



NEWSLETTER OF THE SECTION ON ENVIRONMENT AND TECHNOLOGY OF THE AMERICAN SOCIOLOGICAL ASSOCIATION

SPRING 2004

CONTENTS:

PGS. 1-2

STIRPAT

REFLECTIONS

PGS. 3 - 4

CALL FOR PAPERS:

COMMUNITY AND

ECOLOGY CONFERENCE

PG. 5

CALL FOR

SUBMISSIONS:

JOURNAL OF

CONTEMPORARY

ETHNOGRAPHY

ERULEMAKING

CONFERENCE SEEKS

NGOS

PG. 6

TABLE OF CONTENTS:

LAW AND POLICY

MEMBER NEWS

ELECTED OFFICERS:

Chair:

Phil Brown

Phil_Brown@brown.edu

Chair-Elect:

Stella Capek

capek@hendrix.edu

Secretary/Treasurer:

Bob Brulle

rbrulle@igc.org

Council Members:

Tammy Lewis

lewis@muhlenberg.edu

Lori Hunter

Lori.Hunter@colorado.edu

John Bellamy Foster

Jfoster@oregon.uoregon.edu

Margarita Alario

alario@uiuc.edu

Stephen Zavestoski

smzavestoski@usfca.edu

Dana Fisher

drf2004@columbia.edu

Student Council

Representative:

Marcia Hill

Gossardmgossard@wsu.edu

Newsletter Editor:

Stephan W. Scholz

scholz@u.arizona.edu

Reflections on the STIRPAT Research Program

Eugene A. Rosa

Washington State University

Richard York

University of Oregon

Thomas Dietz

Michigan State University

A research program called STIRPAT has been in development and in application for the past decade. It was initiated by Tom Dietz and Gene Rosa about a decade ago and then joined by Richard York four years ago. The foundation of STIRPAT is an orienting perspective that combines insights from human ecology with a version of environmental sociology that insists on examining a combination of physical, biological, and social variables in combination (Rosa 1999). The principal goal of the program is to develop a systematic way of empirically assessing the anthropogenic (human-generated) driving forces of environmental impacts (see Dietz and Rosa 1994). It takes as a starting point for analyses the I=PAT formulation, well-known in demography and ecology.¹ I=PAT specifies that total environmental impacts (I) are a multiplicative function of population (P), per capita consumption or affluence (A), and impact per unit of consumption or technology (T). The I=PAT identity, relabeled the "Kaya" equation, lies at the heart of efforts to project greenhouse gas emissions by the Intergovernmental Panel on Climate Change (Nakicenovic 2000).

Although a useful heuristic device, the venerable I=PAT formula does not lend itself to straightforward hypothesis testing since it is an accounting equation that must balance by definition. So balanced, it assumes *a priori* that the effects of P, A and T on I are strictly proportional. To address these limitations we reformulated the I=PAT formula into stochastic form (Dietz and Rosa 1994), calling it STIRPAT for Stochastic estimation of Impacts by Regression on Population, Affluence, and Technology (Rosa and Dietz 1998). The mathematical specifics of the formula do not concern us here. In fact, the statistical modeling techniques we have used in our research are simply a means for furthering our understanding of the social conditions that lead to environmental degradation.

Our empirical applications of STIRPAT have focused on cross-national analyses of the material driving forces of environmental degradation, particularly demographic and economic factors (Dietz and Rosa 1994). However, there is nothing intrinsic to our approach that rules out addressing the empirical predictions of other perspectives. In fact, our recent work (York, Rosa, and Dietz 2003a, 2003b, 2003c) explicitly expands the STIRPAT framework to allow for an empirical assessment of the theoretical claims of a diversity of theoretical perspectives, including human ecology, political economy, and ecological modernization. We have used STIRPAT to conceptually refine models of environmental impact (Dietz and Rosa 1994; York, Rosa, and Dietz 2002), while simultaneously performing

¹ Ehrlich and Holdren (1970) were first with the idea of I=PAT, while Barry Commoner (1971; also see Commoner, Corr, and Stamler 1971) was first with an algebraic formulation which Ehrlich and Holdren (1972) refined to its current form.

