



Can We Stop Iran's Nuclear Bomb?

Analyzing the War in Afghanistan: Obama's Fork in the Road

As President **Barack Obama** continues to weigh the impacts of American presence in Afghanistan, the Belfer Center's **Graham Allison**, **Meghan O'Sullivan**, and **Rory Stewart** offer their comments on the situation at this fork in the road.

Focus on the goal: to disrupt, dismantle, and defeat Al Qaeda.
—**Graham Allison**

Graham Allison (Director, Belfer Center for Science and International Affairs)

"The goals of defeating the Taliban, eliminating the narco-economy, and promoting a modicum of modern statehood in Afghanistan are worthy and desirable. But they are not essential to achieving what the President rightly calls 'our essential strategic problem and rationale' for being in Afghanistan: 'To disrupt, dismantle, and defeat Al Qaeda in Pakistan and Afghanistan, and to prevent their return to either country in the future.' The central challenge for President Obama in the way ahead will be to sustain focus on what is required to deliver victory on his precisely-stated goal—and to reject what is not."

Meghan O'Sullivan (Jeane Kirkpatrick Professor of International Affairs, Harvard Kennedy School; Member, Belfer Center Board of Directors)

The most important outcome is a credible expression of long-term commitment.
—**Meghan O'Sullivan**

"Like most presidents at war, President Obama confronts a bad set of strategic options and has the unenviable challenge of choosing the least worst. In doing so, the administration should remember that the greatest U.S. strategic interests are in Pakistan. Yet, perhaps counter-intuitively, this reality underscores the importance of reinforcing current U.S. efforts in Afghanistan. Closer cooperation with Pakistan is hampered most by Pakistan's belief that the United States is a fickle and easily discouraged partner. Therefore, the most important outcome of this strategic review is a credible expression of long-term commitment. Absent this, the United States cannot expect Pakistanis or Afghans—the people or their governments—to make hard choices and stand against the Taliban and Al Qaeda."

Reduce the number of foreign troops.
—**Rory Stewart**

Rory Stewart (Director, Carr Center for Human Rights Policy; Founder, Carr Center's State Building & Human Rights: Afghanistan



Heavy Duty: General **David Petraeus** (center) discusses military challenges facing the U.S. at a meeting with Belfer Center and other Harvard Kennedy School experts in June. The Belfer Center's **Meghan O'Sullivan** took part in the meeting along with **David Gergen**, director of the HKS Center for Public Leadership.

& Pakistan project; Member, Belfer Center Board of Directors)

"The best Afghan policy would be to reduce the number of foreign troops. In that case, two objectives would remain for the international community: development and counter-terrorism. Neither would amount to building an Afghan state. If the West believed it essential to exclude Al Qaeda from Afghanistan, they could do it with special forces. At the same time, providing generous development assistance would not only keep consent for the counter-terrorism operations, but is also desirable as an end in itself. The only thing worse than troop increases would be total withdrawal. That would be disastrous for us and all Afghans."

Belfer Colleagues Impact Policy in D.C.



Sound Suggestions: **John P. Holdren** (center left), director of the White House Office of Science and Technology Policy, makes a point to President **Barack Obama** (center right) at the first meeting of the President's Council of Advisors on Science and Technology (PCAST) in August. Holdren co-chairs the council.

Climate and energy policy, economic reforms, and defense planning—these are among the plethora of issues Belfer Center colleagues are currently tackling in Washington, D.C. Following is a sampling of work underway by **John P. Holdren**, **Lawrence Summers**, and **Michèle Flournoy**. For more about Belfer colleagues in Washington, see <http://belfercenter.org/governmentappointees>.

John P. Holdren (On leave from Belfer Center faculty and Board of Directors)

"John Holdren, the president's top science adviser, is playing a key role in shaping the Obama administration's strategy to combat global warming." ("Obama's Science Adviser Urges Leadership on Climate," Yale Environment 360, Aug. 14, 2009)

Holdren is working on the passage of a U.S. energy bill and preparing for December's international climate meeting in Copenhagen. He



FROM THE DIRECTOR

Ernie Alli

The conduct of foreign policy is not primarily the conduct of relations with other governments. It's primarily a matter of domestic leadership . . .
—Ernest May

President Obama is facing two of the most important foreign policy decisions of his presidency: *whether* to Americanize the Afghanistan war and *how* to stop Iran from building a nuclear weapon. In thinking about these issues—as with many others lately—I find myself reflecting on my friend **Ernest May**, Charles Warren Professor of History and a longtime member of the Belfer Center Board of Directors, who passed away in the spring. Ernie had impeccable judgment about questions like these—not only intellectual acumen, but also a concern about the real world. As my colleague **Joe Nye** has said, he was an extraordinary model for what the Harvard Kennedy School is all about.



Reflections and Respect: Susan Wood, widow of Ernest May, at a Belfer Center seminar in his honor in September. May's daughters Rachel and Donna are also pictured.

2. "When we think about doing something in the world, we should always very closely inspect the premises we are operating on—always look at them very carefully. McNamara makes the point that the premises underlining the Vietnam War were accepted; they were not analyzed."
3. "The conduct of foreign policy is *not* primarily the conduct of relations with other governments. It's primarily a matter of domestic leadership—this seems to me a tremendously important lesson."

As we think about the fateful choice President Obama faces in Afghanistan and Iran, each of those lessons deserve careful contemplation. Would that we had the benefit of Ernie answering his own questions.

On Afghanistan, we should take a cue from Ernie and revisit the question of whether Afghanistan is, truly, a "war of necessity." The decision on that will fundamentally shape President Obama's legacy. 🇺🇸

On the topics of Afghanistan and Iran, I now find myself asking WWED—"What Would Ernie Do?"

Those of us who had the good fortune to know Ernie share similar stories about his analysis and judgment. Prior to his passing, I had more or less assumed there was an endless fountain there—I kept calling it up and getting a good answer. On the topics of Afghanistan and Iran, I now find myself asking WWED—"What Would Ernie Do?"

To answer that question, I took a look back at Ernie's reflections on the Vietnam War, which he articulated in a 1995 Forum with **Robert McNamara**, **Thomas Vallye**, **Hue-Tam Ho Tai**, and myself. At that event, Ernie drew three lessons from McNamara's book, *In Retrospect: The Tragedy and Lessons of Vietnam*, that, he argued, were applicable whenever our country contemplated going to war. (See full video clip at <http://belfercenter.org/publication/19595>.)

Here they are, in Ernie's words:

1. "When you are thinking about any foreign area—any other government or organized force in the world that has a different history and different culture — you need to think about that history and culture, and not to project your own values—not to think that they'll behave the way you do. You have to think about them in their own context."

Colleagues Impact Policy in D.C. (continued from page 1)

told the *National Journal* in an interview on September 24, that: "It would be a benefit if we could get a bill before Copenhagen because the world does look to the United States to finally become a global leader on this issue. We're already in the process of becoming a global leader with the huge investments in the Recovery Act and clean energy. But we need a bill. And it's not a prerequisite for success in Copenhagen but certainly would help."

Lawrence Summers

(On leave from Belfer Center faculty and Board of Directors)

"No one is indispensable. But at this moment, Larry comes very close," said David Axelrod, Mr. Obama's top political advisor. ("Summers, Contender, to Stay Put," Wall Street Journal, Aug. 26, 2009)



A Consumer Financial Protection Agency is one of the many proposed financial reforms with which Summers, director of the National Economic Council, is involved. He noted in a recent White House blog entry that: "Among the President's proposals, the greatest opposition from Wall Street has been reserved for . . . a unified, independent agency with just one mission: to protect the American consumer from fraud and abuse. . . . It will take on the old ways of treating consumers: predatory lending, inappropriately high credit card rates,

and exploitative overdraft fees. . . . Now is an appropriate moment for financial institutions . . . to consider their duty by recognizing that the status quo is not acceptable."

Michèle Flournoy (Former research fellow, Belfer Center International Security Program)

Under Secretary of Defense for Policy Flournoy testified before the House Armed Services Committee in October on the issue of replacing former President Bush's proposed plan to place 10 large ground-based interceptors in silos in Poland.

Flournoy said the 30 ground-based interceptor missiles to be deployed in Alaska and California by the U.S. by the end of 2010 will address the threat that Iranian intercontinental ballistic missiles (ICBM) pose to the U.S. "The very real threat of short-range and medium-range ballistic missiles—that is developing faster—must be dealt with sooner," she said. "Iran's priorities and capabilities may change in ways that we can't predict. So our new approach does not discount the potential future threat of an Iranian ICBM." 🇺🇸



—Compiled by Sharon Wilke

How to Prevent or Live with a Nuclear-Armed Iran —Compiled by Sharon Wilke

As the debate continues over actions the U.S. and international community should take to prevent Iran from building a nuclear weapon—or using it if built—experts from the Belfer Center and Massachusetts Institute of Technology offer their analyses and advice.

