

Mathematical Sociologist

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Comments from the Chair: Murray Webster

The Section continues to be healthy and vigorous. In large part that is due to the organizational skills and work by our previous Chair, Doug Heckathorn, whose guidance has helped me at several points this fall. Doug continues to contribute as chair of the Nominations Committee for officers to be elected in 2017.

Membership is steady at 203, 62 students, 138 faculty, plus a few at reduced dues. The ratio of students to faculty, about 45%, is in line with most other Sections. Finances are sound. At last report (September), we have about \$3100.00 in the account. That allows us to operate, but it also requires modesty in planning a reception in Montreal. In 2015 and 2016 we hosted joint receptions with smaller sections and paid a larger share of the costs. This year, subsidizing

others will probably be impossible.

ASA gives us one section at the meetings. Submis-



sions are open to any paper in which mathematics advances understanding. Alison Bianchi, University of Iowa, is Organizer and Chair.

Submission dates for Section award nominations is February 1, 2017. Send nominations to the chairs. They are: Amir Goldberg, Stanford University: Outstanding Graduate Student Paper in Mathematical Sociology

James A. Kitts, University of Massachusetts, Amherst: Outstanding

Dissertation in Progress in Mathematical Sociology

David Schaefer, Arizona State University: Outstanding Article Publication Award

Carter T. Butts, University of California, Irvine: Harrison White book award; OR James S. Coleman Distinguished Career Award*

* Bylaws specify that the book award and the career award alternate, with book in odd years and career in even. We

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Comments from the Chair: Murray Webster

gave a book award off schedule in 2016. To get back on track, we decided to make 2017 “open” for whichever award seems more appropriate and to make a career award in 2018. As Ken Land, or Chair-Elect, pointed out, Section members write fewer books than scholars in many other sections, so it would not be inappropriate to give a career award two years in a row if the committee deems that reflects scholarly contributions.

Our Section website has not been updated in a while. The reason, we recently learned, is that it resides at UCLA and UCLA doesn't allow outsiders to modify it. Matt Brashears, our Webmaster, will move the site to another host where he and future webmasters can keep it current. When we have the new

address, we will send it to you on the Listserve.

At our 2016 Business Meeting, Michael J. Lovaglia announced that Geoffrey Tootell is exploring creating a second prize in mathematical sociology. The new prize would be for mid-career scholars whose work builds or tests formal theory or models. Some years ago, Geoff's generous gift to the Section established the Outstanding Dissertation in Progress prize. The new prize also would recognize excellent work but for those whose efforts have already produced some results. A significant hurdle was that ASA had always forbidden cash prizes to regular (non-student) members. However, Council met the day after our Business Meeting and, at our request, overturned that ban. Significant issues remain, including

when to establish the prize, how it would be awarded, and even whether it will be administered through our Section, but I am hopeful that those can be worked out and that it will become a part of our Section.

I want to close by thanking every Section member, and particularly Council members, Newsletter Editor Pam Emanuelson, officers and committee members for your willingness to do the work of our Section. Your generosity makes it a pleasure and an honor to work with you.



Harrison White Outstanding Book Award

Dean Lusher, Johan Koskinen, and Garry Robins

Exponential Random Graph Models for Social Networks
Cambridge: Cambridge University Press, 2013.

Committee: Delia Baldassarri, Chair; Members: Amir Goldberg, Kenneth Land, Kazuo Yamaguchi, and Tom Snijders



Outstanding Article Publication Award

DellaPosta, Daniel J., Yongren Shi, and Michael W. Macy

Why Do Liberals Drink Lattes?
American Journal of Sociology. 120(5): 1473-1511, 2015

Committee: James A. Kitts, Chair; Members: Elizabeth E. Bruch, Lincoln Quillian, Gianluca Manzo, and Carter Butts



Mathematical Sociology Outstanding Dissertation in Progress Award

Yongren Shi

Study of Political and Cultural Polarization Using Book Co-purchases and Reviews

Committee: Matthew Brashears, Chair; Members: Matt Salganik, Jacob Dijkstra, Marcel Van Assen, and Joseph Whitmeyer

The section on Mathematical Sociology is pleased to accept nominations for the **Coleman Distinguished Career Award** and the **Harrison White Outstanding Book Award**. The **Coleman Distinguished Career Award** recognizes a lifetime of contributions to the field

