

Polycentric Circles

Indiana University, 513 N. Park Ave.
Bloomington, IN 47408-3895

phone: (812) 855-0441
fax: (812) 855-3150

workshop@indiana.edu
<http://www.indiana.edu/~workshop>

Co-directors: Elinor Ostrom & James Walker
Founding director: Vincent Ostrom



Assistant director & editor: Jacqui Bauer
Layout & design: Patty Lezotte

Workshop Hosts Nobel Laureate Schelling

by Dan Cole and Lin Ostrom

In September, the Workshop was delighted to host Nobel Laureate Thomas Schelling, who visited Indiana University as a Patten lecturer. Schelling is Distinguished University Professor Emeritus, Department of Economics and School of Public Affairs, University of Maryland, and Lucius N. Littauer Professor of Political Economy, Emeritus, Harvard University.

Schelling began his week-long residence at IU with a Workshop colloquium on "What is Game Theory? A Social Science Reply." He distinguished between the way game theory is defined by professional game

theorists and by social scientists, and stressed that one of the most powerful aspects of game theory for social scientists is the identification of situations of major interest while he was more skeptical that game theory provided clear solutions.



1965 or 1985. What explains this? Schelling suggested that countries that have obtained nuclear weapons, including India and Pakistan, have quickly come to realize that they are far more useful as defensive, deterrent devices than as offensive weapons, which, if used, would invite immediate and devastating responses from other nuclear powers and/or complete ostracism from global institutions and alliances.

Managing Nuclear Proliferation

Schelling's visit continued with two major public lectures. At the first Patten Lecture on "Managing Nuclear Proliferation," Schelling sought to understand the happy fact that no nuclear weapon had been exploded "in anger" anywhere in the world since World War II. US politicians and bureaucrats have tried to remove the "taboo" that distinguishes nuclear weapons from "conventional" weapons, but the taboo has persisted. Despite several international incidents that might have provoked their use, atomic weapons have remained off limits. This taboo has held even in cases where there was no risk of near-term retaliation, such as the 1973 Yom Kippur War between Egypt and Israel and the 1982 war between Britain and Argentina over the Falkland Islands. The USSR likewise refrained from using an atomic weapon during its long, bloody fight with the mujahedin in Afghanistan.

The taboo against the use of nuclear weapons has lasted now for more than 60 years, far longer than anyone expected in 1945,

Schelling next asked whether we can maintain or even strengthen the taboo against first use of nuclear weapons in the future, as countries such as Iran and North Korea develop their own nukes. He was cautiously optimistic that even if those states were to obtain nuclear weapons, they would likewise realize that they are virtually useless as offensive weapons.

A more pressing question, he said, is the possible transfer of a nuke to a non-state terrorist organization. While there was insufficient time during the lecture to address this issue, Schelling pursued the topic further in subsequent discussions with faculty and students. On the one hand, he noted the relative ease with which a terrorist group could transport a small nuclear device into New York Harbor. On the other hand, terrorists would have a very difficult time preparing the bomb itself. Acquiring fissile material from a state sponsor or on the black market could prove challenging. Even current state sponsors of terrorism, such as Iran, might balk at sharing nukes with terrorists since the weapons could be traced back to the state sponsor

(continued on p. 2)



VOL. 15 • NO. 1
NOVEMBER 2008

Workshop hosts Thomas Schelling, 1
Announcements, 2
Biologist imagines a directory of life, 3
Lin Ostrom delivers Schuessler lecture, 4
WOW4 conference, 4
Colloquia and lectures, 5
Publications, 6
Congratulations, 9
Visitors, 10

Workshop hosts Schelling (continued from p. 1)

and since unreliable terrorists might use the weapons against the state sponsor itself. In the final analysis, Schelling considered the potential use of nuclear weapons by terrorist organizations to be a more complex problem than their use by state actors.

Managing Climate Change

In his second Patten Lecture on “Managing Climate Change,” Schelling explored another of the world’s most pressing long-term problems: how to deal with the rising global mean temperatures resulting from greenhouse gas emissions. After explaining the basics of how the “greenhouse effect” works, Schelling described how rising temperatures are expected to affect different regions of the world differently. In the United States, the overall economic effects of climate change are likely to be modest, mainly because only a small percentage of our gross national product depends on climate-sensitive activities such as agriculture. The situation is very different, however, in less developed countries, where climate-sensitive activities comprise a much larger share of national income. Thus the countries that are least responsible for creating the climate change problem are likely to bear the highest costs.

Efforts to deal with the climate change problem—including both mitigation of greenhouse gas emissions and adaptation to the consequences of rising temperatures—are well-suited to foreign aid programs. Emissions reductions from countries like the United States will primarily help to avoid harm in countries that don’t have many emissions to reduce. Likewise, adaptation assistance will have to move from richer countries to poorer countries that are more prone to harm from climate change. What is needed, according to Schelling, is something like a new Marshall Plan or NATO, with guarantees of mutual assistance.

As for near-term mitigation, Schelling supports a slow, ramping-up of efforts to reduce greenhouse gas emissions, noting that the effects of climate change are unlikely to be very great for the next 50 to 75 years—a blink of an eye in geological time but a very long period in technological time, as he described it. Schelling noted that several important technologies that are taken for granted today did not even exist before World War II, including plastics, electronics, nuclear energy, and satellites. What technological developments might take place in the next several decades that would help us control the climate change problem? Assuming climate change effects are modest for the next generation or two, Schelling suggested that it would be more worthwhile to assist *current* generations in less developed countries to develop economically—including through relatively inexpensive efforts to help control diseases like malaria. This would both improve the welfare of residents of less developed countries and better enable those countries to afford the costs of adapting to climate changes in future generations.