Diplomatic pressure has a chance of stopping nuclear efforts



R. Nicholas Burns
(Professor, Belfer Center)

“At home, the president’s conservative critics charge that his engagement policy has been naive, arguing the United States should return to a more confrontational strategy based on military force. They could not be more mistaken. The president’s patient diplomatic pressure on Iran [combined with the threat of sanctions] is a more sophisticated strategy with a better chance of actually arresting Iran’s nuclear efforts.” (*Obama’s Opportunity in Iran*, Boston Globe, Oct. 1, 2009)

Persuade Tehran it doesn’t need deterrent to be safe



Stephen Walt
(Professor, Belfer Center)

“If we want to stop an Iranian bomb (as opposed to halting its nuclear enrichment activities), we are going to have to convince Iran that it doesn’t need a nuclear deterrent to be safe. . . . Persuading Tehran that they don’t need a deterrent requires taking the threat of force, regime change, and the like *off the table*, instead of ratcheting the threat level up.” (*What is Iran up to?* ForeignPolicy.com, Sept. 25, 2009)

Transparency is vital to any deal with Iran



Graham Allison (Director, Belfer Center)

“The central policy question has become: What combination of arrangements, inside and outside Iran, has the best chance of persuading it to stop short of a nuclear bomb? More important than how many centrifuges Iran continues operating at Natanz is how

transparent it will be about all of its nuclear activities. Maximizing the likelihood that covert enrichment will be discovered is the best way to minimize the likelihood that it will be pursued.” (*A New Red Line from Iran*, Washington Post, June 1, 2009)

A deal could strengthen arguments against building nuclear weapons



Matthew Bunn
(Associate Professor, Belfer Center)

In comments for this article, Bunn said, “I don’t think the Iranian government as a whole has made a concrete decision to build nuclear weapons. Some factions want that outcome, but others appear to believe Iran can get what it needs by establishing the option to build a weapon when it chooses, without the international reaction that would be provoked by building nuclear weapons. A deal could strengthen the arguments of those who don’t think nuclear weapons are necessary for Iran’s security.”

Bunn believes Iran will not agree to a negotiated deal that would ban all enrichment in Iran and has suggested a range of measures that could limit the security risks of a deal allowing some continued enrichment. These include, among others, Iranian agreement to accept the Additional Protocol and a broad range of additional transparency measures to limit the risk of covert enrichment, international ownership and staffing for the centrifuges that continue to operate, and requirements for declaration and monitoring of all centrifuge-related procurement, testing, and manufacture.

To get a deal that addresses some of the international community’s concerns, Bunn argues, will require addressing some of Iran’s concerns as well, by implementing a broad incentives package, agreeing that the United States will not attack or attempt to overthrow the regime as long as Iran complies with its nuclear obligations and does not commit or sponsor aggression or terrorist attacks against others, and establishing dialogues to address other issues of mutual concern. (See: “Options for Limiting the Security Risks from a Negotiated Nuclear Settlement with Iran,” Presentation, Belfer Center for Science and International Affairs, Sept. 22, 2009. See: <http://belfercenter.org/SecurityRiskOptions>.)

Nuclear Matters: Matthew Bunn discusses nuclear weapons at a Belfer Center Project on Managing the Atom seminar in June.



Iran at a Crossroads: R. Nicholas Burns (center), professor of the practice of diplomacy and international politics with the Belfer Center, at a John F. Kennedy Jr. Forum titled “Iran: War or Peace?” Panelists included Elliott Abrams (left) and Mohsen Milani.

Deterrence and containment can work again



Barry Posen (Professor, Massachusetts Institute of Technology)

“The strategy of deterrence and containment has worked for the United States before; there is no reason why it cannot work again. . . . In a confrontation with the United States, Iran would run risks of complete destruction, and it cannot threaten the United States with comparable damage.” (*A Nuclear-Armed Iran: A Difficult But Not Impossible Policy Problem*, A Century Foundation Report, 2006)

Convince Russia a nuclear Iran is not in its best interests



William Tobey (Senior Fellow, Belfer Center)

“Moscow must understand that the absence of effective international action on Iran’s nuclear program will drive other policies in directions anathema to the Kremlin. It will strengthen NATO unity. It will make missile defense deployments more imperative. Most of all, it will cause countries throughout Europe and the Middle East again to turn to the United States for protection and leadership. In short, Russia must be convinced that a diplomatic double game on Iran is not worth the candle.” (*Is Moscow playing a double game on Iran’s nukes?* Foreign Policy, Sept. 4, 2009)

U.S. must acknowledge legitimacy of Iran’s government



Kayhan Barzegar (Research Fellow, Project on Managing the Atom/International Security Program, Belfer Center)

“From the Iranian perspective . . . the first step is Washington’s acknowledgement of the legitimacy of the current leadership, recognition of the right to an independent nuclear fuel cycle, and a measure of respect for the nation’s long-held history as a regional power.” (*The Paradox of Iran’s Nuclear Consensus*, World Policy Journal, Fall 2009)



Agriculture Innovation in Africa: Addressing Climate-Smart Growth

by Beth Maclin

The Belfer Center's new Agriculture Innovation in Africa project will work to address the dual challenges of climate change and food shortages with the help of a generous grant from the Bill and Melinda Gates Foundation.

The project, directed by Harvard Kennedy School's Professor of the Practice of International Development **Calestous Juma**, seeks to engage with policy makers and focus information dissemination on efforts to align science and technology missions and operations with agricultural development goals in Africa's Regional Economic Communities. It is part of the larger agenda to promote regional economic integration.

Advancing climate-smart growth strategies will demand new diplomatic leadership.
—Calestous Juma

"The initiative is necessary because of the worsening food situation in Africa and the rise of new threats to agriculture such as climate change," said Juma. "The timing is critical: there is greater recognition among African leaders of the importance of innovation in economic development today than was the case a decade ago. Advancing regional innovation strategies is better done in the early stages of the continent's regional integration efforts." Such cooperation, he said, "will benefit from the growing efforts among African countries to integrate their economies and create larger markets."

The project continues the work published in "Freedom to Innovate: Biotechnology in Africa's Development," which Juma and **Ismail Serageldin** co-authored and is based on the work done by the High Level African Panel on Modern Biotechnology. The panel, comprised of people from both in and outside of Africa, was established by the African Union and the New Partnership for Africa's Development to provide independent advice on biotechnology. The panel's main recommendations include the need for individual countries in central, eastern, western, northern, and southern Africa to work together at the regional level to scale up the development of biotechnology.

"Advancing climate-smart growth strategies will demand new diplomatic leadership," Juma wrote recently. "[Africa] will need to respond regionally through a broad range of measures aimed at sustaining human health, agriculture, energy, water supply, tourism, and many other vital sectors.

"Most of Africa's states lack the flexibility to respond to major ecological upheavals," he said. "They need room to [maneuver] and can achieve it by integrating their economies into regional groupings."

Responses to climate change disruptions must come at the regional level.
—Calestous Juma

Juma plans to publish a book and host an executive training workshop that will inform



Inside Innovation: Calestous Juma observes tissue culture propagation of bananas at a genetics technology lab in Nairobi, Kenya.

policy leaders on *options for action*, not simply the challenges that they face in bringing science and technology to bear on agriculture and economic development. There is also a conference planned for mid-2010.

A new blog on the Belfer Center website, "Agricultural Innovation," features posts by Juma on agriculture in Africa as the foundational sector for the continent's economic future. In his second entry, Juma takes a look into the future of climate change and reveals disruptions that will take on wartime proportions. He urges that responses must come at the regional level and match the enormity of the challenge at hand. "The best way to avert political turmoil is to act in time and treat the situation as a state of emergency. That means now." 📖

Melissa Hathaway Joins Cyber Security Initiative

by Beth Maclin

Melissa Hathaway, former acting senior director for cyberspace at the National Security Council, joined Harvard Kennedy School's Belfer Center for Science and International Affairs in October as a senior advisor to its cyber security initiative.

Hathaway worked on cyber security for Presidents **George W. Bush** and **Barack Obama** until August 2009, when she left to establish Hathaway Global Strategies, LLC. She led President Obama's 60-Day Cyberspace Policy Review from February–May 2009.

The cyber security project at the Belfer Center, known as Project Minerva, is a joint effort between the Department of Defense, Massachusetts Institute of Technology, and Harvard University. The project explores a wide range of the issues within cyber security from the contexts of international relations theory and practice.

"I am honored to be joining the team at Harvard Kennedy School's Belfer Center and my distinguished colleagues from Harvard and MIT on the Minerva project," Hathaway said. "I am excited about the opportunity to partner with the talent and expertise of academia and harness academia's power to generate new ideas, inform policy, and incubate new technologies to address the serious cyber security challenges facing our nation."

"There are at least 20 international venues that are determining the future of the information communications infrastructure," Hathaway said. "Our nation needs to determine what it collectively needs and wants—and find ways to foster public and private shared goals."

While at the Belfer Center, Hathaway will work to develop a better understanding of the policy gaps in international relations. She will also publish at least two papers and plans to



Digital Defense: Melissa Hathaway presenting on "Cybersecurity: Assuring a Secure, Resilient and Reliable Digital Infrastructure" at a Belfer Center seminar in May 2009.

contribute to classes at Harvard Kennedy and Law Schools.

"I am thrilled Melissa Hathaway is joining the Belfer Center and Harvard Kennedy School," said **Eric Rosenbach**, the Center's executive director for research. "She will be critical to moving the project forward." 📖

These pages feature a few of the talented women and men who are current and former faculty, fellows, staff, and associates of the Belfer Center whose work is making significant contributions in public and private sectors around the world.

BELFER

Faculty, Fellows,

Featured Fellows—Focus on Research



Melissa Willard-Foster on Peace Agreements

International Security Program Research Fellow

Q What are key components to a lasting peace agreement?