James S. Coleman Distinguished Career Award & Harrison White Book Award Nominations

of Mathematical Sociology. A letter of nomination should outline the candidate's activities of lasting significance in mathemati-

cal sociology, conducted over the course of her or his career. The nomination also should include a copy of the candidate's curriculum vitae, and an assurance that the candidate has given permission to be nominated for the award. The **Harrison White Outstanding Book Award**

recognizes a single book-length contribution to the field of Mathematical Sociology. Eligible books must have been published within the past four years. A letter of nomination should

Outstanding Article Publication Award Nominations

The Mathematical Sociology section is accepting submissions for the **Outstanding Article Publication Award**. Eligible

papers must have been published during the past three years. Please submit papers and a nomination letter to

David Schaefer, Chair
(david.schaefer@asu.edu)

Deadline:
February 1st, 2017.

outline the significance and contribution of the text to the field. Nominations for both awards must come from American Sociological Association members, and should indicate the award for which the individual or work is being nominated; one award will be made by the committee, based on the quality of submissions received. Please send materials to

Carter Butts, Chair
(buttsc@uci.edu)
Deadline:
February 1, 2017.



Graduate Student Paper Award Nominations

The Mathematical Sociology section is accepting submissions for the **Outstanding Graduate Student Paper Award**. Eligible papers must have been written while the author was still a graduate student and during the past three years. Papers can be pub-

lished or unpublished. A dissertation chapter, but not the entire dissertation, is eligible, as is a paper based on the dissertation. The Award includes \$500 to help defray the costs of attending the ASA meetings or other expenses. The author/first author must be a graduate

student at the time of submission, and all authors must be graduate students when the paper was written. Please submit papers to

Amir Goldberg, Chair
(amirgo@stanford.edu)

Deadline:
February 1st, 2017

Please send materials to

Outstanding Dissertation in Progress Award Nominations

The **Outstanding Dissertation-in-Progress** award provides a grant of \$1,500 to meet some of the scholarly expenses of a student whose dissertation employs mathematics in an interesting, imaginative or ingenious way to advance sociological knowledge. The applicant should submit a copy of his or

her approved dissertation proposal, with a list of any requirements added by the graduate committee. The packet should also include a letter of support from the student's sponsor, which describes the student's qualifications for the completed task and the potential importance of the project. You must

be a member of the Mathematical Sociology section to apply for this grant, and agree to remain a member through the period to be covered by the grant. Please send a copy of the dissertation proposal and a nomination letter to

James Kitts, Chair
(jkitts@soc.umass.edu)

Deadline:
February 1, 2017.

The Award provides a grant of \$1,500.



Recent Publication in Mathematical Sociology

Congratulations to Marcel van Assen on becoming Professor by Special Appointment in Mathematical Sociology at Utrecht University, The Netherlands



Explaining cooperation in the finitely repeated simultaneous and sequential prisoner's dilemma game under incomplete and complete information

By Jacob Dijkstra and Marcel van Assen

<http://www.tandfonline.com/doi/full/10.1080/0022250X.2016.1226301>

Explaining cooperation in social dilemmas is a central issue in behavioral science, and the prisoner's dilemma (PD) is the most frequently em-



ployed model. Theories assuming rationality and selfishness predict no cooperation in PDs of finite duration, but cooperation is frequently observed. We therefore build a model of how individuals in a finitely repeated PD with incomplete information about their partner's preference for mutual cooperation decide about cooperation. We study cooperation in simultaneous and sequential PDs. Our model explains three behavioral regularities found in the literature: (i) the frequent cooperation in one-shot and finitely repeated N -shot games, (ii) cooperation rates declining over the course of the game, and (iii) cooperation being more frequent in the sequential PD than in the simultaneous PD.

(In)Equality and (In)Justice

By Guillermina Jasso

Civitas – Revista de Ciências Sociais 16(2):189-217

<http://dx.doi.org/10.15448/1984-7289.2016.2.23118>

Understanding the connection between inequality and justice is important because justice is classically regarded as the first line of defense against self-interest and inequality. Absent a strong link between inequality and justice, the sense of justice would not awaken to exert its moral suasion, no matter how great the inequality or how fast its increase. We obtain exact links between economic inequality and three parameters of the justice evaluation distribution -- the mean, median and variance -- across a comprehensive set of inequality measures and a substantial starter set of just reward scenarios. This work shows that there is no general necessary connection between inequality and justice. There is, however, a striking pattern in some situations: as economic inequality increases, the average of the justice evaluations moves deeper into the territory of unjust underreward, and the distribution stretches outward, increasing the gulf between underrewarded and overrewarded and hallowing out the middle class.