Schelling also stressed the potential for reasonably inexpensive forms of large-scale greenhouse gas mitigation through “geo-engineering.” For instance, it might be possible to inject sulfur aerosols in the upper atmosphere, which would reflect more warming sunlight away from the earth. There are, of course, risks associated with such geo-engineering efforts, but Schelling stressed the importance of engaging in experiments or demonstration projects to test the efficacy and potential side effects of various measures.

The Patten lecture series has been bringing distinguished scholars, artists, and writers to IU since 1936.



*Has your email and/or mailing address changed?
If so, please send updates to: workshop@indiana.edu*



Announcements

- Look for the Workshop’s new website coming soon! The new website is expected to be active early in 2009, and will have information about the events below and other activities at the Workshop.
- A conference on Sustainable Democracy will be held in Bloomington from January 29–31, 2009.
- IU’s African Studies Program is planning a symposium on conflict and democratization through the Indiana Consortium of International Programs. The event will take place February 13, 2009, in Indianapolis.
- From April 30–May 3, 2009, the Workshop will host a conference, sponsored by the Gruter Institute, titled “The Context and Evolution of Mechanisms for Solving Collective Action Problems.” Nobel Laureate Vernon Smith will give the keynote address.
- The Liberty Fund will sponsor a conference immediately preceding WOW4, from May 28–31, 2009, on “Liberty and the Institutions of Self-Government” in Indianapolis.
- Workshop affiliate Burney Fischer and PhD student Brian Steed had an article on urban forests published on the website of the Miller-McCune Center (<http://www.miller-mcune.com/article/619>) and on Science Daily (<http://www.sciencedaily.com/releases/2008/08/080811200427.htm>).
- Register to receive the *International Journal of the Commons*! Registration is free. For more information, go to <http://www.thecommonsjournal.org/index.php/ijc/user/register>.
- An interview with Lin Ostrom appeared in July on *Axess Magazine* (http://www.axess.se/english/2007/08/interview_nils-son.php.htm).



Biologist Imagines a Directory of Life on Earth

Imagine smacking a mosquito. Now imagine taking one leg off of that mosquito, inserting it into a comb-sized device that you carry in your back pocket, and knowing instantly what kind of mosquito it is and whether it's carrying West Nile virus.

If University of Pennsylvania biologist Dan Janzen has his way, everyone on the planet will have just such a device, and for a fraction of the price of an iPhone. Janzen spoke in September on his efforts to promote conservation in Costa Rica at a talk sponsored by the Workshop. Intimate knowledge of our natural endowment, said Janzen, will necessarily lead people to protect it.

The device is called a "barcoder," because it records a DNA "barcode" for each species it is used to identify. Using large (copier-size) versions of this device, which exist in a number of places including a high-volume model located at the University of Guelph in Canada, researchers all over the world have already identified and catalogued hundreds of species. Janzen wants to see the system miniaturized and democratized.

In rural Costa Rica, Janzen and wife Winnie Hallwachs have trained a legion of local people to trap and preserve insects, plucking a single leg from each specimen to send to Guelph for identification. "Most insects have six legs," said Janzen, "but all our insects have five." These local partners are called "parataxonomists"—a term based on the same concept as a paramedic or paralegal, where the person doesn't have a terminal degree in the field but has a command of many of the relevant skills. Although their level of formal education may be less than a graduate student from the capital or from abroad, the parataxonomists can make similar contributions to research in the short term, and vastly more valuable contributions in the long term because of their intimate local knowledge and their willingness to stay in the community.

Already their efforts have identified 3,000 moths and butterflies, 700 flies, and 600 parasitic wasps, including 35 wasp species previously thought to be a single wasp species.

DNA barcoding takes advantage of the same technology used to map genes. Geneticists have identified one sequence of DNA that is unique in nearly every animal, and another that is unique in nearly every plant—of the 4,300 insect species barcoded by the Janzen/Hallwachs team, only 13 (or 0.3%) have had duplicate barcodes.

Janzen said that the consequences of failing to learn about forests and other natural assets are huge, particularly in an era when security and climate change concerns are forcing the world to look for alternatives to petroleum. Early on, said Janzen, fear ruled humans' relationship with nature: "If you cannot read the forest, it is the enemy." Later, utilitari-



anism ruled: "If you cannot read the forest, it is firewood." Now, the pressure is global: "If you cannot read the forest, it is biofuel."

According to Janzen, if everyone has a handheld device that enables them to know what is being threatened, they will take greater care to preserve it. But information isn't everything, and ultimately in Costa Rica and elsewhere it will also take money: Janzen and Hallwachs are working to create a \$500 million endowment to fund the Costa Rican national park system in perpetuity, and recently raised \$3 million to purchase a tract of forest in the northern part of the country that is being threatened with development. In a country that occupies 0.1% of the earth's surface but that holds 4% of the world's biodiversity, such an eye to the future will be critical.



POLYCENTRIC CIRCLES is published biannually in May and November. We welcome information regarding research projects, recent publications, conference announcements, photographs, etc.

The deadline for submitting items for the May 2009 issue is April 30, 2009. Please submit your items to the editor, Jacqui Bauer, at: jacmbaue@indiana.edu



WOW4 conference: approaching fast!