A I think peace agreements can be considered essentially deals that require enforcement to hold. When one party has an incentive to no longer live up to its side of the deal, this is when things fall apart. There has been a lot of research on precisely what is needed to make these deals hold in terms of changes to the balance of power, and ways to invite third parties in to enforce the agreement.

[F]oreign-imposed regimes tend to have weak bases of domestic support, even when they are democratic.

Some recent research says regime change is an effective way to ensure enforcement because you are removing some of the very people who have every incentive to undermine the peace agreement. There is a lot to be said for this; however, there is also a lot to be said about the idea that the state imposing the new regime needs to have a rationale to continue to support it, especially because foreign-imposed

regimes tend to have weak bases of domestic support, even when they are democratic. When that foreign support evaporates, these governments are quite likely to fall, and the result may be much worse and even re-invite war.



Vipin Narang on Taliban threat to Pakistan nuclear weapons

International Security Program/Project on Managing the Atom Research Fellow

Q How much of a threat does the Taliban pose to Pakistan's nuclear stockpile, and what is Pakistan doing to protect against that threat?

A When the army itself has custody of nuclear weapons, it's hard to conceive of a realistic threat to the integrity of those assets. It's clear that the Pakistan army hasn't relinquished control of nuclear weapons to the civilian government now, so in the unlikely event of a Taliban takeover, I don't think that the army would relinquish control to the Taliban, either. That said, there are several points of vulnerability that do warrant attention.

The Pakistani nuclear infrastructure that produces nuclear weapons has personnel liability programs, but over time it's conceivable that an insider could steal or divert enough nuclear material that would go undetected and perhaps pass it off to more radical elements either within or outside of Pakistan. When nuclear weapons are being transported between

the civilian nuclear infrastructure and the army, Pakistan does not use robust, large convoys. They transfer clandestinely. Those tend to be less guarded and can be a potential point of vulnerability when foreign knowledge of a transport route might enable somebody within the Pakistani nuclear establishment to work or collaborate with a terrorist organization that could target that particular convoy.

It's conceivable that an insider could steal or divert enough nuclear material ... and perhaps pass it off to more radical elements ...

Belfer Center Alumni—News and Notes

Belfer Center alumni **Stephen Biddle** (International Security Program (ISP) research fellow, 1985–1987), from the Council on Foreign Relations, and **Robert Gallucci** (ISP research fellow, 1989–1993), president of the MacArthur Foundation, were named by Secretary of Defense **Robert M. Gates** as new members to the Defense Policy Board. The board provides the secretary, deputy secretary, and under secretary for policy with independent, informed advice and opinions concerning matters of defense policy.

Kristin Bakke (Intrastate Conflict Program/ISP research fellow, 2007–2008) was named lecturer in politics and international relations in the Department of Political Science, School of Public Policy at University College, London.

William (Dale) Anderson (ISP research fellow, 2008–2009) was assigned to the Pentagon (the Office of the Deputy Assistant Secretary of Defense for Strategy) as military assistant for Air Warfare Programs. The office prepares the Quadrennial Defense Review and the National Defense Strategy among other duties.

Rasmus Bertelsen (Science, Technology, and Public Policy research fellow, 2006–2008; Dubai Initiative research fellow, 2008–2009) was named Japan Society for the Promotion of Science Fellow at United Nations University's Institute of Advanced Studies in Yokohama, Japan.

Belfer Center Welcomes 2009–10 Fellows

As students returned to Harvard Kennedy School in September, more than 30 new fellows arrived at the Belfer Center, ready to conduct research within the Center's various programs and projects. Hailing from countries as diverse as South Korea, Iran, South Africa, and Italy, as well as the United States, they are researching issues of critical significance, ranging from security challenges to climate change and energy policy.

"The Belfer Center's research fellows bring to the Center and to Harvard a rich diversity of experience, insight, and ideas," said **Eric Rosenbach**, Belfer Center executive director for research.

For the full list of fellows and their areas of research, see: <http://belfercenter.ksg.harvard.edu/publication/19570/>.

Making Connections: Belfer Center research fellows **Melissa Chan** (left), **Sarah Zukerman Daly**, and **Charles Jones** at Center orientation in September.



Belfer Center Programs and Projects: International Security Program (ISP); Science, Technology, and Public Policy (STPP); Environment and Natural Resources Program (ENRP); Program on Intrastate Conflict (ICP); Dubai Initiative (DI); Energy Technology Innovation Policy research group (ETIP); Project on Managing the Atom (MTA); Science, Technology, and Globalization Project (STG); Broadmoor Project; Harvard Project on International Climate Agreements; Initiative on Religion in International Affairs; Agricultural Innovation in Africa



Mohammed Al-Juaied, a 2008–09 visiting scholar with the Belfer Center's Energy Technology Innovation Policy research group, co-authored the Belfer Center discussion paper, "Realistic Costs of Carbon Capture," with **Adam Whitmore**, chief economist with Hydrogen Energy International Ltd. The paper, published in July 2009, is available at: <http://belfercenter.org/CCcosts>.

Abstract:

There is a growing interest in carbon capture and storage (CCS) as a means of reducing carbon dioxide (CO₂) emissions. However there are substantial uncertainties about the costs of CCS. Costs for pre-combustion capture with compression (i.e. excluding costs of transport and storage and any revenue from EOR associated with storage) are examined in this discussion paper for First-of-a-Kind (FOAK) plant and for more mature technologies, or Nth-of-a-Kind plant (NOAK).

There is a growing interest in carbon capture and storage (CCS) as a means of reducing carbon dioxide. . . . However there are substantial uncertainties about the costs.

For FOAK plant using solid fuels, the levelised cost of electricity on a 2008 basis is approximately 10¢/kWh higher with capture than for conventional plants (with a range of 8–12¢/kWh). Costs of abatement are found typically to be approximately \$150/tCO₂ avoided (with a range of \$120–180/tCO₂ avoided). For NOAK plants the additional cost of electricity with capture is approximately

Realistic Costs of Carbon Capture

by Mohammed Al-Juaied and Adam Whitmore

2–5¢/kWh, with costs of the range of \$35–70/tCO₂ avoided. Costs of abatement with carbon capture for other fuels and technologies are also estimated for NOAK plants. The costs of abatement are calculated with reference to conventional SCPC plant for both emissions and costs of electricity.

Estimates for both FOAK and NOAK are mainly based on cost data from 2008, which was at the end of a period of sustained escalation in the costs of power generation plant and other large capital projects. There are now indications of costs falling from these levels. This may reduce the costs of abatement and costs presented here may be "peak of the market" estimates.

Innovation and integration can both lower costs and increase net output. . . . These factors are expected to reduce abatement costs by approximately 65 percent by 2030.


If general cost levels return, for example, to those prevailing in 2005 to 2006 (by which time significant cost escalation had already occurred from previous levels), then costs of capture and compression for FOAK plants are expected to be \$110/tCO₂ avoided (with a

range of \$90–135/tCO₂ avoided). For NOAK plants costs are expected to be \$25–50/tCO₂.

Based on these considerations a likely representative range of costs of abatement from CCS excluding transport and storage costs appears to be \$100–150/tCO₂ for FOAK plants and perhaps \$30–50/tCO₂ for NOAK plants.

[M]ature technology would be competitive with conventional fossil fuel plants at prevailing carbon prices.

The estimates for FOAK and NOAK costs appear to be broadly consistent in the light of estimates of the potential for cost reductions with increased experience. Cost reductions are expected from increasing scale, learning on individual components, and technological innovation including improved plant integration. Innovation and integration can both lower costs and increase net output with a given cost base. These factors are expected to reduce abatement costs by approximately 65 percent by 2030.

The range of estimated costs for NOAK plants is within the range of plausible future carbon prices, implying that mature technology would be competitive with conventional fossil fuel plants at prevailing carbon prices. 

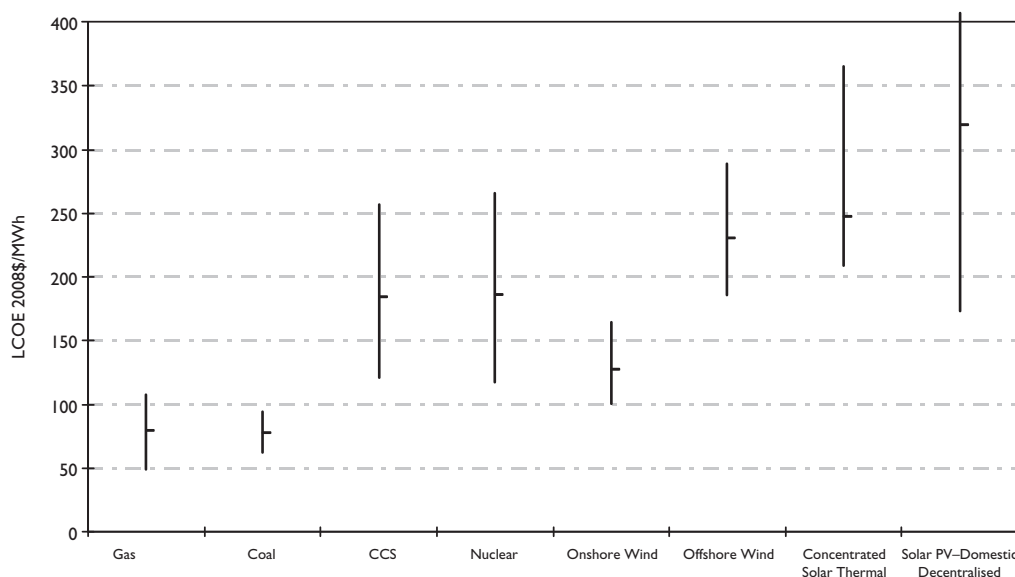


Figure 8: Relative Costs of Low Carbon Electricity Generation. Source: Estimates by Hydrogen Energy Based on a Return of 10 percent (Nominal Post-Tax).

