictions. The international community would also assure Iran of access to fuel cycle services for nuclear power generation at equitable market rates without political conditions. That is the basic formula being applied in North Korea. Iran could not reasonably refuse this arrangement if it were credibly offered and accompanied by a U.S. commitment to normalize political and economic relations.

Engaging Iran in extensive, substantive discussion and adjusting prevailing political attitudes to apply that formula to Iran would support the broader program of conceptual transformation not only by mitigating emotional resistance but also by demonstrating the significance of the principles involved. In requiring both Iran and the United States to accept standards of behavior and to document their compliance through the systematic exchange of information, this arrangement would illustrate the practice of systematic reassurance. In a world of intense antagonisms and dispersed threats where small operations can have catastrophic consequences,

all major states are likely to discover the value and consequence of systematic reassurance. That principle supported by advanced information technology can be expected to emerge as the necessary foundation for international security under the circumstances of globalization.

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THE NEXT U.S. PRESIDENT MUST REmember that nuclear strategy is as important as trade policy. Bush Sr. was known for doing the heavy lifting needed to achieve foreign policy goals, especially if they were bold and potentially controversial. Clinton, by contrast, was wary of engendering conflict with the military, the Pentagon, and Congress and his wariness left subordinates to fight their battles alone, without enough political muscle to prevail.

Another piece of advice: Seasoned professionals, loyal to the president yet respected by careerists, stand a far better chance of defusing bureaucratic resistance than outsiders who come in seeking to impose aggressive—and unfamiliar—agendas on institutions that prize the familiar. Staffing a new administration wisely at the outset could be decisive for later endeavors.

The next commander-in-chief must also support appointees. Leadership is the art of superintending change. Presidents need to demonstrate their commitment to specific, high-priority strategic outcomes, state that these outcomes are nonnegotiable, and be prepared to intervene personally when the process encounters trouble. Tactics for implementation can be left to subordinates who can count on the president's full backing.

Finally, the president must realize that wholesale institutional change may be necessary to enable a new president to