The fourth Workshop on the Workshop (WOW4) will be held **June 3–7, 2009**. The deadline for abstracts and working groups has already passed, and the planning committee is now working to finalize the schedule. The tentative list of working groups is as follows:

- *Applying Interdisciplinary Management Concepts to Quality School Reform*
Coordinator: David Porter
- *New Challenges for the Management of Shared Water Resources*
Coordinator: Insa Theesfeld
- *Cognition and Norms*
Coordinator: TBA
- *Sustainable Democracy*
Coordinators: William Bianco and Regina Smyth
- *Field Experiments on Development and the Environment*
Coordinator: Maria Claudia Lopez
- *The Politics of Authority, Land, and Natural Resources: Broadening the Analysis*
Coordinators: Amy Poteete and Jesse Ribot
- *Property Rights*
Coordinator: TBA
- *Protected Areas as Common-Pool Resources or Public Goods?*
Coordinator: Xavier Basurto
- *Changing Governance, Land Use, and Livelihoods among Kenyan Pastoralists*
Coordinator: Esther Mwangi
- *Complex Systems and Spatial Effects*
Coordinator: TBA
- *Local Governance*
Coordinators: Richard Feiock and Kenneth Bickers

The WOW4 website, <http://www.indiana.edu/~wow4>, will be up and running in early January. In the meantime, please contact Jacqui Bauer at jacmbaue@indiana.edu if you have any questions.

Lin Ostrom delivers first annual Schuessler lecture at IU

Lin was honored to deliver the first Annual Karl F. Schuessler Lecture in Social Science Research in November. She addressed the importance of taking into account the complexity of both social and ecological systems when studying sustainability. Solutions must be developed that are tailored to the complex characteristics of a given system, rather than trying to address all situations with a single solution. To move ahead in achieving higher levels of sustainability, she said, we need to develop research methods and ontological approaches that enable social and ecological scientists to work together.

The Schuessler Lecture is sponsored by the Schuessler Institute for Social Research, the Bureau of Social Science Research, and the Department of Sociology.



Workshop hosts scholars from the Max Planck Institute

In September, the Workshop hosted roughly 15 graduate students from Germany as part of a small workshop on uncertainty in decision making organized by Peter Todd in Informatics. The visiting students are part of the International Max Planck Research School (IMPRS) on Uncertainty in Psychology, Economics, and the Law, which is based in Jena, Germany.

Vincent Ostrom honored at APSA

The American Political Science Association held a roundtable on Vincent Ostrom's ideas at its annual meeting in August. The session was titled "Scholarship and 21st Century Approaches to Understanding Global Inequality: Contributions to Institutional Theory, Political Economy, and Federalism in the Study of Development and Governance." Workshop alumnus and long-time affiliate Barbara Allen chaired the session.

Affiliate Update

President of Romania Traian Basescu has appointed affiliate **Aurelian Craiutu** (IU; Member of the School of Social Science, AY 2008–2009) to serve as Honorary Chair of the Presidential Committee for the Study of Romania's Political and Constitutional Regime. The Committee, consisting of constitutional experts and political scientists from Romania, France, and the United States, was entrusted with the task of submitting a report to the president by October 2008 that will then be discussed in Parliament.



Colloquia and Lectures

Colloquia

Lynne Kiesling, Department of Economics, Northwestern University, Sept. 8: “Beneficial Complexity: A Field Experiment in Technology, Institutions, and Institutional Change in the Electric Power Industry.”

Eric Dannenmaier, IU School of Law—Indianapolis, Sept. 15: “Beyond Indigenous Property Rights: The Implications of a Distinctive Connection to the Land and Environment.”

Kinga Boenning, Inst. of Agricultural Development in Central and Eastern Europe, Halle, Germany, Sept. 17: “A Framework for Analyzing Bottom-Up Rural Development: The Application of the IAD Framework to Leader+ in Poland.”

Thomas Schelling, Department of Economics and School of Public Policy, University of Maryland, Sept. 22: “What is Game Theory? A Social Science Reply.”

Wibke Crewett, Faculty of Agriculture and Horticulture, Humboldt University, Berlin, Sept. 24: “Governance of Rural Services in Kyrgyzstan.”

Daniel Janzen, Department of Biology, University of Pennsylvania, Sept. 29: “How to DNA Barcode the Tropical Wild World and Endow it as Well: The ACG Example from Northwestern Costa Rica.”

Katrin Daedlow, Division of Resource Economics, Humboldt University, Berlin, Oct. 1: “Institutional Resilience of East German Recreational Fisheries to Abrupt Social-Political Change after the Reunification in 1990.”

Michael Rauh, Kelley School of Business, IU, Oct. 6: “Firms, Markets, and the Work Ethic.”

Nana Afranaa Kwapong, Division of Resource Economics, Humboldt University, Berlin, Oct. 8: “Rural Services and Poverty Alleviation in Uganda.”

Christopher Kam, Department of Political Science, University of British Columbia, Oct. 13: “Partisanship, Enfranchisement, and the Historical Transformation of Political Finance in Britain.”

David Porter, School of Management, University of Alaska, Oct. 15: “Markets, Vouchers and the Student/Teacher Nexus: In Search of Coordinating Institutions to Improve the Coproduction of Education Services.”

Stephen Benard, Department of Sociology, IU, Oct. 20: “Does Intergroup Conflict Promote Norms and Hierarchies?”

Johanna Speer, Division of Resource Economics and Division of Cooperative Sciences, Humboldt University, Berlin, Oct. 22: “How Has Participatory Planning Legislation Affected Decision-Making over Rural Infrastructure in Guatemala?”

Amber Wutich, School of Human Evolution and Social Change, Arizona State University, Oct. 27: “Fear and Loathing at the Tapstand: Water Insecurity, Institutions, and Emotional Distress in Urban Bolivia.”

Marco Janssen, Center for the Study of Institutional Diversity, Arizona State University, Oct. 29: “Coordination and Cooperation in Asymmetric Commons Dilemmas in the Lab and the Field.”