Respondent-Driven Sampling - Testing Assumptions: Sampling with Replacement.

By Vladimir Barash, Christopher Cameron, Michael W. Spiller and Douglas D. Heckathorn

Journal of Official Statistics, 32, 29-73, 2016

Classical Respondent-Driven Sampling (RDS) estimators are based on a Markov Process model in which sampling occurs with replacement. Given that respondents generally cannot be interviewed more than once, this assumption is counterfactual. We join recent work by Gile and Handcock in exploring the implications of the sampling-with-replacement assumption for bias of RDS estimators. We differ from previous studies in examining a wider range of sampling fractions and in using not only simulations but also formal proofs. One key finding is that RDS estimates are surprisingly stable even in the presence of substantial sampling fractions. Our analyses show that the sampling-with-replacement assumption is a minor contributor to bias for sampling fractions under 40%, and bias is negligible for the 20% or smaller sampling fractions typical of field applications of RDS.

Model-based and Design-based Inference: Reducing Bias Due to Differential Recruitment in Respondent-Driven Sampling

By Shi, Yongren, Christopher J. Cameron, and Douglas D. Heckathorn.

Sociological Methods and Research, in press, 2016. OnLine First

URL: <http://smr.sagepub.com/cgi/reprint/0049124116672682v1.pdf?ijkey=PZ2uu8l6RZ3hraZ&keytype=finite>

Respondent-Driven Sampling, a link-tracing sampling and inference method for studying hard-to-reach populations, has been shown to produce asymptotically unbiased population estimates when its assumptions are satisfied. However, some of the assumptions are prohibitively difficult to reach in the field, and the violation of a crucial assumption can produce biased estimates. We compare two different inference approaches: design-based inference, which relies on the known probability of selection in sampling; and model-based inference, which is based on models of human recruitment behavior and the social context within which sampling is conducted. The advantage of the latter approach is that when the violation of an assumption has been shown to produce biased population estimates, the model can be adjusted to more accurately reflect actual recruitment behavior, and thereby control for the source of bias. To illustrate this process we focus on three sources of bias, differential effectiveness of recruitment, a form of non-response bias, and bias resulting from status differentials which produce asymmetries in recruitment behavior. We first present diagnostics for identifying types of bias, and then present new forms of a model-based RDS estimator which controls for each type of bias. In this way, we show the unique advantages of a model-based estimator.

Graduate Student Highlight



Jasmin S. Link
Member of the Research Group Climate Change and Security

“Her agent-based approach allows for social simulations based on group dynamics rather than on attributes or resources”

University of Hamberg



Jasmin S. A. Link applies Mathematical Sociology in her dissertation in a twofold way: On the one hand, Jasmin emphasizes the importance of interdisciplinary research such as in the joint Science paper on climate change and violent conflict that Jasmin has published together with colleagues from the excellence cluster she is based in (Scheffran et al. 2012). Furthermore, Jasmin transfers various mathematical perspectives into sociology such as proving a sociological hypothesis in the style of a mathematical proof (Kominék 2009), using functional analysis to point to the potential pitfalls of early hy-

potheses linking climate change and conflict when designing case studies (Link & Link 2012), using statistics on social data to analyze potential correlations of climate change and violent conflict in Uganda (Ide et al. 2014), and using network theory and computer simulation to analyze potential effects of climate engineering on society (expansion of Schäfer et al. 2015).