Biofuels: A Solution for the Developing World?

Workshop urges clear standards to prevent negative impacts

by Amanda Swanson

What is the potential for biofuels to help meet the world's energy needs, protect the environment, and advance the livelihoods of farmers and other land users around the world? Participants of a workshop organized by the Belfer Center's Environment and Natural Resources Program (ENRP) and Harvard Kennedy School's Sustainability Science Program discussed these questions as they addressed the goals of a sustainable biofuel industry in developing countries and the role of certification processes in attaining these goals. The two-day event in late spring attracted more than 20 leading experts from around the world, representing academia, business, and government.

"In the next few years, both the United States and Europe will endorse environmental sustainability standards that biofuels must reach to be certified as renewable fuels," said **Henry Lee**, director of ENRP. "If governments do not require reductions in direct emissions of carbon, they will undercut their biofuel mandates, but if they become overly ambitious and include a wide menu of standards dictating land and water uses as well as social goals, they may seriously undermine the potential for biofuel production in the developing world."

A report on the workshop, produced by Lee and **Charan Devereaux** and titled, "Biofuels and Certification," looks at the issues involved in mandating the use of biofuels for a particular percentage of transportation fuels, and in particular, the process of certifying whether the biofuels meet clear standards.

A strong global biofuels industry will not emerge unless these environmental and social concerns are addressed.
—**"Biofuels and Certification"**

The executive summary notes the following:

Liquid biofuels can provide a substitute for fossil fuels in the transportation sector. Many countries have mandated the use of biofuels, by creating targets for their use. If not implemented with care, however, actions that increase biofuel production can put upward pressure on food prices, increase greenhouse gas (GHG) emissions, and exacerbate degradation of land, forest, and water sources. A strong global biofuels industry will not emerge unless these environmental and social concerns are addressed.

Interested parties around the world are actively debating the design and implementation of policies to meet the biofuel goals, particularly those established in the United States

and Europe. In general, policy options for managing the potential risks and benefits of biofuel development should specify not only clear standards governing biofuel content and production processes, but also certification processes for verifying whether particular biofuels meet those standards, and specific metrics or indicators on which to base the certification. Historically, many standards in the energy and environment fields have ultimately been set or supported by governments. Many of the certification processes have been voluntary, carried out by independent third parties. The biofuels case is a young one, however, with questions of goals, standards, certification, and metrics still in interdependent flux. The workshop focused its discussions on certification issues, but found the discussions naturally reaching into ongoing debates regarding possible goals, standards, and metrics.

While the threat to both forests and food supplies from increased biofuel production is real, it is not clear that setting broad sustainability standards and then requiring sellers to certify . . . standards have been met is the best way to address these interconnected problems.
—**"Biofuels and Certification"**

Many countries are proposing that for a biofuel to qualify as contributing to government-mandated targets or goals, it must be certified to meet certain standards. These standards could be limited to the amount of GHG emitted in the production process or could include a number of other environmental sustainability concerns ranging from deforestation and biodiversity to water resources. While the threat to both forests and food supplies from increased biofuel production is real, it is not clear that setting broad sustainability standards and then requiring sellers to certify that all of those standards have been met is the best way to address these interconnected problems. In particular, if too many standards and related certification requirements are put in place too soon, this could constrain the development of a global biofuels market. In contrast, certification targeted at a specific and limited set of problems and designed with the flexibility to



Fueling the Debate: Henry Lee (left), director of the Belfer Center's Environment and Natural Resources Program, leads a discussion at Harvard Kennedy School's Biofuels and Certification workshop in May.

adjust to changes in policies and programs can enhance the public's acceptance of the biofuel option while protecting key social and environmental goals.

A second set of questions revolves around the locus of responsibility for certifying whether biofuel production meets sustainability targets. Should the biofuel processing firms, third parties, or governments be responsible for certifying the production of biofuels? This question also elicited significant discussion. While it could be easier to have individual country governments assume the certification of production responsibility, some governments may not have the capacity to implement an effective certification process. Production facilities that comply with international standards should not be kept out of the market because of their government's inability to manage the process. The possible contribution to effective certification of third party organizations or public-private partnerships should not be underestimated.

The complete report can be accessed at: <http://belfercenter.org/biofuelsandcertification>.



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AP PHOTO: CHARLES RIEDEL

Q&A

U.S. Senator Jack Reed

An alumnus of Harvard Kennedy School, Francis (Jack) Reed was elected to the U.S. Senate from Rhode Island in 1996. A leader on defense, education, and health care issues in the Senate, Reed is a senior member of the Armed Services Committee. Prior to his Senate election, he represented his state in the U.S. House of Representatives. Reed served in the U.S. Army from 1967 to 1979, earning a Masters in Public Policy from the Kennedy School in 1973. In 1982, he received a J.D. from Harvard Law School.

Q Former President Clinton recently observed that when he thinks about the predicament in Afghanistan, he sees “ghosts of Vietnam.” What do you find to be the most relevant lessons from Vietnam for the decisions that President Obama and the nation now face in Afghanistan?

The experience in Vietnam taught us that insurgencies are ultimately political struggles shaped by local culture. Military actions can buy time, but they are not decisive in themselves. The decisive factor is the commitment of people to their government, which presumes a government that can provide security and public service, and is perceived as working on behalf of its people.

Vietnam also taught us to carefully analyze the assumptions underlying our involvement and the nature of the particular struggle. We must ensure that there are vital American national security interests at stake, and these interests cannot be protected without our involvement. Unlike Vietnam, we were drawn to Afghanistan by a direct attack on American soil.

Finally, Vietnam taught us that our policy must be sustainable over time. This factor, in large part, rests on the willingness of the American people to support the effort, and the ability of the Administration to effectively communicate the rationale and consequences of our involvement.

Q Do you believe that a counterinsurgency strategy is an essential prerequisite for achieving President Obama’s stated objective “to disrupt, dismantle, and defeat al Qaeda in Pakistan and Afghanistan, and to prevent their return to either country in the future”?

Counterinsurgency embraces a wide range of tasks that go beyond military operations and extends to governance and economic development. Moreover, in most cases,

counterinsurgency strategy also assumes a complimentary counterterrorism strategy. The counterterrorism strategy is focused on military activities to disrupt and destroy terrorist networks. Both strategies are important in Afghanistan.

Counterterrorism operations depend on accurate and timely intelligence and speed of action. These factors are enhanced by a “presence.” Although some suggest that this presence can be remote or virtual through the use of technology, there is a strong case for a physical presence. In addition, the ability of insurgents, particularly the Taliban and Al Qaeda, to regenerate their forces indicates that counterterrorism operations will be long-term, which also argues for a physical presence.

Counterinsurgency operations are intended to stabilize the legitimate government and, as rapidly as possible, provide the local capacity to ensure security and adequate governance. This process requires a physical presence in order to create an environment for long-term and sustainable activities which shifts the bulk of operations to local forces to prevent regeneration of insurgent forces.

Q You have said that elements of the insurgency in Afghanistan might be persuaded to cease attacks or even switch sides. What strategy would you propose to peel the reconcilable Taliban from the incorrigibles?

The Taliban is comprised of a core of fanatical jihadists who will not give up armed resistance to the legitimate government. However, there are a number of Taliban who are involved for non-ideological reasons. These numbers are difficult to determine, but they are not insignificant. Some are drawn to the Taliban for economic reasons. Some are reacting to tribal pressures. Some are disenchanted with the government for its inability to deliver basic services. Some are engaged in criminal activities and the Taliban serve as a convenient, short-term ally.

To win over a portion of these non-ideological Taliban, we have to provide incentives and security. We have to have a uniform procedure, including vetting applicants, that is supported by the national government in Kabul, but also implemented and endorsed by local authorities including tribal and religious leaders. The most obvious incentive is paid employment. This employment must be seen as more than temporary. Concurrent with these types of efforts, the Afghan government and international forces must deploy an aggressive information effort to discredit the Taliban so that individual



U.S. SENATE

Taliban will be more disposed to switch sides and tribal and religious leaders will be more willing to endorse these efforts and guarantee the sincerity of the individual.

Q Most analysts agree that the U.S. has more vital interests in the fight of Pakistan than in Afghanistan. Do you agree? If so, is the allocation of attention and resources between Afghanistan and Pakistan appropriate? If not, how should it be adjusted?

Pakistan is the most critical area of concern in the region, if not the world. The leadership of Al Qaeda is located there. The leadership of the Taliban is there. Within Pakistan and spilling into Afghanistan is a syndicate of terrorist groups with various affiliations to Al Qaeda and the Taliban. And, a disturbing number of worldwide terrorist plots emanate from Pakistan. Added to this tumultuous and dangerous mix is the sobering fact that Pakistan has a large and growing nuclear arsenal.