Laura Underkuffler, School of Law, Duke University, Nov. 3: “Captured by Evil: The Idea of Corruption in Law.”

Audun Sandberg, Faculty of Social Science, Bodø University College, Norway, Nov. 5: “Analyzing Dynamics of Complex Socio-Ecological Systems: The Case of the Coast.”

Rinku Roy Chowdhury, Department of Geography, IU, Nov. 10: “Smallholder Land Management, Forest Successions, and Environmental History in Southern Mexico.”

Ashwini Chhatre, Department of Geography, University of Illinois, Nov. 12: “Democratic Politics and Collective Action.”

Nadya Hajj Parks, Department of Political Science, Emory University, Nov. 17: “Forming Institutions in Fouda: The Origins of Property Rights in Palestinian Refugee Camp Sectors.”

Giulia Andrighetto, Institute of Cognitive Sciences and Technologies, Rome, Nov. 19: “Normal = Normative? The Role of Intelligent Agents in Norm Innovation.”

Mark Sproule-Jones, Department of Political Science, McMaster University, Dec. 1: “Developing Basic Principles for the Governance of Large-Scale Water Commons: The Great Lakes Case.”

Ulrike Müller, Faculty of Agriculture and Horticulture, Humboldt University, Berlin, Dec. 3: “An Institutional Analysis of Decentralized Governance and Rural Service Delivery—Evidence from North India.”

Sujai Shivakumar, Board on Science, Technology, and Economic Policy, National Research Council, Washington, DC, Dec. 8: “Innovation in America—A Polycentric Perspective.”

Middle East Conflict and Reform Lecture Series

William Maley, Asia-Pacific College of Diplomacy, Australian National University, Canberra, Oct. 1: “Afghanistan: Some Dilemmas of Political Transition.”

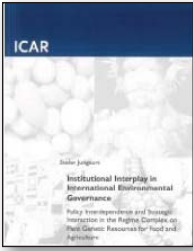
Mark Tessler, Department of Political Science; International Institute; Vice Provost for International Affairs, University of Michigan, Oct. 29: “Attitudes about Democracy and Governance in the Arab World: Findings and Insights from the Arab Barometer Project.”



*Colloquia and lecture papers
are available online at:*

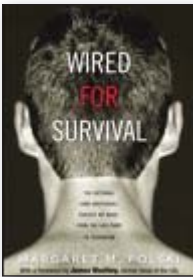
[www.indiana.edu/~workshop/
colloquia.html](http://www.indiana.edu/~workshop/colloquia.html)

Publications: Books & Monographs



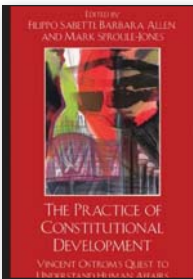
Stefan Jungcurt. 2008. INSTITUTIONAL INTERPLAY IN INTERNATIONAL ENVIRONMENTAL GOVERNANCE: POLICY INTERDEPENDENCE AND STRATEGIC INTERACTION IN THE REGIME COMPLEX ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE. Shaker Verlag.

Institutional interplay—synergies and disruptions in the implementation of overlapping international agreements—is an important factor for the effectiveness of international environmental governance. This book analyzes the determinants of institutional interplay between institutions that regulate the conservation and use of plant genetic resources for food and agriculture.



Margaret Polski. 2009. WIRED FOR SURVIVAL: THE RATIONAL (AND IRRATIONAL) CHOICES WE MAKE, FROM THE GAS PUMP TO TERRORISM. Pearson Education, FT Press.

Drawing on cutting-edge research in neuroeconomics, *Wired for Survival* illuminates the surprising implications of rapid growth in emerging economies and develops practical, technically sound ways to face the challenges of global growth. Top researcher and consultant Margaret Polski begins by uncovering the remarkable neurological underpinnings of policy. Polski reveals why the most effective political and economic policies are codified not in law, treaty, or culture, but in the networks embedded in our brains . . . and how the changes we need to protect our prosperity will require us to adapt those networks to radically new realities.



Filippo Sabetti, Barbara Allen, and Mark Sproule-Jones, eds. 2009. THE PRACTICE OF CONSTITUTIONAL DEVELOPMENT: VINCENT OSTROM'S QUEST TO UNDERSTAND HUMAN AFFAIRS. Lexington Books.

This edited collection further expands our knowledge about what comprises a successful constitution in both theory and application. Building on the research and analysis of Vincent Ostrom, who as one of America's leading scholars on constitutions has spent a lifetime writing about constitutions in America and overseas. Each essay shows how particular countries, governments, and organizations devise constitutions to reflect their visions of governance and sets of rules for their leaders. On a higher theoretical level, the contributors emphasize the importance of choosing the rules of the political game in order to determine the nature of the game itself.



Mark Sproule-Jones, Carolyn Johns, and B. Timothy Heinmiller, eds. 2008. CANADIAN WATER POLITICS: CONFLICTS AND INSTITUTIONS. McGill-Queen's University Press.

Canadian Water Politics explores the nature of water use conflicts and the need for institutional designs and reforms to meet the governance challenges now and in the future. The editors present an overview of the properties of water, the nature of water uses, and the institutions that underpin water politics. Contributors highlight specific water policy concerns and conflicts in various parts of Canada and cover issues ranging from the Walkerton drinking water tragedy, water export policy, Great Lakes pollution, St. Lawrence River shipping, Alberta irrigation and oil production, and fisheries management on the Atlantic and Pacific coasts.

FORTHCOMING

Krister Andersson, Gustavo Gordillo de Anda, and Frank van Laerhoven. 2008. LOCAL GOVERNMENTS AND RURAL DEVELOPMENT: COMPARING LESSONS FROM BRAZIL, CHILE, MEXICO, AND PERU. University of Arizona Press.