On the other hand, the centerpiece of Jasmin's dissertation consists of her development of path dependence theory as a basis for social simulation. Her agent-based approach allows for social simulations based on group dynamics rather than on attributes or resources and allows for consistent switching between the focus on single agents on the micro level; opinion dynamics on networks, changing linkages in networks

via moving agents, or local stabilities on the meso level; or swarming and herding dynamics, periodic opinion dynamics, or global opinion or collective-movement lock-ins on the macro level. The agent-based theoretical path dependency approach Jasmin has deduced (Kominék 2012) is consistent with the general path dependence theories based on Brian W. Arthur or Paul A. David following the Coleman's bathtub as Jasmin demonstrates in her current manuscript using computer simulations with her own model, which will also be online accessible as soon as the paper is accepted for publication. An application of her deduced development of path dependence theory on the meso level Jasmin presents in her paper on cascading effects on and of path dependent social networks (Kominék & Scheffran

2012), which will also form a chapter in Jasmin's thesis as will her other related publications (https://www.researchgate.net/profile/Jasmin_Link2) or working papers (<http://www.clisec.uni-hamburg.de>) such as an application on trading behavior on financial markets (Kominek 2013).

When finishing her diploma in pure mathematics, Jasmin recognized that behavior can be somehow predicted to some extent from observing group behavior. Having sharpened her observational skills when working with mathematically talented children for about ten years – starting in a research project writing protocols and finishing as leader of a tutor team of

one age-group – she realized that parts of behavior seemed to be predictable. The same kind of apparently channeled behavior also held true for international students in the international dormitory where she stayed for about five years and where she governed the academic self-administration for a few years. While Jasmin considered mathematics a valuable method to calculate or simulate potential outcomes, she also determined that she would need a strong explanatory sociological basis for her models. Thus, Jasmin has started her PhD in sociology at the University of Hamburg, in which she has developed her path dependence approach as basis for social simulation.

Since 2010 Jasmin is a member of the Research Group Climate Change and Security, which is part of the Cluster of Excellence on Integrated Climate System Analysis and Prediction at the University of Hamburg, having also worked for the Max Planck Institute for Meteorology for about half a year in a project on the European Transdisciplinary Assessment of Climate Engineering, funded by the European Union. Besides various presentations at international conferences and participation in workshops such as the Graduate Workshop in Computational Social Science, Modeling and Com-

plexity at the Santa Fe Institute, NM, USA, Jasmin has also co-organized workshops herself such as networking events by the Young Researcher Network on Complex Systems, which she has co-founded and in which she has been a member of the advisory board.

Jasmin is planning to submit her dissertation in 2017 and would like to be part of or initiate a research project herself on advanced social simulation based on her path dependence approach afterwards. For feedback or inquiries, please feel free to contact Jasmin directly at Jasmin.Link@uni-hamburg.de.

American Sociological Conference

The 112th ASA Annual Meeting will be held August 12-15, 2017 in Montreal, Quebec, Canada at the Canada Palais des Congres de Montreal. The Submission Portal is now open until January 11, 2017. This year the section is seeking papers for an open submission session organized by

Alison
Bianchi.



Canada Palais des Congres de Montreal

Annual Report for the Mathematical Sociology Section

For membership year 2015-2016
 Prepared by Douglas Heckathorn, Past Chair of the Section
 October 2016

Section Governance

During the year, there were routine matters that were considered including the following committee appointments and decisions:

Mathematical Sociology Outstanding Dissertation in Progress Award:

Chair: Matthew Brashears, Members: Matt Salganik, Jacob Dijkstra, Marcel Van Assen, and Joseph Whitmeyer

WINNER: Yongren Shi, Dissertation Title: "Study of Political and Cultural Polarization Using Book Co-purchases and Reviews"

Outstanding Article Publication Award:

Chair: Kitts, James A., Members: Elizabeth E. Bruch, Lincoln Quillian, Gianluca Manzo, and Carter Butts

WINNER: DellaPosta, Daniel J., Yongren Shi, and Michael W. Macy. "Why Do Liberals Drink Lattes?" *American Journal of Sociology*. 120(5): 1473-1511, 2015

Graduate Student Paper Award

Chair: James Montgomery, Members: Eugene Johnsen, Michael Lovaglia, Katie Corcoran, and Alison Bianchi

NO AWARD GIVEN

Harrison White Outstanding Book Award

Chair: Delia Baldassarri, Members: Amir Goldberg, Kenneth Land, Kazuo Yamaguchi, and Tom Snijders

WINNER: Dean Lusher, Johan Koskinen, and Garry Robins, *Exponential Random Graph Models for Social Networks*, Cambridge: Cambridge University Press, 2013.

The entire council consulted on candidates for the positions that were open (President Elect, Two Council Members, and a Student Council member). Phil Bonacich as Past President then took these nominations and contacted members for permission to list them on the ballot.

