Talcott Parsons Prize Awarded to Daniel Kahneman

On November 9, 2011, the Academy presented the Talcott Parsons Prize to Daniel Kahneman for his outstanding contributions to the social sciences. First awarded in 1974, the Talcott Parsons Prize was established to honor the noted sociologist and former president of the Academy.

With his friend and colleague, the late Amos Tversky, Kahneman conducted pioneering work that laid the foundation for the field of behavioral economics. In the 1970s, they were among the first academics to analyze what sometimes causes people to make wrong choices. Kahneman’s work changed how we understand the psychology of markets and individual financial decision-making.

Kahneman is the Eugene Higgins Professor of Psychology, Emeritus; Professor of Psychology and Public Affairs, Emeritus; and Senior Scholar in the Woodrow Wilson School of Public and International Affairs at Princeton University. In 2002, he was awarded the Nobel Prize in Economic Sciences. He was elected a Fellow of the American Academy in 1993.

At the award ceremony, Kahneman delivered a talk on “Two Systems in the Mind” (see page 55 in this issue for his presentation). Academy President Leslie Berlowitz presided over the ceremony; Harriet Zuckerman, Chair of the Talcott Parsons Prize Committee, Senior Fellow at The Andrew W. Mellon Foundation, and Professor of Sociology Emerita at Columbia University, introduced Kahneman; and William Julius Wilson, recipient of the Talcott Parsons Prize in 2003 and the Lewis P. and Linda L. Geyser University Professor at Harvard University, presented the award.

Members of the 2011 Talcott Parsons Prize Committee include Harriet Zuckerman, Chair (The Andrew W. Mellon Foundation), Susan Tufts Fiske (Princeton University), John Mark Hansen (University of Chicago), Tanya Luhrmann (Stanford University), James Poterba (MIT; NBER), Judith Resnik (Yale University), William Julius Wilson (Harvard University), and Leslie Berlowitz (American Academy).

The citation that was presented to Kahneman reads:

You have described the mind as “a machine for jumping to conclusions,” and for nearly four decades your pioneering research has shown how the gears and levers of that amazing machine function. By constructing elegant experiments and asking creative questions, your work has revealed answers to some of the most complex mysteries about the human mind – how it processes information, forms judgments, and makes decisions. Your insights and empirical findings have overturned conventional wisdom that for generations guided our understanding of how people perceive and assess risk.

Relying on a highly disciplined approach to probing the automatic system of intuition, and the deliberate system of rational decision-making, you helped define a new area of scholarship – behavioral economics. Your facility to explain clearly abstract principles and describe their practical relevance to everyday life has made your findings accessible to both scholars and the wider public.

Transcending cognitive psychology, behavioral economics, and the science of well-being, your work has enhanced our understanding of the relationship between perception, intuition, emotion, and cognition.
Briefings for D.C. Officials on Internet Issues

The Academy recently sponsored briefings for executive branch officials and congressional staff on the evolution of the Internet and issues pertaining to trust, access, personal identity, and unruly behavior online. The briefings followed the publication of the Fall 2011 issue of *Dædalus* on “Protecting the Internet as a Public Commons,” guest edited by David D. Clark, Senior Research Scientist at the Massachusetts Institute of Technology. The *Dædalus* volume includes an essay by Vinton G. Cerf, Vice President and Chief Internet Evangelist at Google, as well as essays from legal scholars, sociologists, political scientists, and other computer scientists. The essays examine social and political participation online, the consequences of being disconnected in a digital society, and the roles of government, industry, and private citizens in ensuring the security and utility of the future Internet.

While Washington worries about national security and cyber attacks, individual Internet users are concerned with issues such as stolen identity, loss of privacy, and having their computers corrupted with malware, said David Clark. The character of the Internet will be very much shaped by the steps we take to mitigate these problems. For example, should we modify the Internet so that authorities can identify the person who carries out an action? “Identity is a subtle issue,” Clark noted. “Sometimes you want to know and sometimes you don’t. There have been calls for a uniform, government-centered Internet identification scheme. I would argue this approach would be useful only in certain contexts and if it was applied generally it would be neither effective nor beneficial.”