Aurelian Craiutu and Sheldon Gellar, eds. 2009. CONVERSATIONS WITH TOCQUEVILLE: THE GLOBAL DEMOCRATIC REVOLUTION IN THE TWENTY-FIRST CENTURY. Lexington Books.

Aurelian Craiutu and Jeremy Jennings, eds. and trans. 2009. TOCQUEVILLE ON AMERICA AFTER 1840: LETTERS AND OTHER WRITINGS. Cambridge University Press.



Publications: Articles

- Agrawal, Arun, and Elinor Ostrom. 2008. "Decentralization and Community-Based Forestry: Learning from Experience." In *Decentralization, Forests and Rural Communities*, ed. Edward Webb and Ganesh Shivakoti, 44–67. New Delhi: Sage.
- Akinola, Shittu. 2007. "Coping with Infrastructural Deprivation through Collective Action among Rural People in Nigeria." *Nordic Journal of African Studies* 16(1):30–46.
- Akinola, Shittu. 2007. "Knowledge Generation, Political Actions and African Development: A Polycentric Approach." *International Journal of African Renaissance Studies* 2(2):217–38.
- Akinola, Shittu. Forthcoming. "Community Self-Governance as a Panacea for Environmental and Social Injustice in the Niger-Delta of Nigeria." In *New Frontiers in African Studies*, ed. Akin Alao and Rotimi Taiwo. Trenton, NJ: African World Press & Red Sea Press.
- Akinola, Shittu. 2008. "Coping with Social Deprivation through Self-Governing Institutions in Oil Communities of Nigeria." *Africa Today* 55(1):89–107.
- Altrichter, Mariana, and Xavier Basurto. 2008. "Effects of Land Privatisation on the Use of Common-Pool Resources of Varying Mobility in the Argentine Chaco." *Conservation and Society* 6(2):154–65.
- Basurto, Xavier. 2008. "Biological and Ecological Mechanisms Supporting Marine Self-Governance: The Seri Callo de Hacha Fishery in Mexico." *Ecology and Society* 13(2):20. [online]
- Blomquist, William, and Elinor Ostrom. 2008. "Deliberation, Learning, and Institutional Change: The Evolution of Institutions in Judicial Settings." *Constitutional Political Economy* 19(3):180–202.
- Boschken, Herman L. 2008. "A Multiple-perspectives Construct of the American Global City." *Urban Studies* 45(1):3–28.
- Craiutu, Aurelian. 2008. "From the Social Contract to the Art of Association: A Tocquevillian Perspective." *Social Philosophy and Policy* 25(2):263–87.
- Shane Day. 2008. "Applications of Q Methodology to a Variety of Policy Process Theories and Frameworks." *International Journal of Organization Theory and Behavior* 11(2).
- Evans, Tom, Abigail York, and Elinor Ostrom. 2008. "Institutional Dynamics, Spatial Organization, and Landscape Change." In *Political Economies of Landscape Change: Places of Power*, ed. James Wescoat and Douglas Johnston, 111–29. New York: Springer.
- Gordillo de Anda, Gustavo. 2008. "Citizenship in the Making." *Georgetown Journal of International Affairs* 9(2):105–13.
- Horning, Nadia. 2008. "Behind Sacredness: Rules, Local Interests, and Forest Conservation in Bara Country, Madagascar." In *African Ethnoforests: Sacred Groves, Culture, and Conservation*, ed. Celia Nyamweru and Michael Sheridan, 117–32. Oxford University Press.
- Horning, Nadia. 2008. "Madagascar's Biodiversity Conservation Challenge: From Local- to National-Level Dynamics." *Environmental Sciences* 5(2):109–28.
- Horning, Nadia. 2008. "Strong Support for Weak Performance: Donor Competition in Madagascar." *African Affairs* 107(428):405–31.
- Horning, Nadia, and Alain Bertrand. 2007. "Les nouvelles idées de gestion locale des ressources renouvelables et le processus de promulgation de la loi 96–025." In *Le Transfert de Gestion à Madagascar, Dix Ans d'Efforts: Tanteza*, ed. Pierre Montagne, Zo Razanamaharo, and Andrew Cooke, 21–28. Montpellier: CIRAD.
- Janssen, Marco, Robert Goldstone, Filippo Menczer, and Elinor Ostrom. 2008. "Effect of Rule Choice in Dynamic Interactive Spatial Commons." *International Journal of the Commons* 2(2):288–312.
- Janssen, Marco, and Elinor Ostrom. 2008. "TURFS in the Lab: Institutional Innovation in Real-Time Dynamic Spatial Commons." *Rationality and Society* 20(4):371–97.
- Karmacharya, Mukunda, Birendra Karna, and Elinor Ostrom. 2008. "Implications of Leasehold and Community Forestry for Poverty Alleviation." In *Decentralization, Forests and Rural Communities*, ed. Edward Webb and Ganesh Shivakoti, 177–208. New Delhi: Sage.
- Kashwan, Prakash, and Pemaram Patel. 2008. "Neighbours Who Refused to Be Excluded!: An Inter-village Conflict Arising from Exclusion of Traditional Users of Forests from JFM in Udaipur District, Rajasthan." In *Locked Horns: Conflicts and their Resolution in Community Based Natural Resource Management*, ed. A. Pastakia, 245–61. Bangalore: Books for Change.
- Norberg, Jon, James Wilson, Brian Walker, and Elinor Ostrom. 2008. "Diversity and Resilience of Social-Ecological Systems." In *Complexity Theory for a Sustainable Future*, ed. Jon Norberg and Graeme Cumming, 46–79. New York: Columbia University Press.
- Ostrom, Elinor. 2008. "The Challenge of Common-Pool Resources." *Environment: Science and Policy for Sustainable Development* 50(4):8–20.
- Ostrom, Elinor. 2008. "Developing a Method for Analyzing Institutional Change." In *Alternative Institutional Structures: Evolution and Impact*, ed. Sandra Batie and Nicholas Mercurio, 48–76. New York: Routledge.
- Ostrom, Elinor. 2008. "El Gobierno de los Bienes Comunes Desde el Punto de Vista de la Ciudadanía." In *Genes, Bytes y Emisiones: Bienes Comunes y Ciudadanía*, ed. Silke Helfrich, 268–78. Mexico: Heinrich Böll Foundation. Book online at: <http://www.boell-latinoamerica.org/index.html?http://www.boell-latinoamerica.org/es/web/795.html>