Section Council Meeting

As is the section's tradition, we held the Council meeting outside of the usual time allocation so that we can save this time for an award ceremony just before the Business Meeting. Sunday, August 21 from 7:00 to 8:30am, we had a breakfast meeting. It was held at the restaurant in the convention hotel, the Daily Grill.

We discussed issues related to our newsletter. Our newsletter editor, Pamela Emanuelson, asked for assistance, and a promising lead was identified.

We also discussed our reception and the growing costs of receptions even when we team up with other sections. We left this issue unresolved, but no doubt will have to revisit it.

We prepared the agenda for the business meeting.

Section Award Ceremony

During this ceremony from 2:30 to 3:30pm, Sunday, August 21st, three awards were given. Generally, the chair of the award committee made a statement, followed by a talk by the recipient of the award.

Harrison White Outstanding Book Award

Presenter: Kenneth Land (substituting for Delia Baldassarri)

Recipient: Dean Lusher, Johan Koskinen, and Garry Robins, *Exponential Random Graph Models for Social Networks*, Cambridge: Cambridge University Press, 2013.

Outstanding Article Publication Award

Presenter: James Kitts

Recipient: DellaPosta, Daniel J., Yongren Shi, and Michael W. Macy. "Why Do Liberals Drink Lattes?" *American Journal of Sociology*. 120(5): 1473-1511, 2015

Mathematical Sociology Outstanding Dissertation in Progress Award

Presenter: Douglas Heckathorn (substituting for Matthew Brashears)

Recipient: Yongren Shi, Dissertation Title: "Study of Political and Cultural Polarization Using Book Co-purchases and Reviews"

Business Meeting

The business meeting was held from 3:30 to 4:10pm, Sunday, August 21st.
42 people attended

Discussions:

Report by Secretary/Treasurer John Skvoretz

Report on Newsletter (Pamela Emanuelson)

Discussion of the effort to create a section on Analytic Sociology which would be wholly separate from the Mathematical Sociology Section

Welcoming of Murray Webster, Jr. as Incoming Chair

State of the Section Budget

Report for Current Year Expenditures			
Annual Meeting	Amount	Code	Notes
Reception	\$2,000.00	37300	This was paid from a contribution from a section member
Other Meeting Expenses	\$0.00	37310	
Misc	\$0.00	37320	
Other	\$0.00	37370	
Total	\$2,000.00	n/a	
Awards	Amount	Code	Notes
Student Awards	\$0.00	37360	The student award was paid for out of another account
Award Plaques		37360	
Misc		37360	
Other		37360	
Total	\$0.00	n/a	
Communications	Amount	Code	Notes
Website		37330	
Misc		37370	
Other		37370	
Total	\$0.00	n/a	
Miscellaneous	Amount	Code	Notes
Membership		37370	Gift Memberships may not be funded from allocated funds. Funds must be raised for this purpose.
Misc		37370	
Other		37370	
Total	\$0.00	n/a	
Summary	Amount	Notes	
Total Expenditures	\$2,000.00	998 was the section allocation; 2000 was a gift from a member From Net Assets, Beginning Balance in Q1	
Current Year's Income	\$2,998.00		
Carryover Balance	\$3,177.00		
End of Year Balance	\$4,175.00		

Report for Current Year Income			
	Source	Amount	Calculated
	Section Allocation	\$998.00	
Description	Fill this in using the "Section Budget Allocation" from the "Year to Date" Column		
	Levied Dues		Special
Description	Fill this in using the "Dues Income" from the "Year to Date" Column. Your section may not collect excess dues. Dues income accrues on a monthly basis, so this number will change over time.		
	Contributions	\$2,000.00	n/a
Description	These are funds raised from members.		
	Royalties		n/a
Description	Royalties donated by members or generated through other activities.		
	Outside Contributions		n/a
Description	Funds donated from individuals/entities outside the section.		
	Miscellaneous Income		n/a
Description	Anything not captured above. Please replace this text with a description		
	Miscellaneous Income		n/a
Description	Anything not captured above. Please replace this text with a description		
	Total	\$2,998.00	n/a