One of the most important insights that President Obama brought to our strategy was recognition of the interrelationship between Afghanistan and Pakistan, and also India. As such, we must measure our efforts in terms of both countries and not view each country in isolation. As a result of this regional perspective, we are reevaluating our posture in Afghanistan and increasing the quantity of our aid to Pakistan as well as the focus of our efforts there. In Pakistan, we are working with the military to help develop their counterinsurgency skills and to acquire equipment geared to counterinsurgency operations. We have also increased our developmental aid to help provide an appropriate complement to military efforts. These changes represent an improved approach to meeting our natural security needs.

Although our efforts in Afghanistan and Pakistan are linked, we operate under different constraints. In Afghanistan, as the largest component of the NATO force, we are directly engaged in support of that country’s government. In Pakistan, we have no similar military presence, and we are supporting the efforts of an established and sovereign country and their armed forces. As such, the needs of each country are different and the means of meeting their needs is therefore different. 🇺🇸

AP PHOTO/HARRY HAMBURG



Power Walk: Senator Jack Reed (left) with Senator Kent Conrad in Washington, D.C.

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Providing Leadership . . .

MARTHA STEWART



Human Interest: **Samantha Power**, senior director for multilateral affairs with the National Security Council and founding executive director of Harvard Kennedy School's Carr Center for Human Rights Policy, speaks at a John F. Kennedy Jr. Forum, "Why Human Rights Matter," celebrating the 10th anniversary of the Carr Center. Prior to the launch of the Carr Center, Power was executive director of the Belfer Center Human Rights Initiative. During the event, which included current and past Carr Center Directors **Rory Stewart** and **Sarah Sewall**, Power said that one of the most gratifying things about her work with the Carr Center is to see how questions that were being asked 10 years ago are no longer on the table.

TOM FITZSIMMONS



Dual Decisions: **Graham Allison** (center), director of the Belfer Center, moderates a John F. Kennedy Jr. Forum discussion with **Kathleen Stephens**, United States ambassador to South Korea, and **Han Duk-soo**, South Korean ambassador to the U.S. The discussion of challenges facing the Korean peninsula was titled "Ambassadors' Dialogue." The event was sponsored by the Belfer Center along with The Kim Koo Forum on U.S.-Korea Relations at the Korea Institute at Harvard University and The Korea Economic Institute.

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Sense and Security: **Leslie Gelb** (center), president emeritus of the Council on Foreign Relations, enjoys a light moment with **Joseph Nye** and **Paula Dobriansky** at a Belfer Center directors' lunch in October prior to discussing his new book *Power Rules: How Common Sense can Rescue American Policy*. Gelb is a former reporter and editor for the *New York Times* and previously was director of policy planning and arms control for international security affairs at the Department of Defense. He received the Pentagon's highest award, the Distinguished Service Award. In his book *Power Rules*, Gelb says deterrence is underappreciated as a policy tool, even though it worked in the Cold War. He says: "deterrence has worked on almost all occasions when presidents positioned it clearly and firmly."



Essential Safeguards: **Olli Heinonen**, International Atomic Energy Agency (IAEA) deputy director general and head of the Department of Safeguards, presents on nuclear nonproliferation at a Belfer Center/Project on Managing the Atom (MTA) seminar in September. He makes a point to **Matthew Bunn** (right), associate professor of public policy and co-principal investigator of MTA. Also pictured is **Henry Lee**, director of the Center's Environment and Natural Resources Program, listens.

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Timely Advice: The Belfer Center's Energy Technology Innovation Policy (ETIP) research group discussed their recently released book *Acting in Time on Energy* at an event sponsored by Brookings Institution in Washington, D.C. in late spring. The authors who discussed their findings and recommendations regarding policy included **Kelly Sims Gallagher** (second from right), then director and currently senior associate of ETIP and energy and environmental policy professor at Tufts University, and (left to right) the Belfer Center's **Laura Diaz-Anadon**, Harvard Kennedy School's **William Hogan**, and the Belfer Center's **Henry Lee**. The event was moderated by Brookings' **Robert Faherty** (right).

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Pivotal Position: **Richard Falkenrath**, deputy commissioner of counter terrorism with the New York City Police Department and former executive director of the Belfer Center, speaks in September at a Belfer Center directors' lunch on "Terrorism: A View from the Trenches." Falkenrath oversees several hundred uniformed and civilian personnel assigned to security and counter-terrorism units.

SPEAKERS

Advancing Policy-Relevant Knowledge



Energizing the Electorate: Secretary of Energy **Steven Chu** (left) speaks at a John F. Kennedy Jr. Forum in August about the need for innovative energy technologies to help solve the climate change challenge. U.S. Congressman **Edward Markey**

introduced Chu and joined in the forum discussion titled “Laying the Foundation for the Next Generation of Clean Energy Jobs.”



Worldly Wisdom: **Paul Volcker**, chair of President Obama's Economic Recovery Advisory Board, presents “The Financial Crisis in Perspective” at a John F. Kennedy Jr. Forum in October. Volcker, a member of the Belfer Center International Council, has provided the president with international as well as national perspective on the crisis. “I don't think we're going to have a sustainable recovery from this recession unless we deal with the underlying structural imbalance in the economy,” Volcker said during the Forum. “I think we've got to regain—to sound really old fashioned—some ability to produce goods.”



Just and Unjust: **Niall Ferguson** (center), Laurence A. Tisch professor of history at Harvard and member of the Belfer Center's board of directors, discusses “Justice: What's the Right Thing to Do?” with panelists **Lani Guinier** (right) and **Michael Sandel**. Not pictured is **Peggy Noonan**, who also took part in the Forum discussion in October at the John F. Kennedy Jr. Forum.



Common Grounds: **Dan Meridor** (left), minister of intelligence and atomic energy in the Israeli Cabinet, discusses security and nuclear issues at a Belfer Center directors' seminar. **Ryan Crocker**, former ambassador to Iraq, Pakistan, Lebanon, Syria, and Kuwait, took part in the discussion. Crocker spoke later in the day at the John F. Kennedy Jr. Forum event titled “Lessons from the Long War: The U.S. in the Middle East.”



Ultimate Deterrence: **Negeen Pegahi**, a research fellow with the Belfer Center's Project on Managing the Atom (MTA) and the International Security Program, presented “Deterrence Theory and Nuclear Strategy: Basic Logics and Concepts,” at a brown bag seminar in June. The seminar, a part of MTA's “Nuclear 101” series, focused on uses of force/military strategy, basic concepts with respect to nuclear energy, and broader political implications for nuclear activity.



Pakistani Presence: **Hassan Abbas** (right), a senior advisor with the Belfer Center, with Pakistan President **Asif Ali Zardari** in July. Abbas, a former Pakistani government official who is currently a Bernard Schwartz Fellow at the Asia Society's New York headquarters working on U.S. relations with South and Central Asia, is a former Belfer Center fellow.

SPOTLIGHT

Paula Dobriansky by Sasha Talcott

Paula Dobriansky is a senior fellow with Harvard Kennedy School's Belfer Center for Science and International Affairs. She previously served as undersecretary of state for democracy and global affairs for the Bush administration, and also was a senior vice president and head of the Washington office for the Council on Foreign Relations.

It was, wrote the Associated Press, a bit of “star power in Baghdad.” When actress **Angelina Jolie** visited Iraq in early 2008, she arrived with a senior State Department official: **Paula Dobriansky**, then undersecretary of state for democracy and global affairs.

Together, Dobriansky and Jolie met with General **David Petraeus**, top commander in Iraq, as well as Iraq Prime Minister **Nouri al-Maliki**, to highlight the plight of Iraq's displaced. Though thousands of refugees had returned to the country, many of their communities had been bombed, shelled, or taken over by another of Iraq's rival factions. Through the series of meetings, Dobriansky and Jolie (who serves as the UN's Goodwill Ambassador on the topic) were able to persuade the office of the UN High Commissioner for Refugees to significantly increase its staff in Baghdad and the Iraqi Government to provide more aid to the displaced.

“It was a very significant and moving trip,” Dobriansky said.

Dobriansky, now a senior fellow at Harvard Kennedy School's Belfer Center, served as undersecretary from 2001 to 2009, making her the longest-serving person in that position in history. Her portfolio encompassed a broad range of critical foreign policy issues, including democracy, human rights, labor, refugee and humanitarian relief matters, and environmental/science issues. She led the U.S. delegation in international negotiations that focused on a successor to the Kyoto Protocol, the current global climate agreement whose first commitment period ends in 2012. She

also was designated as the Special Coordinator for Tibetan Issues and the President's Special Envoy on Northern Ireland, with the rank of Ambassador.

While growing up, Dobriansky originally thought she would go into medicine. But her father, **Lev Dobriansky**, a Georgetown economics professor and prominent member of the Ukrainian-American community, persuaded her to pursue a career in foreign affairs instead. She attended Georgetown's School of Foreign Service as an undergraduate and later earned her master's and Ph.D. from Harvard, where she wrote her thesis on the military determinants of Soviet foreign policy. While at Harvard, she took classes with Harvard Kennedy School professors **Graham Allison**, **Joseph S. Nye**, and **Ernest May**.

Her portfolio encompassed ... democracy, human rights, labor, refugee and humanitarian relief matters, and environment/science issues.

While still working on her dissertation, Dobriansky took a job in President Reagan's National Security Council, where she eventually became director of European and Soviet Affairs. She then moved to the State Department, where she worked on human rights issues, and later the United States Information Agency, where she served as associate director for policy and programs. In the late 1990s, she



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became senior vice president and head of the Washington office of the Council on Foreign Relations.