(continued on p. 8)

Publications—Articles

(continued from p. 7)

Ostrom, Elinor. 2008. "Frameworks and Theories of Environmental Change." *Global Environmental Change* 18(2):249–52.

Ostrom, Elinor. 2008. "Institutions and the Environment." *Economic Affairs* 28(3):24–31.

Ostrom, Elinor. 2008. "Tragedy of the Ecological Commons." In *Encyclopedia of Ecology*, 1st edition, ed. Sven Erik Jorgensen and Brian D. Fath, 3573–76. Oxford: Elsevier.

Ostrom, Elinor. 2008. "Tragedy of the Commons." In *The New Palgrave Dictionary of Economics*, 2nd ed., ed. Steven Durlauf and Lawrence Blume. New York: Palgrave Macmillan. [online]

Ostrom, Elinor, and Harini Nagendra. 2008. "Linking Forests, Trees, and People: From the Air, on the Ground, and in the Lab." *Current Conservation*, no. 2.1:4–5.

Patel, Pemaram, and Prakash Kashwan. 2008. "Power of the Marginalised: Community Action by a Tribal Community to Uproot Encroachment from Common Grazing Land at Viyal Village, Rajasthan." In *Locked Horns*, ed. Astad Pastakia, 141–52. Bangalore: Books for Change.

Shivakoti, Ganesh, and Elinor Ostrom. 2008. "Facilitating Decentralized Policies for Sustainable Governance and Management of Forest Resources in Asia." In *Decentralization, Forests and Rural Communities*, ed. Edward Webb and Ganesh Shivakoti, 292–310. New Delhi: Sage.

Theesfeld, Insa. 2008. "Irrigation Sector in Bulgaria: Impact of Post-Socialist Policy Reform." *Water Policy* 10:375–89.



Publications: Working Papers

Unless indicated otherwise, the working papers below are available on the Digital Library of the Commons (DLC) at <http://dlc.dlib.indiana.edu/>.

Basurto, Xavier, Gordon Kingsley, Kelly McQueen, Mshadoni Smith, and Christopher Weible. 2008. "A Systematic Approach to Institutional Analysis: Applying Crawford and Ostrom's Grammatical Syntax." Submitted to *Political Science Quarterly*. <http://www.indiana.edu/~workshop/publications/W08-33%20Draft.pdf>

Cox, James, Elinor Ostrom, and James Walker, with Jamie Castillo, Eric Coleman, Robert Holahan, Michael Schoon, and Brian Steed. 2007. "Trust in Private and Common Property Experiments." Paper presented at the APSA annual meeting, Chicago, IL, August 30–September 2, 2007.

Holler, Manfred J., and Barbara Klose-Ullmann. 2008. "Art goes America." Working Paper. Hamburg: University of Hamburg, Institute of SocioEconomics. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1126233

Ostrom, Elinor. 2007. "The Challenge of Crafting Rules to Change Open-Access Resources into Managed Resources." Paper presented at the International Economic Association Roundtable on the Sustainability of Economic Growth, Beijing, China, July 13–14, 2007.

Ostrom, Elinor. 2007. "Why Do We Need Laboratory Experiments in Political Science?" Paper presented at the American Political Science Association annual meeting, Chicago, IL, August 30–September 2, 2007.

Ostrom, Elinor. 2008. "Building Trust to Solve Commons Dilemmas: Taking Small Steps to Test an Evolving Theory of Collective Action." Forthcoming in *Games, Groups, and the Global Good*, ed. Simon Levin. New York: Springer.

Ostrom, Elinor. Forthcoming. "Design Principles of Robust Property-Rights Institutions: What Have We Learned?" In *Property Rights and Land Policies*, ed. K. Gregory Ingram and Yu-Hung Hong. Cambridge, MA: Lincoln Institute of Land Policy.

Ostrom, Elinor. Forthcoming. "Engaging with Impossibilities and Possibilities." In *Arguments for a Better World: Essays in Honor of Amartya Sen, Volume II: Society, Institutions and Development*, ed. Kaushik Basu and Ravi Kanbur, 522–41. New York: Oxford University Press.

Ostrom, Elinor. Forthcoming. "Governance and Institutions." In *The Princeton Guide to Ecology*, ed. Simon Levin. Princeton, NJ: Princeton University Press.

Ostrom, Elinor. Forthcoming. "Polycentric Systems as One Approach for Solving Collective-Action Problems." In *Climate Change and Sustainable Development: New Challenges for Poverty Reduction*, ed. Mohamed Salih. Northampton, MA: Edward Elgar.

Ostrom, Elinor, and T. K. Ahn. Forthcoming. "The Meaning of Social Capital and Its Link to Collective Action." In *Handbook on Social Capital*, ed. Gert T. Svendsen and Gunnar L. Svendsen. Northampton, MA: Edward Elgar.