Vinton Cerf, a co-inventor of the architecture and basic protocols of the Internet, suggested that individual users could protect their own privacy and enhance security by exercising more caution. He recommended starting a “think-before-you-click” or “think-before-you-link” campaign to assist Internet users in avoiding harmful websites: “We get email that we think came from someone we know, even though it was actually spam that’s generated by something else, and we click on it and we end up on a website that infects our machines and, of course, now we’ve shot ourselves in the foot.” Cerf contributed an essay on “Safety in Cyberspace” to the *Dædalus* volume.

The briefings also featured presentations on “A Contextual Approach to Privacy Online,” by Helen Nissenbaum, Professor of Media, Culture, and Communication and Professor of Computer Science at New York University, and “Doctrine for Cybersecurity,” by Deirdre K. Mulligan, Assistant Professor in the School of Information at the University of California, Berkeley, and Fred B. Schneider, Samuel B. Eckert Professor of Computer Science at Cornell University. Nissenbaum, Mulligan, and Schneider are contributors to the *Dædalus* volume.

Participants in the meeting at the White House Office of Science and Technology Policy included senior privacy and security officials from the National Security Staff, the National Telecommunications and Information Administration, the Federal Trade Commission’s Division of Privacy and Identity Protection, the Department of Justice, and the Department of State. Approximately seventy legislative and nongovernmental organization staff attended a second session at the House of Representatives. The briefings were organized in coordination with Daniel Weitzner, U.S. Deputy Chief Technology Officer for Internet Policy, and Representative Anna Eshoo (D-California).

A video of the Capitol Hill briefing is available at http://www.amacad.org/events/internetprivacyandsecurity/. Copies of *Dædalus* may be purchased from MIT Press (phone: 617-253-2889; email: journals-cs@mit.edu). A Kindle version of the issue is also available at Amazon.com.
At its second full meeting on December 8 and 9, 2011, in San Francisco, the Academy’s Commission on the Humanities and Social Sciences heard reports from its working groups and continued to develop its preliminary recommendations, focusing on both intrinsic and instrumental arguments for the importance of these disciplines to the nation.

The Commission is the Academy’s response to a bipartisan call from United States Senators Lamar Alexander (R-Tennessee) and Mark Warner (D-Virginia) and Representatives Tom Petri (R-Wisconsin) and David Price (D-North Carolina) to organize a blue-ribbon group of humanists, policy-makers, educators, business leaders, and funders to examine the nation’s system of humanistic, social-scientific, and liberal arts education.

Yang Yu-liang, President of Fudan University in the People’s Republic of China, joined Commission members at their recent meeting and described the renewed attention that China is devoting to the humanities and social sciences as critical tools for the promotion of rational thinking, cultural tolerance, and social cooperation.

Another guest at the meeting, Andrew W. Mellon Foundation President Don Michael Randel spoke about the importance of the humanities and social sciences for Americans at every economic and social level. “We have many people to reach, many with whom we can share the pleasure of being human,” Randel said.

Members of the Commission have spent part of their deliberations reaching consensus on ways to communicate to policy leaders and the general public the role that the humanities and social sciences play in American life. The humanities, noted Cochair Richard H. Brodhead, President of Duke University, are “a name for the process by which all the things humans have made, said, thought, and done come back to spark the understandings of other humans across time.”

Commission Cochair John W. Rowe, Chairman and Chief Executive Officer of Exelon Corporation, reminded the group that convincing people that the humanities and social sciences are important is only half of the battle. “Our challenge,” he said, “is to place a priority on these disciplines at a time when resources are constrained for every purpose.”

Commission member Kwame Anthony Appiah, Laurance S. Rockefeller University Professor of Philosophy and the University Center for Human Values at Princeton University, emphasized the importance of the humanities and social sciences for success in an increasingly interconnected global culture. “We have to participate in the world, whether as partners of other people or as leaders in certain of the discussions of the world,” he said. “To do that, we have to have the capacity for understanding other perspectives.”

Appiah serves on the Commission subcommittee examining the importance of the humanities and social sciences to American citizenship and the functioning of democracy. Other members on the subcommittee include Amy Gutmann (University of Pennsylvania), Danielle Allen (Institute for Advanced Study), Tom Campbell (Chapman University Law School), Anthony Marx (New York Public Library), and David Souter (Supreme Court of the United States).