At the National Security Council, Dobriansky worked with **Colin Powell**, then deputy national security advisor. When President Bush named Powell Secretary of State, Powell played a key role in bringing Dobriansky to the State Department as undersecretary of state for global affairs. Dobriansky had also gotten to know Bush foreign policy advisor **Richard Armitage** during the Bush-Cheney campaign, and she served as a foreign policy expert discussing the Republican platform during the 2000 Republican National Convention.

As undersecretary, Dobriansky was especially active in setting up a global fund for HIV/AIDS, tuberculosis and malaria, as well as working on international women's issues—including the establishment of the U.S.-Afghan Women's Council. While serving as the President's Special Envoy to Northern Ireland, Dobriansky played a pivotal role in holding a business investment conference there, underscoring U.S. commitment to the peace process. She also spearheaded many of the State Department's democracy promotion initiatives.

Dobriansky's array of responsibilities made for no shortage of high-profile moments. Soon after becoming undersecretary, Dobriansky found herself in the White House residence meeting with President **George W. Bush** and the **Dalai Lama**. In the meeting, the Dalai Lama spoke of his desire to establish a dialogue with Chinese government officials—an initiative that the Bush Administration helped launch during Dobriansky's tenure.

“His Holiness is a person of great compassion, who desires to see cultural and religious freedom in Tibet,” Dobriansky said.

Her return to Harvard after 30 years marks a full circle for Dobriansky—and a chance to work alongside the professors who were influential in her early career. Dobriansky still remembers Allison's and Nye's class on national security decision-making, where she wrote a one-page policy memo on conventional arms transfers.

“It was one of the best courses being taught at the time at the Kennedy School,” she said. “It was very practical. I have well-used many of the skills that I acquired from that course.” 📖



Star Power: Paula Dobriansky (left) with General **David Petraeus** and **Angelina Jolie** in Iraq in 2008.



Paul Anastas, former senior associate with the Environment and Natural Resources Program, was nominated by President Obama to be assistant administrator for

research and development at the Environmental Protection Agency. Anastas, known as the father of “Green Chemistry,” is director of Yale’s Center for Green Chemistry and Green Engineering.



R. Nicholas Burns, a member of the Belfer Center’s board of directors and Harvard Kennedy School professor of the practice of diplomacy and international politics, was named director of the Aspen Strategy Group. Co-chaired by **Brent Scowcroft** and the Belfer Center’s **Joseph S. Nye**, the Aspen Strategy Group is a bi-partisan forum “dedicated to thoroughly exploring the critical national security and foreign policy challenges facing the nation.”



Vaidyanantha Gundlupet, a research fellow with the International Security Program and Project on Managing the Atom, received the 2009 Kenneth N. Waltz Dissertation Award for the best dissertation in the field of security studies from the American Political Science Association’s International Security and Arms Control section. His dissertation was titled “Big Sticks and Contested Carrots: Explaining International Security Institutions.”



Donald Kendall, a member of the Belfer Center International Council and former chairman and CEO of PepsiCo, sponsored the Open World Program’s anniversary gala on September 29, 2009. The gala was held at the Library of Congress’ historic Thomas Jefferson Building and hosted an international cadre of policy makers, activists, politicians, foreign and U.S. ambassadors, and cultural luminaries.



John P. Holdren, on leave from the Belfer Center’s board of directors to serve as assistant to the president for science and technology and director of the Office of Science and Technology Policy, was inducted into the Royal Society on July 10, 2009. In announcing his selection, the Royal Society hailed Holdren as “pre-eminent in the fields of science and technology policy,” adding that “his contributions to our understanding of energy technology and the population-resource-environment nexus have justifiably received wide acclaim.”

“ON MY MOST RECENT VISIT TO WASHINGTON, I could not help being struck by the shift that has occurred from the imperial presidency of the Bush era to something like parliamentary government under Mr. Obama. This president proposes; Congress disposes.”

—**Niall Ferguson**, “A Runaway Deficit May Soon Test Obama’s Luck,” *Financial Times* (August 11, 2009)

“IN RECENT YEARS, THE PACE OF INNOVATION in the financial sector has outstripped the pace of regulatory modernization, leaving entire markets and market participants largely unregulated.”

—**Lawrence Summers** and **Timothy Geithner**, “A New Financial Foundation,” *Washington Post* (June 15, 2009)

“THE CBO ESTIMATES THAT THE HOUSE COMMITTEE VERSIONS of the Obama health plan would add more than \$1 trillion to federal deficits over the next decade. But the actual costs would be much higher.”

—**Martin Feldstein**, “ObamaCare’s Crippling Deficits,” *Wall Street Journal* (September 7, 2009)

“THE BOTTOM LINE FOR AMERICAN POLICY is that the menu of feasible options has shrunk. Every option available at this point requires living with an Iran that knows how to enrich uranium. Continued denial of this truth is self-delusion. The central policy question becomes: What combination of arrangements, inside and outside Iran, has the best chance of persuading it to stop short of a nuclear bomb?”

—**Graham Allison**, “A New Red Line for Iran,” *Washington Post* (June 1, 2009)

“AT HOME, THE PRESIDENT’S CONSERVATIVE CRITICS charge that his engagement policy has been naive, arguing the United States should return to a more confrontational strategy based on military force. They could not be more mistaken.”

—**Nicholas Burns**, “Obama’s Opportunity in Iran,” *Boston Globe* (October 1, 2009)

“FOR THE LAST EIGHT YEARS, U.S. taxpayers’ money has funded hardly any bona fide counterterrorism successes, but quite a bit of corruption in the Pakistani Army and intelligence services. . . . Despite the U.S. goal of encouraging democratization, assistance to Pakistan has actually weakened the country’s civilian government.”

—**Azeem Ibrahim**, “How America Is Funding Corruption in Pakistan,” *Foreign Policy* (August 13, 2009)

“THE MOST WORRISOME ASPECT of these recurring incidents is that facilities from which the materials originated did not report them missing. In addition, there have been some notable lapses in warhead security, even in the United States.”

—**Rolf Mowatt-Larssen**, “Nuclear Security in Pakistan: Reducing the Risks of Nuclear Terrorism,” *Arms Control Today* (July/August 2009)

“IN THE LONG-TERM, HOWEVER, WHAT REALLY MATTERS is whether the Muslims of South Asia will be able to roll back the spread of Talibanization altogether. The answer to that question lies within the various Muslim communities of the region, not just in Pakistan.”

—**Hassan Abbas**, “A Long Fight for Pakistan’s Soul,” *Korea Herald* (June 25, 2009)

“KASHMIR LOOKS REMARKABLY DIFFERENT from the streets of Srinagar than it does from the seminar circuits of Delhi, and Kashmiris are serious political players who can thwart the agendas of the Indian and Pakistani governments.”

—**Paul Staniland**, “Kashmir in the AfPak equation,” *Foreign Policy* (August 18, 2009)

“GENERAL PETRAEUS WILL FIND IT DIFFICULT to repeat the apparent success of the surge in Iraq. There are no mass political parties and the Kabul government lacks the base, strength or legitimacy of the Baghdad government.”

—**Rory Stewart**, “Afghanistan: A War We Cannot Win,” *London Telegraph* (July 10, 2009)

“THE SHI’I-SUNNI DIVISION IS REAL, and it will continue to play out in Iraqi politics. Already there are warning signs, including the dominance of Shia in the security apparatus (notably the Ministry of Interior) and the lack of progress in integrating the Shi’i-Sunni-dominated Awakening Council members in the security forces.”

—**Monica Duffy Toft**, “A Risky Prospect for Iraq,” *Foreign Policy* (June 30, 2009)

“ENCOURAGING THIS MOVEMENT TOWARD ISSUES-BASED POLITICS is arguably the most important component of a strategy to help Iraqis solve their most intractable problems. Too often, differences among Iraqis are portrayed as feuds between primordial rivals, grounded in irrational and emotional stances.”

—**Meghan O’Sullivan**, “Issues Before Identity in Iraq,” *Washington Post* (July 21, 2009)

"THE CONTINUING HEADACHE that this Iraqi prime minister gave to President Bush may indeed carry over into this administration, despite Maliki's non-endorsing 'endorsement' of Obama during the U.S. presidential campaign. Nevertheless, given the drawdown of U.S. troops in Iraq, having a strong man in Baghdad—whatever his ethnic or confessional background—is not the worst of all outcomes."

—**Eric Rosenbach** and **Aki Peritz**, "What Maliki's Power Means for US," *Boston Globe* (July 24, 2009)

"HOW CAN DEVELOPING COUNTRIES PARTICIPATE in an international effort to reduce emissions without incurring costs that derail their economic development? Their emissions targets could start at business-as-usual levels, becoming more stringent over time as countries become wealthier."

—**Robert Stavins** and **Sheila M. Olmstead**, "The Essential Pillars of a New Climate Pact," *Boston Globe* (September 20, 2009)

"A CARBON TAX SHIFT IS ONE OF THOSE RARE IDEAS that can take a political liability and turn it into a political asset—it allows Congress to vote for a tax cut and a tax increase while putting into place the financial incentives we need to transition to a noncarbon future."

—**Elaine Kamarck**, "Gore's Carbon Tax Makes Good Sense," *Politico* (September 23, 2009)

"AFRICA COULD BENEFIT FROM THIS NEW INFRASTRUCTURE if it can focus on four critical areas: lowering the cost of access to bandwidth; expanding training opportunities in multimedia technology; stimulating enterprise development and liberalizing the market for devices to access the net."