Ostrom, Elinor, and Charlotte Hess. Forthcoming. "Private and Common Property Rights." In *Encyclopedia of Law and Economics: Property Law and Economics*, 2nd edition, ed. Boudewijn Bouckaert. Northampton, MA: Edward Elgar.



Congratulations to . . .

Alumnus **T. K. AHN** and his wife, on the birth of their daughter Ji Hye (Sophia) in May.

Advisory Council member **MATTAUER**, who was appointed Dean of the Hutton Honors College at IU.

Advisory Council member **BURNEY FISCHER**, who was appointed Director of Undergraduate Programs in IU's School of Public & Environmental Affairs.

Alumnus **EVELYN LWANGA**, who gave birth to a daughter, Njeri, on October 23.

Former staff **SARAH KANTNER** and her husband, who are expecting their first child in March 2009.

PhD student **PRAKASH KASHWAN**, who received a grant to support his fieldwork in India from the International Foun-

ation for Science. Prakash and his wife also had a daughter, Zia, in July.

Former visiting scholar **STEPHAN KUHNERT**, who was appointed deputy mayor and city treasurer by the city of Troisdorf, a city with 77,000 people, located between Bonn and Cologne, Germany, beginning September 2008.

LIN OSTROM, who received her 8th honorary degree from the Norwegian University of Science and Technology in September (photo on right). Lin was also appointed the 2008 Robert A. Dahl Fellow by the American Academy of Political and Social Science, and received the Galbraith Award from the Agriculture and Applied Economics Association.

Alumnus **FRANK VAN LAERHOVEN** and his wife, who had a son, Ruben Cesar, on September 26.



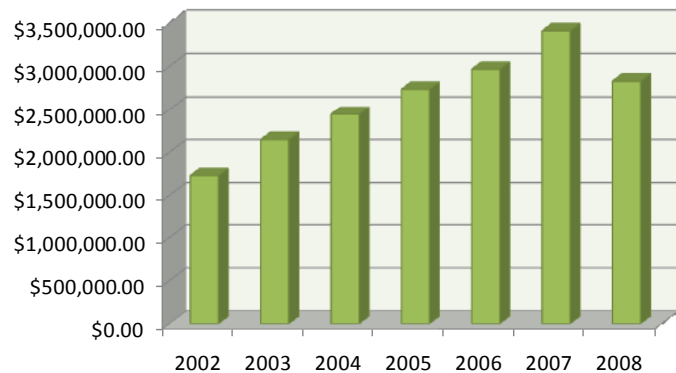
Visiting scholar **YAOCAI WANG** and his wife, whose son Rui Yu was born on election day.

Alumnus **TRACY YANDLE**, who was promoted to Associate Professor of Environmental Policy and received tenure at Emory University.

Tocqueville Endowment for the Study of Human Institutions



Tocqueville Endowment Market Value



	2003	2004	2005	2006	2007	2008
Market value	\$2,146,899	\$2,443,920	\$2,737,665	\$2,967,214	\$3,408,272	\$2,832,149
Percentage growth		13.83%	12.02%	8.38%	14.86%	-16.90%

Visitors for 2008–2009

Long-Term Visitors

Xavier Basurto (August 2007–May 2009). To advance his work on common-pool resources theory, early this fall Xavier published two articles in *Ecology and Society* and *Conservation and Society*. He has two more manuscripts in review and is preparing to submit two more shortly. This semester, Xavier is participating in several working groups (Social-Ecological Systems, Experimental Economics, and IFRI) and taught a short course on qualitative comparative methods attended by Ph.D. students and faculty from sociology, anthropology, geography, political science, and SPEA. In the spring, Xavier wrote a successful proposal to the Christensen Fund to continue his work with small-scale fisheries in Mexico, and accepted an exciting tenure-track position at Duke University starting next fall. Xavier is excited to continue developing new collaborations with Workshopers and members of the Resilience Alliance among others.

Esther Blanco (Spring 2008) is a PhD candidate in Economics at the University of the Balearic Islands, Spain. Her PhD research adopts an economic and institutional approach to analyze uses of natural common-pool resources by the tourism industry. By means of analytical modeling, she examines the strategic incentives behind stability of voluntary environmental initiatives by the tourism industry (focusing on unilateral commitments and ecolabels). Her research objectives while at the Workshop are twofold: (1) to extend the analytical models developed during her PhD research and (2) to develop and pretest an experimental design aimed to analyze tourists' strategic use of natural common-pool resources from an empirical perspective.

Kinga Boening (Fall 2008) is a PhD student at the Leibniz-Institute of Agricultural Development in Central and Eastern Europe (IAMO) in Halle, Germany. In her PhD she wants to explore possibilities

to support bottom-up rural development. While at the Workshop, she is working on her research design and broadening her understanding of institutional analysis. She participates in the IFRI training program and related research as well as in several working groups.



Wibke Crewett (Fall 2008), Ph.D. candidate, Department of Agricultural Economics and Social Sciences, Humboldt University Berlin. Her dissertation work focuses on local governance reforms in Kyrgyzstan. At the Workshop, she presented her findings on the decentralization process currently under way in Kyrgyzstan from her fieldwork in summer 2008. She also worked on a paper that analyzes the rural citizen perceptions of local self-governance bodies in her study country.

Katrin Daedlow (Fall 2008) is a PhD candidate at the Division of Resource Economics, Humboldt University Berlin. She is also affiliated with the Leibniz-Institute of Freshwater Ecology and Inland Fisheries in Berlin. In her work, she concentrates on collective-action problems and governance in recreational fisheries management in Germany. At the Workshop, she worked on a paper about access and use regulations of fish resources in German inland waters.