A second subcommittee, focusing on issues related to advanced expertise in the disciplines, includes Pauline Yu (American Council of Learned Societies), Robert Hauser (University of Wisconsin-Madison), and Anthony Grafton (Princeton University). At the meeting in San Francisco, Grafton observed that “university teaching is not teaching a set body of knowledge. It’s going after a moving object, which keeps changing. If you’re going to do it properly, you have to do research to prepare every class you ever give.”
In addition to the meetings of the full Commission and its subcommittees, the Academy has engaged a number of stakeholders in this work, including the leadership of the Association of American Universities, the Association of Public and Land-Grant Universities, the American Council of Learned Societies, the President’s Council on the Arts and Humanities, the National Governor’s Association, Phi Beta Kappa, the Consortium of Social Science Associations, and the Federation of State Humanities Councils.

“Members of the Commission are participating in a new effort to project a cohesive, positive message about the importance of the humanities and social sciences to our national well-being,” noted Academy President Leslie C. Berlowitz. “We have seen significant progress over the last year, as many new voices have been added to the public discussion of these disciplines, and we all look forward to continuing this work in the months ahead.”

The Commission will meet again in April in Washington, D.C.

Anthony Grafton, Henry Putnam University Professor of History at Princeton University, and Pauline Yu, President of the American Council of Learned Societies

The Andrew W. Mellon Foundation and Carnegie Corporation of New York Support the Commission on the Humanities and Social Sciences

The Academy has received support from two of the country’s leading philanthropic organizations to help advance the work of the Commission on the Humanities and Social Sciences.

Grants from the Andrew W. Mellon Foundation and from Carnegie Corporation of New York will promote the Commission’s goal of recommending specific steps that government, schools and universities, cultural institutions, businesses, and philanthropic organizations can take to strengthen the humanities and social sciences, which include history, literature, civics, geography, and languages.

The Academy is grateful to the Andrew W. Mellon Foundation and to Carnegie Corporation of New York for helping the Commission move forward with its examination of disciplines critical to the functioning of democracy, to individual fulfillment, and to the nation’s ability to compete in a global economy.
Beyond Technology: Strengthening Energy Policy through Social Science

U.S. households account for 30 to 40 percent of energy use nationwide, an amount that could be reduced by 20 percent using available, no- to low-cost interventions. To increase public acceptance of alternative energy technologies, policy-makers and technology developers need to pay greater attention to consumer behavior and to how government regulations affect the adoption of clean energy.

A new Academy report, Beyond Technology: Strengthening Energy Policy through Social Science, shows how the social sciences can help address energy challenges. It highlights social science tools that could be applied immediately to make energy policy and programs more effective. The report cites, for example, development of energy efficiency information for home renovation projects and more effective appliance labels. The report also suggests that utilities use social science-based best practices when deploying new technologies, such as smart meters.

“The social sciences are vital to our energy system because they can tell us so much about how individual, household, and community behavior affects the acceptance of innovative technologies,” said Robert W. Fri, Director of the Academy’s Alternative Energy Future project. “Energy savings can only be realized by combining behavioral interventions with useful policies aimed at facilitating their adoption.”

Beyond Technology recommends five strategies for enhancing collaboration between social scientists and policy-makers:

- Demonstrate the value of social and behavioral research for enhancing the effectiveness of energy policy. Practical demonstration of how the social sciences can make energy policy more effective will be an important first step in creating a demand for further collaboration.
- Encourage the use of interdisciplinary social science research within energy programs. To encourage the application of social science expertise, energy programs should be evaluated to determine how the social sciences could contribute to the improved effectiveness of the programs in the near and long term.
- Build stronger connections between the energy policy and social science communities. Bringing policy-makers and social scientists together on substantive issues will build the bridges necessary to make effective use of the social sciences over the long term.
- Incorporate social science into federal energy policy analysis. Beyond Technology emphasizes the need to incorporate behavioral considerations into energy economic modeling efforts.
- Engage state and local governments and regulatory communities. Coordination between regional, state, and local governments will be essential to designing more effective energy policies.