Budget for Next Year Budgeted Expenditures			
Annual Meeting	Amount	Code	Notes
Reception		37300	
Other Meeting Expenses		37310	
Misc		37320	
Other		37370	
Total	\$0.00	n/a	
Awards	Amount	Code	Notes
Student Awards		37360	
Award Plaques		37360	
Misc		37360	
Other		37360	
Total	\$0.00	n/a	
Communications	Amount	Code	Notes
Website		37330	
Misc		37370	
Other		37370	
Total	\$0.00	n/a	
Miscellaneous	Amount	Code	Notes
Membership		37370	Gift Memberships may not be funded from allocated funds. Funds must be raised for this purpose.
Misc		37370	
Other		37370	
Total	\$0.00	n/a	
Summary	Amount		Notes
Budgeted Expenditures	\$0.00		Brought over from current year's report
Estimated Income	\$500.00		
Carryover Balance	\$2,998.00		
Est. End of Year Balance	\$3,498.00		

Budget for Next Year Estimated Income			
Source	Amount	Calculated	
Section Allocation	\$500.00	(Members*2) +A	
Description	<p>"A" is determined by the overall membership size: Sections with fewer than 200 members receive a base allocation of \$500. Sections with less than 300 members but more than 200 members receive a base allocation of: (# of section members minus 100) multiplied by \$5. Sections with more than 300 members receive a base allocation of \$1,000. In addition the section receives two dollars from dues of each member. To calculate this amount enter your section's membership in the shaded box on the left. See your monthly membership report update for these numbers.</p>		
Levied Dues		Special	
Description	Your section does not levy additional dues.		
Contributions		n/a	
Description	These are funds raised from members.		
Royalties		n/a	
Description	Royalties donated by members or generated through other activities.		
Outside Contributions		n/a	
Description	Funds donated from individuals/entities outside the section.		
Miscellaneous Income		n/a	
Description	Anything not captured above. Please replace this text with a description		
Miscellaneous Income		n/a	
Description	Anything not captured above. Please replace this text with a description		
Total	\$500.00	n/a	

Mathematical Sociology Dissertation Award Fund – Fund 73 (Sctn 037)	
American Sociological Association Restricted Fund Balance	
June 30, 2016	
Revenue Interest Income	\$1,691.60
Investment Gain/(Loss)	\$4,881.99
Total Revenues	\$6,573.59
Expenses	NA
Change in Net Assets	\$6,573.59
ENDING FUND BALANCE AVAILABLE	\$184,638.61

The Previous Year

Mathematical Sociology Sections Sessions at the ASA

Friday, August 19, 9:00am to 6:00pm

The Sixth Joint Japan-US Conference on Mathematical Sociology and Rational Choice.

A joint pre-conference sponsored by the ASA Section on Mathematical Sociology, the ASA Section on Rationality and Society, and the Japanese Association for Mathematical Sociology.

The previous (fifth) conference had been held in 2012. It was also scheduled for the day before the beginning of the ASA meetings.

Sunday, August 21, 12:30-2:10PM

260. Section on Mathematical Sociology Paper Session. Advances in Mathematical Sociology

Session Organizer: Douglas Heckathorn, Cornell University

Presider: Douglas Heckathorn, Cornell University

A Performance Comparison of Intersection and Union Rules for Integrating Self-Reports of Social Relationships. Francis Lee, University of California-Irvine; Carter T. Butts, University of California, Irvine

Exploring Moving Mechanism between Forward-looking and Backward-looking Rational Actions: Toward a Meta Rational Choice Theory. Yoshimichi Sato, Tohoku University

Is Inequality Good or Bad? Guillermina Jasso, New York University

Is Inequality Inevitable? An Agent-based Bargaining Model of Network Structure and Nominal Characteristic Tags. Natalie Herbert, Annenberg School for Communication, University of Pennsylvania; Soojong Kim, University of Pennsylvania; Damon M. Centola, Annenberg School

The Strength of Long Ties. Patrick Park, Cornell University; Michael W. Macy, Cornell University

Recruiting and Retention Efforts

The council and business meetings included discussions of how to best encourage ASA members to join the section. The dissertation in progress prize, with its financial award, is an effort to increase interest from graduate students. The Japanese-American Mathematical Sociology Conference increased attendance from

Japanese scholars. This conference's joint sponsorship by the Mathematical Sociology and Rational Choice Sections also helped to solidify bonds between the two sections.