**STIRPAT
REFLECTIONS
(CONT'D)****Webmaster:**

Rob Gardner
Robert.Gardner
@colorado.edu

Listserv Manager:

Andrew Van Alstyne
avanalst@umich.edu

**Program Committee
for ASA 2004:**

Phil Brown, chair

Membership Committee:

Stephen Zavestoski, chair;
Aaron McCright
Bruce Pobodnik

Policy and Research**Committee:**

Dana Fisher
Bill Freudenburg
Gene Rosa

**Outstanding Publication
Committee:**

Craig Humphrey, chair;
Scott Frickel
Tammy Lewis

**Olsen Student Paper
Award Committee:**

Margarita Alario, chair;
Karen O'Neill
John Bellamy Foster

Nominations Committee:

Steve Kroll-Smith, chair;
David Pellow
Lori Hunter

**Distinguished Contribution
Award Committee:**

Bob Brulle, chair;
all council members

Section Website:

[http://socsci.colorado.edu/
SOC/ET/ets.html](http://socsci.colorado.edu/SOC/ET/ets.html)

To subscribe to the listserv
for this section go to the
website and follow the
relevant link and directions.

empirical analyses of the driving forces of a variety of environmental impacts, including the “ecological footprint”, carbon dioxide emissions, and a host of other measures of environmental impacts. (Dietz and Rosa 1997; Rosa, York, and Dietz forthcoming; York, Rosa, and Dietz 2003a, 2003b, 2003c) We note that other scholars have begun to use the STIRPAT model in their research (Cramer 1996, 1998; DeHart and Soulé 2000; Shi 2003; Soulé and DeHart 1998), while others are citing our results in general assessments of the environmental problematic. (Ehrlich and Ehrlich 2004)

The program has produced some clear empirical findings. Most strikingly, population size has emerged as a persistent, major factor influencing the scale of national environmental impacts of all varieties. All of our analyses suggest that, controlling for other factors, population size proportionately scales national environmental impacts. This body of findings is not simply an affirmation of Malthusian thinking for there are important variations in national environmental impacts after controlling for population. Indeed, we consistently find that there is dramatic inequality in resource consumption and waste emissions across nations even after controlling for population, with wealthy core nations consuming the bulk of the world’s resources and emitting the bulk of the world’s wastes. We find that national affluence (GDP per capita) has a strong effect on environmental impacts, although its effect differs across types of impacts (e.g. among different types of greenhouse gases). With few exceptions, however, we find that national impacts increase with affluence, providing little support for the “environmental Kuznets curve” hypothesis or ecological modernization theory, which predict a decline in impacts in the later stages of economic development. Furthermore, we find that other material structural factors, such as urbanization and geography, influence environmental impacts.

The program has helped to clearly specify the anthropogenic factors that drive environmental change and point to testable hypotheses. We do not view STIRPAT as a substitute for more elaborate abstract theorizing, but rather see it as a robust framework for disciplining abstract theoretical claims and for furthering our understanding of human interaction with the environment.

RC 24 (Environment and Society) and RC 03 (Community Research) of the International Sociological Association

"Community and Ecology: The Intersection of Community Sociology and Environmental Sociology", ISA Mini-Conference

at the Hiram W. Johnson State Office Building in San Francisco, California on August 13, 2004.

2004 Mini-Conference Organizers:

Terry Nichols Clark, President of RC03, University of Chicago

Aaron Matthew McCright, University of Chicago

Submission Deadline:

May 15, 2004

Over the past thirty years the discipline of sociology has witnessed both the emergence of a sustained focus on human-environment interactions and a lively debate on the dynamics and significance of communities in a globalizing world. These trends have even produced an abundance of existing works attempting to integrate theories and research agendas across these two areas. This mini-conference attempts to continue this fruitful line of sociological endeavor. We designed this mini-conference to increase the dialogue between these two areas of sociology so that the theoretical insights and body of knowledge of each will enhance the ongoing work within the other. Furthermore, such an explicit focus on the intersection of these two areas can facilitate the creation of a more general sociology that is ultimately more powerful in explaining and providing an understanding for the relationships among humans (in communities) and between humans and the biophysical environment.