In his foreword to the publication, former Department of Energy Under Secretary for Science Steven E. Koonin affirmed the value of the report and the Academy’s key role in bringing together a variety of constituencies to address critical energy issues. Beyond Technology has been cited by the DOE’s Quadrennial Technology Review as evidence of the importance of applying social science expertise to the design of energy technologies and policies.

Beyond Technology is based on ongoing work of the Academy’s Alternative Energy Future project, including a May 2011 workshop held in Washington, D.C. The workshop and report received extensive press coverage in The Boston Globe, USA Today, and Science magazine, and on National Public Radio, among other media outlets.

The Academy is grateful to Robert Fri for his leadership of the Alternative Energy Future project and to the steering group that developed the report’s recommendations: Stephen Ansolabehere (Harvard University), Douglas Arent (National Renewable Energy Laboratory), Ann Carlson (University of California, Los Angeles), Thomas Dietz (Michigan State University), Kelly Sims Gallagher (Tufts University), M. Granger Morgan (Carnegie Mellon University), Maxine Savitz (Honeywell, Inc., ret.), Paul Stern (National Research Council), James Sweeney (Stanford University), and Michael Vandenbergh (Vanderbilt Law School).

The Alternative Energy Future project is supported by the DOE and the National Science Foundation, two anonymous foundations, and contributors to the American Academy Intellectual Venture Fund, including The Fremont Group, Kleiner Perkins Caufield & Byers, and Novartis.

GNF Initiative Suggests New Directions for the Nonproliferation Regime and the Nuclear Fuel Cycle

In two forthcoming papers, leaders of the Academy’s Global Nuclear Future (GNF) Initiative offer important insights and recommendations for managing the emerging nuclear order.

Nuclear Collisions: Discord, Reform & the Nuclear Nonproliferation Regime, by Steven E. Miller (Harvard University), outlines the main points of contention within the Nuclear Non-Proliferation Treaty (NPT) regime and identifies the issues that have made reform so difficult. “The future of the NPT regime will be heavily shaped by colliding visions,” Miller writes. How these deep divergences can be managed, minimized, or overcome is a crucial question for the future.

Miller, codirector of the GNF Initiative, proposes a few measures that may help reduce the dismuster of a divided regime, such as focusing on interests rather than rights. He observes, for example, that enrichment “is so costly and so unnecessary (given the existence of a robust nuclear fuel market) that in anything like current market conditions, it makes little sense for any state whose motives are purely peaceful.” Miller suggests that using realistic economic calculations in nuclear deliberations could help minimize the politics involved in national decisions to pursue aspects of a nuclear energy program, such as the production of fissile material and nuclear fuel.

The paper includes responses from a group of global experts. Jayantha Dhanapala (Pugwash Conference on Science and World Affairs), Wael Al-Assad (League of Arab States), C. Raja Mohan (Indian Express), and Tuan Ta (Office of the Prime Minister of Vietnam) offer commentary and provide international perspectives on how to improve the NPT regime.

In The Back-End of the Nuclear Fuel Cycle: An Innovative Storage Concept, Robert Rosner (University of Chicago and senior advisor to the GNF Initiative), Stephen Goldberg (Argonne National Laboratory and research coordinator for the GNF Initiative), and James Malone (Lightbridge) advocate for a pragmatic approach to the back-end of the nuclear fuel cycle, one rooted in sound business principles. They argue that when governments and businesses are developing plans for new nuclear energy programs, economic decisions must be considered in light of the established competition in back-end services.

While many proposals for managing the back-end of the fuel cycle exist, this report puts forward a new regional storage concept for used nuclear fuel. This approach is not tied exclusively to new fuel supply and can be utilized for storage of both legacy and future used nuclear fuel inventories. Under the proposed regional storage concept, an independent storage installation would be created and maintained as a business venture; monitoring would be provided by an international governing entity. Economic compensation, among other incentives, could be used to encourage nations to host regional sites for fuel storage and waste disposal.