Nana Afranaa Kwapong (Fall 2008) is a Ph.D. candidate at the Division of Resource Economics from Humboldt University Berlin. Her research focuses on how to make rural services work for the poor in Uganda, considering why some rural services are failing the poor and the mechanisms by which rural services can be made to alleviate poverty. While at the Workshop, she will broaden her understanding of institutional analysis, research methods, and case study design that will help her in writing her dissertation.

Minchang Lee (July 2008–July 2009) is a Vice Professor, Division of Public Administration & Welfare, Chosun University, South Korea. His scholarly interests are in

the interdisciplinary study on New Institutionalism. He has studied various topics related to environment and regulation policies based on the institutional approach. At the Workshop, he will work on the theoretical explanation of volunteerism from the perspective of New Institutionalism.

Maria Claudia Lopez has a PhD in Resources Economics from UMass, Amherst. This is her second year as a postdoctoral fellow at the Workshop. Her research interests fall into two main categories: (1) combining field experiments with other research strategies to study different institutions that promote cooperation among direct users of natural resources and (2) how the Colombian conflict has affected rural populations and natural resources.

Maria Claudia is working on two projects. She received a grant from the Latin American and Caribbean Environmental Economics Program to conduct experiments on the Pacific Coast of Colombia and investigate how community members craft and define rules. She is also designing a new set of experiments on the trade-offs that tourism destinations face regarding water allocation. Maria Claudia is also working with colleagues on three other papers using information from her previous experiments and incorporating new approaches to analyze this information. Finally, Maria Claudia co-organized the first Workshop of the Latin America Field Experiments Network in Bogota in November 2008.

Ulrike Mueller (Fall 2008) is a Ph.D. candidate at the Department of Resource Economics, Humboldt University Berlin. In her research, she analyzes institutional reforms in rural service delivery with a focus on the North Indian states of Uttar Pradesh and Bihar. At the Workshop, she will be working on the theoretical part of her dissertation to underpin her empirical findings. The outputs of her research stay will include: (1) a paper on the politics of choice in decentralized governance networks and (2) a concept note for her next round of data collection in India.

(continued on p. 11)

Long-Term Visitors

(continued from p. 10)

Jiang Nie (January 2009–December 2009) is an Associate Professor at the school of resources and environmental management, Guizhou College of Finance and Economics, China. Over the years, she has focused on human capital and rural-urban migration. Now she pays more attention to the areas of economic development and environmental policies. At the Workshop, she will work on ecological compensation and rural development using a case study of western China.

David O. Porter (July 2008–July 2009) is Professor of Management at the University of Alaska Fairbanks. While at the Workshop, he will be working on a project entitled “Coordination and Evaluation of the Coproduction of K-12 Education.” This is a normative exercise designed to guide students, parents, teachers, and education administrators in designing more effective arrangements to coordinate coproducing education services.

Johanna Speer (Fall 2008) is a PhD candidate in the international research project “Making Rural Services Work for the Poor” at Humboldt University Berlin. Her research contributes to the debate on how to govern rural services in order to reach the poor. Focusing on the case of Guatemala, her project investigates the implementation and the effects of the Development Council Law on decision making regarding rural infrastructure. Her interests include community-level determinants of participation in communal development councils and the effects of local power structures on service governance.

Yaocai Wang (August 2008–August 2009) is a PhD student from the School of Public Administration, Renmin University, China. His research includes “Humanistic Olympics and Community Development” and “Citizen Participation in Public Policy.” Now, he is studying about community governance, and learning about Institutional Analysis at the Workshop.



Short-Term Visitors

Kamiljon Akramov, International Food Policy Research Institute (IFPRI), Washington, DC (December 8–10)

Krister Andersson, Department of Political Science, University of Colorado, Boulder (December 9–11)

Giulia Andrighetto, Post-Doctoral Research Fellow, Institute of Cognitive Sciences and Technologies, Rome, Italy (November 2–23)

Regina Birner, International Food Policy Research Institute (IFPRI), Washington, DC (December 8–10)



Ashwini Chhatre, Department of Geography, University of Illinois at Urbana-Champaign (November 11–13)

Julia and Wal Duany, Republic of Sudan, the Southern Sudan Legislative Assembly, Juba (August 8–12)

Markus Hanisch, Institute for Cooperative Studies, Humboldt University, Berlin, Germany (December 6–11)

Nadia Rabesahala Horning, Department of Political Science, Middlebury College, Middlebury, VT (July 6–8)

Marco Janssen, School of Human Evolution and Social Change, Center for the Study of Institutional Diversity, Arizona State University, Tempe (October 24–29)

Marty Luckert, Forest and Natural Resources, Economics and Policy, Department of Rural Economy, University of Alberta, Edmonton, Canada (December 9–11)

Esther Mwangi, Center for International Development, Kennedy School of Government, Harvard University, Cambridge, MA (December 9–11)

Ephraim Nkonya, International Food Policy Research Institute (IFPRI), Washington, DC (December 8–10)

Alexander Obolonsky, Higher School of Economics, Moscow, Russian Federation (November 16–30)

John Pender, International Food Policy Research Institute (IFPRI), Washington, DC (December 8–10)

Amy Poteete, Department of Political Science, Concordia University, Montreal, Quebec, Canada (October 25–28)

Audun Sandberg, Faculty of Social Science, Bodø University College, Bodø, Norway (October 27–November 26)

Ria Steiger, Strategic Interaction Group, Max Planck Institute of Economics, Jena, Germany (September 4–13)

Happy Holidays!