Members of the ISA and other interested individuals are invited to submit formal papers to be considered for inclusion in the 2004 Mini-Conference Program. All papers should cohere to the general theme of the mini-conference. For further guidance, we identify four sub-thematic areas that papers may, but are not required to, address.

the concept of community within an ecological framework. theoretical and methodological innovations from ecology; New Urbanism; green architecture; local adoption and implementation of the Earth Charter; intergenerationality; aesthetics and the urban environment; environmental education

local and regional sustainability. social, economic, and ecological dimensions of sustainability; theorizing and empirical research on local population and economic growth and its ecological consequences; ecological footprinting; "green cities;" environmental inequality; local dimensions of ecological risk

local or community-level environmental politics. local or regional political cultures; community-level environmental policy-making; environmental movements; civic leadership, social capital, and internet individualism; resource mobilization strategies for environmental activities; environmental public opinion; environmental justice

the global-local nexus of global environmental change. theoretical and empirical work on the social and ecological effects of globalization on local areas; global communities of environmental scientists and activists; international trade and the displacement of ecological impacts; globalizing patterns of environmental movements; the role of the internet and transnational models of activism

CALL FOR
PAPERS:

COMMUNITY
AND ECOLOGY
CONFERENCE

SAN
FRANCISCO

SUBMISSION
DEADLINE:
MAY 15

SUBMISSION INFORMATION

All paper submissions for the 2004 mini-conference are due by May 15, 2004. All submissions must be made over electronic mail (e-mail). Paper authors should prepare an e-mail message with the subject line of "ISA Mini-Conference Submission" to mccright@uchicago.edu with the following information enclosed:

CALL FOR
PAPERS:

COMMUNITY AND
ECOLOGY CONT'D

1. paper title
2. full names, institutional affiliations, and contact information for all authors (especially e-mail addresses, as this facilitates speedier communication)
3. abstract (up to 250 words)
4. request for audio-visual equipment, if necessary
5. attach the paper file – that fulfills each of the "submission criteria" below
 - A. this paper file must be either converted to a PDF file or prepared as a Word, WordPerfect, or basic text document [.txt or .rtf])
 - B. if your paper is not finished by May, then simply send an e-mail containing information in 1-4 above; upon acceptance of your abstract, you will be responsible for sending the completed paper to the e-mail address above in a timely fashion. Submitting authors will receive an e-mail acknowledgment of successful submission receipt.

SUBMISSION CRITERIA

Only completed papers, not abstracts, outlines, or rough drafts, may be presented at the mini-conference. All paper submissions must comply with the following submission criteria.

Original Contribution. Papers must reflect original work or major developments in previously reported work.

Length and Style. Papers as submitted are limited to 30 double-spaced pages, including footnotes, tables, and bibliographies.

Number of Submissions. Authors may submit one or more separate and distinct papers, Provided they realize that they will be limited to two presentations on the final program.

Language. To optimize opportunities for discussion, all papers must be submitted in written English, and all accepted papers must be presented in spoken English.

PAPER PRESENTATIONS

A presider shall convene each thematic paper presentation session, introduce each of the presenters, and manage the time for the session. Presenters shall be given approximately 20 minutes to discuss their paper. Presenters are encouraged to be clear, brief, and budget their time wisely. The remaining time in each session shall be devoted to questions and comments from the audience.

Each presenter may bring multiple hard copies of your paper to distribute at the conference. However, we request that you keep this amount to a minimum, since we will archive all the papers presented at the mini-conference on an Internet website (in PDF format) immediately after the mini-conference.

Journal of Contemporary Ethnography Seeks Submissions

JCE publishes theoretically, methodologically, and substantively significant studies based upon participant-observation, unobtrusive observation, intensive interviewing, and contextualized analysis of discourse as well as examinations of ethnographic methods. Submissions from all substantive areas and theoretical perspectives are welcomed.

Email manuscript submissions (in Word or WordPerfect format) may be sent to the editor - elect Scott A. Hunt at sahunt00@uky.edu.