“There are several reasons to suggest a commercial approach to the back-end of the nuclear fuel cycle, one rooted in sound business principles. They argue that when governments and businesses are developing plans for new nuclear energy programs, economic decisions must be considered in light of the established competition in back-end services.” Furthermore, developing a model partnership between a limited number of countries in the South and East Asia regions – in which all participants have equal rights and protection regardless of the size and style of their governments – could serve as a building block for other such agreements.

An integral part of the GNF Initiative is listening to the goals and objectives of both nuclear aspirants and current nuclear energy countries. Members of the Initiative are working with decision-makers and stakeholders in the Middle East and the South and East Asia regions to improve the regional storage proposal and to further the conversation on ways to strengthen the NPT regime.

$1 Million of New Funding for the Global Nuclear Future Initiative

Major new funding has been awarded to the Academy to continue the Global Nuclear Future Project. Grants of $500,000 from Carnegie Corporation of New York, $280,000 from The John D. and Catherine T. MacArthur Foundation, and $150,000 from The William and Flora Hewlett Foundation are advancing the work of the Initiative. The project seeks to promote multilateral fuel cycle arrangements for safe civil nuclear energy programs; strengthen the international nonproliferation regime; and reduce the probability that a terrorist group could steal or acquire material from a nuclear facility.

The GNF Initiative brings together decision-makers and stakeholders that historically have not communicated with each other. The Academy has built a global network–government policy-makers and the heads of nongovernmental organizations, nuclear engineers and industry leaders, social scientists and nonproliferation experts–and is working closely with colleagues at the International Atomic Energy Agency, the United Nations, the League of Arab States, the Association of Southeast Asian Nations, and various state energy agencies.

Recent project activities include policy-oriented work on the physical protection of nuclear facilities and materials; proposals for managing the back-end of the fuel cycle; suggestions for strengthening the international regulatory and nonproliferation regime; and an assessment of the current state and future prospects of the emerging international nuclear order (with a particular focus on the Middle East and Southeast Asia). To bring the project’s findings directly to policy-makers, the Academy continues to organize high-level meetings in both the United States and abroad. The Academy convened key diplomats and nuclear experts during the Nuclear Non-Proliferation Treaty (NPT) Review Conference in May 2010 at the United Nations. A similar meeting is planned for May 2012, during the NPT Preparatory Committee meetings in Vienna, Austria.

The GNF Initiative, which began in 2008, carries on the Academy’s long-standing interest in nuclear arms control and energy-security issues. It has previously received major support from The William and Flora Hewlett Foundation, Carnegie Corporation of New York, and the Alfred P. Sloan Foundation. The project has produced several volumes that examine various aspects of nuclear energy—from a technical primer on nuclear reactors to proposals for strengthening the nonproliferation regime (a list of publications appears below). All of these publications are available on the Academy’s website at http://www.amacad.org/projects/globalnuclearbooks.aspx.

The GNF Initiative is directed by Steven E. Miller (Harvard University) and Scott D. Sagan (Stanford University), with senior advisor Robert Rosner (University of Chicago) and research coordinator Stephen M. Goldberg (Argonne National Laboratory). Advisors to the project include Wael Al-Assad (League of Arab States), Noramly bin Muslim (National University of Malaysia), Albert Carnesale (University of California, Los Angeles), Richard A. Meserve (Carnegie Institution for Science), George Perkovich (Carnegie Endowment for International Peace), William Potter (Monterey Institute of International Studies), John W. Rowe (Exelon Corporation), and George P. Shultz (Stanford University).

Publications

Nuclear Collisions: Discord, Reform & the Nuclear Nonproliferation Regime, Essay by Steven E. Miller and Responses by Wael Al-Assad, Jayantha Dhanapala, C. Raja Mohan, and Tuan Ta (American Academy of Arts and Sciences, 2012)


Game Changers for Nuclear Energy, Kate Marvel and Michael May (American Academy of Arts and Sciences, 2011)

Nuclear Reactors: Generation to Generation, Stephen M. Goldberg and Robert Rosner (American Academy of Arts and Sciences, 2011)


Multinational Approaches to the Nuclear Fuel Cycle, Charles McCombie & Thomas Isaacs, Noramly Bin Muslim, Tariq Rauf, Atsuyuki Suzuki, Frank von Hippel, and Ellen Tauscher (American Academy of Arts and Sciences, 2010)