—**Calestous Juma**, "Riding the Digital Express," *BBC* (September 15, 2009)

"THE REASON FOR THE SILENCE on the forums is that al Qaeda couldn't care less about the current U.S. debate about torture. The questions of who signed which memos when, whether Khalid Sheikh Mohammed was waterboarded 80 or 180 times, and whether a millipede was inserted into Abu Zubaydah's confinement box are only interesting for those who did not expect the United States to behave this way."

—**Thomas Hegghammer**, "Irreparable Damage," *Foreign Policy* (May 4, 2009)

(To read opeds in full, see Publications on the Belfer Center website: www.belfercenter.org)

—Compiled by **Beth Maclin**

"[T]HE FACT THAT NO ORGANIZED GROUP has an extensive network in the country is no longer a guarantee that radicalization cannot reach America's shores, as the Internet has replaced the need to have operatives physically spreading the propaganda on the ground."

—**Lorenzo Vidino**, "Keeping a Lid on Homegrown Terror," *Boston Globe* (October 5, 2009)

"IF WE ARE CAPABLE AS A NATION OF LEARNING FROM HISTORY, we should also take this opportunity to decide that covert operations should be done rarely, and then only by a special component of the military and perhaps by a small, separate, civilian agency under the joint supervision of a group of experienced administration and bi-partisan Congressional overseers."

—**Richard A. Clarke**, "Targeting Terrorists," *Wall Street Journal* (July 18, 2009)

"THIS SITUATION IS A TRAGEDY in the making between peoples who have known more than their share. Unless Obama summons the will and skill to break the logjam, a two-state solution will become impossible and those who yearn for peace will be even worse off than before."

—**Stephen Walt**, "Settling for Failure in the Middle East," *Washington Post* (September 20, 2009)

"THE SIMPLE TRUTH, that if Israel were to offer the Palestinians 100% of their demands, there would be no one capable of both accepting and delivering on this, was lost to international opinion. Netanyahu played tough, failed and delivered a severe blow to Israel's international standing."

—**Chuck Freilich**, "Hoping the Next 100 Days Go Better," *Jerusalem Post* (July 12, 2009)

"GIVEN THEIR DOMESTIC FRAGMENTATION, the Palestinians are limited in what they can provide Israel in exchange for the concessions it is being asked to make. By contrast, the promise of peace with the Arab world is a more enticing context, justifying Israeli downpayments such as in settlement construction."

—**Shai Feldman** and **Gilead Sher**, "The Grand Bargain that is the Mideast's Best Hope," *Financial Times* (August 19, 2009)

"ABBAS' WEAKNESS, LIKE ARAFAT'S BEFORE HIM in the latter's last decade of life, has been an infatuation with two elements that are addictive but non-productive: the trappings of power, privilege and incumbency, and a direct line to the U.S. president."

—**Rami Khouri**, "The Emptiness of the Palestinian Presidency," *Agence Global* (October 7, 2009)



Laura Holgate, former staff assistant to the International Security Program, was named Senior Director for Weapons of Mass Destruction Terrorism and Threat Reduction on the National Security Council. Holgate will work with **Gary Samore**, former research fellow and current coordinator for Arms Control and Weapons of Mass Destruction, Proliferation, and Terrorism, on the National Security Council.



Daniel Ponemon, former research fellow with the International Security Program and current deputy secretary of energy, held the first meeting of the U.S.-Russian Nuclear Energy and Nuclear Security Working Group in September. The meeting was co-chaired by **Sergei Kiriyeenko**, director general of Russia's Rosatom State Atomic Energy Corporation. The group was established under the U.S.-Russia Bilateral Presidential Commission during the July 2009 Presidential Summit.



Samantha Power, former executive director of the Belfer Center Human Rights Initiative and current senior director for Multilateral Affairs and Human Rights on the National Security Council, was appointed by President Obama to coordinate the efforts of the many parts of the U.S. government on Iraqi refugees and internally displaced persons, including the Department of State, U.S. Agency for International Development, Department of Homeland Security, and Department of Defense.



Moshik Temkin, a Belfer Center faculty affiliate, was on the 2009 Cundill International Prize in History's longlist of nominated books for *The Sacco-Vanzetti Affair: America on Trial*. The prize is awarded to an author who has published a book determined to have a profound literary, social, and academic impact on the subject. The ten books on the longlist were chosen from more than 130 entries.

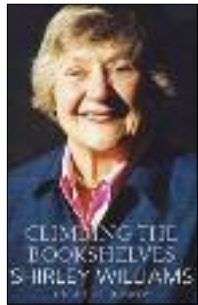


Shirley Williams, a member of the Belfer Center's board of directors, was appointed as the United Kingdom's representative to the International Commission on Nuclear Non-proliferation and Disarmament (ICNND). The ICNND is a joint initiative by the Australian and Japanese Governments aimed at reinvigorating international efforts on nuclear non-proliferation and disarmament. It is co-chaired by the former foreign secretaries of Australia and Japan and made up of 15 commissioners.

HOT OFF THE PRESSES

Climbing the Bookshelves: The Autobiography of Shirley Williams

By Shirley Williams; Virago Press
(September 2009)



"The role of women in our society has changed out of all recognition. But it has changed least in the House of Commons. I want to describe those changes and the resistances to them through the magnifying glass of my own life, a life that coincides with our turbulent post-war history."

Shirley Williams was born into politics. She was influenced both by her mother, Vera Brittain, and father George Caitlin, a leading political scientist, who encouraged his daughter to have high ambitions for herself—including daring to climb the bookshelves in his library. Elected as MP for Hitchin in 1964, she was a member of the Harold Wilson and James Callaghan governments and also the Secretary of State for Education. As one of the "Gang of Four," Williams famously broke away from the Labour Party to found the Social Democratic Party in 1981 and later supported its merger with the Liberal Party to form the Liberal Democrats. *Climbing the Bookshelves* is the voice of a strong and passionate woman of luminous intelligence.

"... [A] straight narrative, few secrets, no bitching but clear-eyed political analysis."

"What you get is what you might expect—a straight narrative, few secrets, no bitching but clear-eyed political analysis."

—*The Guardian*

Securing the Peace: The Durable Settlement of Civil Wars

By Monica Duffy Toft; Princeton University Press
(Forthcoming January 2010)



Securing the Peace is the first book to explore the complete spectrum of civil war terminations, including negotiated settlements, military victories by governments and rebels, and stalemates and ceasefires.

Examining the outcomes of all civil war terminations since

1940, **Monica Duffy Toft** develops a general theory of postwar stability, showing how third-party guarantees may not be the best option.

Toft finds that military victory, especially victory by rebels, lends itself to a more durable peace. She

argues for the importance of the security sector—the police and military—and explains that victories are more stable when governments can maintain order. Toft presents statistical evaluations and in-depth case studies that include El Salvador, Sudan, and Uganda to reveal that where the security sector remains robust, stability and democracy are likely to follow.

"... [C]hallenges the flawed assumptions driving international peacemaking diplomacy and peacekeeping operations..."

"... Toft challenges the flawed assumptions driving international peacemaking diplomacy and peacekeeping operations, which sadly may be prolonging civil wars instead of ending them."

—Andrew Natsios, Georgetown University

The Sacco-Vanzetti Affair: America on Trial

By Moshik Temkin; Yale University Press
(April 2009)



What began as the obscure local case of two Italian immigrant anarchists accused of robbery and murder flared into an unprecedented political and legal scandal as the perception grew that their conviction was a judicial travesty and their execution a

political murder. This book is the first to reveal the full national and international scope of the Sacco-Vanzetti affair, uncovering how and why the two men became the center of a global cause célèbre that shook public opinion and transformed America's relationship with the world.

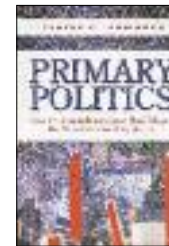
Drawing on extensive research on two continents, and written with verve, this book connects the Sacco-Vanzetti affair to the most polarizing political and social concerns of its era. **Moshik Temkin** contends that the worldwide attention to the case was generated not only by the conviction that innocent men had been condemned for their radical politics and ethnic origins but also as part of a reaction to U.S. global supremacy and isolationism after World War I. The book concludes by investigating the affair's enduring repercussions and what they reveal about global political action, terrorism, jingoism, xenophobia, and the politics of our own time.

"... [A] reminder that modern ambivalence about American power has deep roots."

"... This is a fresh look at an enduring controversy and a reminder that modern ambivalence about American power has deep roots."

—*ALA Booklist*

Primary Politics: How Presidential Candidates Have Shaped the Modern Nominating System By Elaine C. Kamarck; Brookings Institution Press (2009)

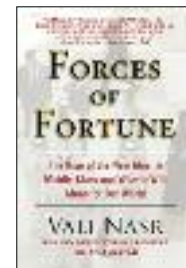


In *Primary Politics*, **Elaine Kamarck** explains how the presidential nomination process became the often baffling system we have today. Her focus is the largely untold story of how presidential candidates since the early 1970s have sought to alter the rules in their favor and how their failures and successes have led to even more change. She describes how candidates have sought to manipulate the sequencing of primaries to their advantage and how Iowa and New Hampshire came to dominate the system. She analyzes the rules that are used to translate votes into delegates, paying special attention to the Democrats' twenty-year fight over proportional representation.

Drawing on meticulous research, interviews with key figures in both parties, and years of experience, this book explores how we narrow the list of presidential candidates every four years.