Hardcopy submissions and all other correspondence should be sent to:

Scott A. Hunt

Editor, Journal of Contemporary Ethnography
Department of Sociology, University of Kentucky
Lexington, Kentucky 40506-0027.

A processing fee of US\$10 must be submitted via a check or money order made payable to the Journal of Contemporary Ethnography.

Call for NGO Participants: Federal Electronic Rulemaking Conference

The federal government is moving toward an Internet-based public participation process for all regulatory rulemaking activity, and the following workshop desperately needs NGOs in attendance to help ensure that the [regulations.gov](http://www.regulations.gov) website is designed in a way that enhances the democratic process.

There will be a series of half day workshops at the George Washington University June 2-4 for stakeholders in the federal government's regulatory rulemaking process. The focus of the meeting is electronic rulemaking (eRulemaking) and the practical and policy issues as the federal government moves toward a centralized Federal Docket Management System (FDMS). Workshop details are online at:

<http://www.drake.edu/artsci/faculty/sshulman/eRulemaking/June-2004-NSF-Workshop.htm>

We are issuing a general call for participants willing to attend the specific half day session devoted to their constituency. There are six broadly defined constituencies: 1) larger businesses, 2) smaller businesses, 3) labor & environmental advocacy groups, 4) good government and public participation groups, 5) state & local government, and 6) the legal and lobbyist professions.

Space is limited. We ask that only individuals committed to attending and contributing to a serious dialogue register. Participation is free and comes with lunch. Our intent is to share our findings with government agency managers, members of Congress, IT contractors developing the FDMS, academics, and the general public.

**CALL FOR
SUBMISSIONS:**

**JOURNAL OF
CONTEMPORARY
ETHNOGRAPHY**

**CALL FOR
PARTICIPANTS:**

**ELECTRONIC
RULEMAKING
CONFERENCE
SEEKS NGOS**

Special Issue of *Law & Policy*, V. 26 Issue 2, July 2004.

Toxic Torts and Environmental Justice

Editors

Steve Kroll-Smith and Sandra Westervelt

Prelude

"People, Bodies, and Biospheres: Nexus and the Toxic Tort"

Steve Kroll-Smith and Sandra Westervelt (s_krolls@uncg.edu)

"Toxic Torts, Politics, and Environmental Justice: A Case for Crim torts"

Thomas Koenig and Michael Rustad (tkoenig@neu.edu)

"Equity in Toxic Tort Litigation: Unjust Enrichment and the Poor"

Allan Kanner (a.kanner@kanner-law.com)

"Daubert and the Exclusionary Ethos: The Convergence of Corporate and Judicial Attitudes Towards the Admissibility of Expert Evidence in Tort Litigation"

Gary Edmonds and David Mercer (g.edmond@unsw.edu.au)

"Technological Disasters, Litigation Stress and the Use of Alternative Dispute Mechanisms"

Brent K. Marshall, J. Steven Picou, and Jan R. Schlichtmann
(bmarshall@pegasus.cc.ucf.edu)

"Toxic Torts, Public Interest Law and Environmental Justice: Evidence From Louisiana"

Melissa Toffolon-Weiss and J. Timmons Roberts (jtrobe@wm.edu)

Jason W. Moore, University of California-Berkeley, was awarded the 2004 Alice Hamilton Prize from American Society of Environmental Historians, for the best article published outside the journal *Environmental History* in 2003:

"The Modern World-System as Environmental History" *Ecology and the Rise of Capitalism, Theory & Society* 32(2003): 307-377.

Please send any story submissions for the newsletter to scholz@u.arizona.edu by June 15th for inclusion in the summer edition. Anything relevant to the upcoming ASA conference in San Francisco, such as local city information or special events, is especially welcome. Conference schedules concerning environment, technology and society topics will be posted in the newsletter as well. Thanks, and have a great summer.

TABLE OF CONTENTS:**SPECIAL ISSUE OF LAW AND POLICY****MEMBER NEWS****CALL FOR NEWSLETTER SUBMISSIONS:****SUMMER EDITION**