Communication Strategy

The section's newsletter, the *Mathematical Sociologist*, helps to inform section members about

1. Announcements for upcoming conferences.
2. Information concerning the publication of special editions.
3. Calls for paper submissions to journals, conferences or books.
4. Announcements for up-and-coming grant or internship opportunities.
5. Information on new graduate students in the area of mathematical sociology.
6. New technological innovations, websites or mathematical resources that could be used in teaching or conducting research.
7. Book or article publications in the area of mathematical sociology.

In these ways, the newsletter performs an important function for the section.

The section's web site provides additional resources for section members, including access to mathematical-sociology-related data sets.

The Coming Year

Elections and Nominations

Plans for elections and nominations are currently in process, in the manner consistent with the section's by-laws.

Plans for the Coming Year

The current chair, Murray Webster, Jr., is also organizing the section's sessions at the upcoming ASA meetings, in August, 2017.

Statements, Notes, and Observations

Members of the Mathematical Sociology Section continue to feel a strong sense of mission, including their identity as mathematical sociologists. This is reflected in the section's success in raising funds for the dissertation in progress award, and in the section's outreach efforts to participate in joint conferences with other scholars with similar interests.



Opening Remarks by
Naoki Sudo

Sixth Joint Japan-US Conference of Mathematical Sociology and Rational Choice

Jun Kobayashi

The Sixth Joint Japan-US Conference on Mathematical Sociology and Rational Choice was held at Sheraton Seattle hotel on August 19, 2016, a day before the ASA annual meeting. It was cosponsored by ASA Rationality and Society Section, Japanese Association for Mathematical Sociology, and ASA Mathematical Sociology Section. Organizers, thus, consist of the three groups: Jun Kobayashi (Seikei University), Masayuki Kanai (Senshu University), Kikuko Nagayoshi (Tohoku University), John Skvoretz (University of South Florida), and Douglas Heckathorn (Cornell University).

The conference has its origin in 2000 in Hawaii. This time it focuses on advancement of mathematical and rational choice theoretic sociology. How did it go? We divided it into four parts: a keynote speech by Doug Heckathorn, a training workshop with three senior advisers (Doug, Andreas Diekmann, and Mitch Sato), a poster session, and three oral sessions. No parallel sessions. We had 38 participants and 24 presentations.

The organizers gave Best Papers Awards to the following four papers.

Marc Höglinger, "Can Social Norms Help to Overcome a Public Good Dilemma? The Case of Organ Procurement"

Kazuhiro Kezuka, "Late Marriage and Transition from Arranged Marriages to Love Matches: A Search-Theoretic Approach"

Shinya Obayashi, "Group Expansion by Collective Reputation: Game-theoretic Analyses of Collective Action"

Wojtek Przepiorka, Lukas Norbutas, and Rense Corten, "Information Sharing Promotes Cooperation in Illicit Causes: Evidence from an Online Market in the Dark Web"

Some selected papers were recommended to submit to special issues on the conference in the *Journal of Mathematical Sociology* and *Sociological Theory and Methods*.

I myself really enjoyed it. I have participated in all the six conferences from Hawaii. The conference seems like a cradle, with a warm and encouraging atmosphere. I hope it bridged the three groups and inspired a lot of new ideas.



Conference Organizers



Key note speaker Douglas
Heckathorne

Mission Statement of the Mathematical Sociology Section

The purpose of the Mathematical Sociology Section of the American Sociological Association is to encourage, enhance and foster research, teaching and other professional activities in mathematical sociology, for the development of sociology and the benefit of society, through organized meetings, conferences, newsletters, publications, awards and other means deemed appropriate by the Section Council. The Section seeks to promote communication, collaboration and consultation among scholars in sociology in general, mathematical sociology and allied scientific disciplines.



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Newsletter Editor

Thank you for your timely contributions to the Fall/Winter Issue of the *Mathematical Sociologist*. Please continue to send us your announcements, articles, book reviews, conference announcements, etc. The more you are involved with the newsletter, the better it will be. Please join me in welcoming my new co-editors for the newsletter: Diego Leal, University of Massachusetts and James Houghton, Massachusetts Institute of Technology.

Please feel free to send us your comments, concerns, corrections, or any ideas you have for the newsletter.

Have a great winter and watch your email for future newsletter editor requests.