Forces of Fortune: The Rise of the New Muslim Middle Class and What It Will Mean for Our World

By Vali Nasr; Free Press (September 2009)



Vali Nasr presents a paradigm-changing revelation that will transform the understanding of the Muslim world at large. He reveals that there is a vital but unseen rising force in the Islamic world—a new business-minded middle class—that is building a vibrant

new Muslim world economy and holds the key to winning the cold war against Iran and extremists.

Drawing on his in-depth knowledge of the Muslim world's tortured history, he offers a powerful reassessment of why both extremism and anti-Americanism took hold in the region—not because of an inevitable "clash of cultures" or the nature of Islam, but because of the failure of this kind of authentic middle class to develop in the nineteenth and twentieth centuries, largely due to the insidious effects first of colonialism and then of top-down dictatorial regimes, often supported by the West. He then shows that the devoutly Islamic, yet highly modern, Muslims—in Iran, Pakistan, Turkey, and the stealth force behind the extraordinary growth of aggressively capitalist Dubai—are finally the middle class the region has desperately needed. They are people in the region the West can and *must* do business with.

—Compiled by Susan Lynch, ISP/STPP

BELFER IN BRIEF

Coordinated by the Belfer Center's Environment and Natural Resources Program, Harvard Kennedy School's 2009 Roy Family Award for Environmental Partnership was presented in November to Mexico City Metrobus, a system that greatly reduces air pollution.



Russian Relations: Brigadier General (ret.) **Kevin Ryan** (right) was warmly welcomed by Belfer Center faculty, fellows, and staff upon his return in September as a senior fellow focusing on U.S.-Russian relations around nuclear issues. Ryan is pictured here with **Rolf Mowatt-Larsen**, Center senior fellow, discussing their recent trip to Russia.

Eric Rosenbach, the Center's executive director for research, was honored by Harvard Kennedy School students in May as Best HKS Advisor for 2008–09.

Belfer Center Senior Fellow **Ben Heineman** was appointed to the presidential advisory committee at Central European University (Budapest) to evaluate the mission of the business school and its relation to schools of law and public policy.

Congratulations to newly engaged **Katie Bartel** (*International Security*) and to **Simone O'Hanlon** (Belfer core) and **Greg Durham** (Agricultural Innovation in Africa project) on their recent marriages. Best wishes to all.

The Belfer Center has expanded with several newborns. Congratulations to the proud parents and welcome to: **Ella Eiran** (daughter of Ehud Eiran and his wife Margot), **Haldis Dagmar Hegghammer** (daughter of Thomas Hegghammer and Malfrid Braut-Hegghammer), **Atticus Harold Oliver** (son of Hongyan Oliver and her husband Will), and **Ella Eileen Kane** (daughter of Paul and Chen Zak Kane).



Safety Measures: **Calestous Juma**, director of the Belfer Center's Science, Technology, and Globalization project, with General **William E. Ward**, commander of U.S. Africa Command, in Stuttgart, Germany. Juma spoke in June on "Security and Development in a Turbulent World; Safeguarding Africa's Prosperity," the inaugural presentation of the Command's speaker program.

International Security

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"Bad Debts: Assessing China's Financial Influence in Great Power Politics"

Daniel W. Drezner

As a result of the recent financial crisis, the United States has grown increasingly dependent on foreign sources of credit. U.S. policymakers worry that China, in particular, could use its financial power to influence U.S. foreign policy. However, two case studies (the contestation over the regulation of sovereign wealth funds and the protection of Chinese investments in the United States) demonstrate that their concerns are somewhat exaggerated. The current relationship between the United States and China is one of mutual dependency. Unless the balance shifts—for example, if the U.S. deficit continues to grow and China becomes enmeshed in the fortunes of the United States—China will be able to resist U.S. entreaties, but not coerce the United States into changing its policies.

"[T]he United States should begin to develop policies that will help to manage U.S.-China naval competition . . ."

—Robert S. Ross

—Compiled by International Security staff

International Security is America's leading journal of security affairs. It provides sophisticated analyses of contemporary security issues and discusses their conceptual and historical foundations.

The journal is edited at Harvard Kennedy School's Belfer Center and published quarterly by the MIT Press. Questions may be directed to: IS@harvard.edu.

"China's Naval Nationalism: Sources, Prospects, and the U.S. Response"

Robert S. Ross

Three factors—nationalism, a demand for great power status, and domestic interests—suggest that China will soon begin to build a power-projection navy. The first step in this process is likely to be the construction of an aircraft carrier. Challenges to China's territorial security and its commitment to a large ground force capability, however, will constrain China's maritime power and limit its ability to challenge U.S. maritime security. Still, the United States should begin to develop policies that will help to manage U.S.-China naval competition and promote continued political cooperation between the two nations.

"What's in a Line? Is Partition a Solution to Civil War?"

Nicholas Sambanis and Jonah Schulhofer-Wohl

Partition proponents advocate dividing territory with or without formal recognition of sovereignty as a stable solution to ethnic civil wars and a way to enforce a lasting peace. A new data set and analysis, however, show that partition does not have the pacifying effects its proponents suggest it does, nor does it reduce the risk of a return to war. In some cases, it may even increase this risk.

"Transformative Choices: Leaders and the Origins of Intervention Strategy"

Elizabeth N. Saunders

Leaders of great powers have different causal beliefs about the origin of threats, which in turn shape the cost-benefit calculation they make when contemplating foreign interventions. An analysis of John F. Kennedy's and Lyndon B. Johnson's decision-making processes during the Vietnam War illustrates how different intervention strategies can influence leaders' decisions to whether or not become involved. Scholars can apply this typology to George W. Bush's decision to go to war in Iraq.

"Long Time Going: Religion and the Duration of Crusading"

Michael C. Horowitz

Religious beliefs can act as a genuine motivator in war or they can serve as a proxy for materialist objectives. An analysis of the Crusades reveals that religion was a driving force behind the wars and helps to explain why, despite spectacular failures and rising costs, crusading lasted much longer than it should have. The evidence suggests that policymakers ought to consider how, in certain instances, religious beliefs can influence when actors go to war, how they fight, and when and how wars end.

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Belfer Center Mission: To provide leadership in advancing policy-relevant knowledge about the most important challenges of international security and other critical issues where science, technology, environmental policy, and international affairs intersect.

Visit our website at www.belfercenter.org to learn more about the Belfer Center.

BELFER CENTER



Influential Insight: Ernest May with Ashton Carter at a Belfer Center seminar.

“No other historian of recent memory has so successfully bridged the chasm between history and public policy,” Belfer Center Director **Graham Allison** said at a seminar in September to honor and recognize the impact of long-time colleague and friend **Ernest May**. During the discussion, “Reflections on Ernest May: A Rare Bridge Between History and Policy,” colleagues, students, friends, and family members gathered to discuss May’s tremendous influence on them as individuals and on society.

A member of the Belfer Center’s board of directors until his death in June 2009, May was a world-renowned historian of international relations and foreign policy. A member of the Harvard faculty for more than 50 years, he served Harvard in many roles, including as dean of Harvard College, director of Harvard Kennedy School’s Institute of Politics, and chair of Harvard’s History Department. May was the author of numerous books, including *Thinking in Time: The Uses of History for Decision-Makers* (Free Press, 1986), written with **Richard Neustadt**, and *The Kennedy Tapes: Inside the White House During the Cuban Missile Crisis*, co-authored by **Philip Zelikow**. From 2003 to 2004, he was senior advisor to the 9/11 Commission and instrumental in the writing of the 9/11 Commission report.

Tribute to Ernest May—Extraordinary Historian, Colleague, Teacher, Friend by Sharon Wilke

Among the reflections shared during the September seminar, a Harvard memorial service, and on the Belfer Center website are those that follow.

Ernest May was an intellectual model, someone with extraordinary judgment and patience.

—Joseph S. Nye

“Not only was Ernie a really important historian . . . he was an historian who knew how to engage successfully in the public sphere.”

(**Niall Ferguson**, Harvard’s Laurence A. Tisch Professor of History; Member, Belfer Center Board of Directors)

“May was an intellectual model, someone with extraordinary judgment and patience. He would look carefully and patiently at all of the complexities of a problem, and when he came to a conclusion, it was compelling.”

(**Joseph S. Nye**, Harvard University Distinguished Service Professor; Member, Belfer Center Board of Directors)

“Ernest was someone who spoke softly, yet carried a big mind. He would invariably let others do most of the talking while he ended up doing most of the thinking. . . . ‘What would Ernie do?’ is a question I continue to ask myself.”

(**Philip Zelikow**, University of Virginia’s White Burkett Miller Professor of History)

His influence on me was incalculable.
—Vivek Viswanathan

“His influence on me was incalculable. . . . [M]ore than his renown as a historian or his intimate knowledge of national security policy, I was fascinated by the quality of his mind: the precision of his words, the pointed nature of the questions that he posed, and the bracing clarity of his thought.”

(**Vivek Viswanathan**, 2009 Harvard graduate and recent student of May’s)

“He was first and foremost a teacher, and if he was asked by somebody, ‘What do you do?’ he would say, ‘I’m a teacher.’”

(**Susan B. Wood**, Ernest May’s wife)

For these and other reflections and video clips, see: <http://belfercenter.org/ernestmayreflections>. 📺



Sharing Moments: Philip Zelikow (left) remembers a light moment with Ernest May as May’s son John listens.

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