Social Interaction and Society (SIS 2016)
Perspectives of Modern Sociological Science

CONFERENCE PROGRAMME

Organizers:
Chair of Sociology at ETH Zurich, Prof. Dr. Andreas Diekmann
in collaboration with the Section of Model Building and Simulation of DGS

Sponsored by ETH Zurich

26 – 28 May 2016
Introduction

Social and strategic interaction is the basic element in explanations of how society works. People imitate habits, fashions, customs and norms, and learn from other people’s behaviour. Opinions spread throughout society by characteristic patterns and the “law of imitation” (Tarde) drives the social diffusion of innovations like norms, attitudes or the adoption of new technologies. Strategic behaviour considers other actors’ goals and opportunities and often leads to far reaching consequences that were not intended by rational or boundedly rational actors. Competing models from game theory, behavioural game theory, rational choice theory, and bounded rationality theory with evolutionary models based on principles of learning and imitation were developed to account for explanations of social interactions and its consequences on the macro level of society.

The aim of the conference is to bring together diverse perspectives on modelling social interaction, on deriving hypotheses from theories of interaction and on empirical tests of hypotheses in various fields of applications.

With contributions on (but not restricted to) the following topics:

How actors make decisions. Theoretical models and empirical research from experimental studies, field experiments and surveys

Models of social interaction. New models from game theory, evolutionary models, bounded rationality, models of social diffusion, etc. to explain actors’ behaviour and social processes

Impact on society. Consequences of individual actions and interactions

Methods. Methodological problems, problems of experimental studies, problems of assessing causality in survey studies, the use and misuse of ‘big data’, and simulation studies

Applications of models and theories of social interaction in various fields like social norms, law and crime, social stratification, environmental problems, population studies and other fields
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Conference Office:
irene.urbanek@soz.gess.ethz.ch
Tel: +41 44 6325556

Website:
www.socio.ethz.ch/sis2016

Location:
ETH Zurich, Main Building, Rämistrasse 101
Part I

Programme
# Sessions Overview SIS 2016

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<th>Saturday, 28 May</th>
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<td>09:00</td>
<td>Registration</td>
<td>A7 Public Goods I</td>
<td>Social Norms II</td>
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<td>10:00</td>
<td>Coffee Break</td>
<td>B7 Social Networks I</td>
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<tr>
<td>11:30</td>
<td>Coffee Break</td>
<td>A8 Reputation I</td>
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<tr>
<td>12:00</td>
<td>Lunch at Dozentenloher</td>
<td>B8 Discrimination</td>
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<tr>
<td>13:00</td>
<td>Lunch at Clausiusbar</td>
<td>A9 Trust</td>
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<tr>
<td>14:00</td>
<td>Keynote Andreas Diefmann</td>
<td>B9 Ethnicity</td>
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<tr>
<td>14:30</td>
<td>Keynote Michael Hechter</td>
<td>Keynote Ernst Fehr</td>
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<tr>
<td>15:00</td>
<td>Keynote Peter Hedström</td>
<td>Keynote Michael Macy</td>
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<tr>
<td>15:30</td>
<td>Coffee Break</td>
<td>Boat Trip to Rapperswil</td>
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<tr>
<td>16:00</td>
<td>Parallel Sessions</td>
<td>Parallel Sessions</td>
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<tr>
<td>17:00</td>
<td>Poster Session</td>
<td>Parallel Sessions</td>
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<tr>
<td>18:00</td>
<td>Dinner in Rapperswil</td>
<td>Poster Session</td>
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<td>19:00</td>
<td>Poster Session</td>
<td>Poster Session</td>
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<tr>
<td>20:00</td>
<td>Conference Dinner at uniTurm</td>
<td>Dinner at uniTurm</td>
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<tr>
<td>21:00</td>
<td>Meeting at Commihalle</td>
<td>Conference Dinner at uniTurm</td>
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## Plenary Speakers

### Thursday, 26 May

Room HG G 60 “Semper Aula”

**Introductory Lecture**

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<th>Speaker</th>
<th>Institution</th>
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<tbody>
<tr>
<td>14:00–14:45</td>
<td>Andreas Diekmann</td>
<td>ETH Zurich</td>
<td>Strategic Interactions and Society. Endogenizing Beliefs and Opportunities</td>
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**Keynote**

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<tbody>
<tr>
<td>14:45–15:45</td>
<td>Peter Hedström</td>
<td>Linköping University Institute of Analytical Sociology</td>
<td>Social Interactions and Macro-Level Dynamics</td>
<td>17</td>
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### Friday, 27 May

Room HG G 60 “Semper Aula”

**Keynote**

<table>
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</thead>
<tbody>
<tr>
<td>14:30–15:30</td>
<td>Michael Hechter</td>
<td>University of Copenhagen Department of Sociology</td>
<td>Reflections on the Evolution of Social Order</td>
<td>16</td>
</tr>
<tr>
<td>15:30–16:30</td>
<td>Ernst Fehr</td>
<td>University of Zurich Department of Economics</td>
<td>Degustibus est Disputandum. The Emerging Science of Preference Formation</td>
<td>15</td>
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### Saturday, 28 May

NOTE: Room HG F 30 “Auditorium Maximum”

**Keynote**

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<thead>
<tr>
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<th>Speaker</th>
<th>Institution</th>
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</thead>
<tbody>
<tr>
<td>14:00–15:00</td>
<td>Ramzi Suleiman</td>
<td>University of Haifa Department of Psychology</td>
<td>Economic Harmony: An Epistemic Theory of Economic Interactions</td>
<td>18</td>
</tr>
<tr>
<td>15:00–16:00</td>
<td>Michael Macy</td>
<td>Cornell University NY Information Science, Sociology</td>
<td>Methodological Dilemmas in Social Science</td>
<td>19</td>
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# Parallel Sessions

## Thursday, 26 May

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<th>Speaker</th>
<th>Topic</th>
<th>Page</th>
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<tbody>
<tr>
<td>16:45</td>
<td>Sandra Andraszewicz</td>
<td>Resolving Persistent Uncertainty by Self-organised Consensus to Mitigate Market Bubbles</td>
<td>25</td>
</tr>
<tr>
<td>17:15</td>
<td>Peter Bernholz</td>
<td>The Role of Expectations in the Current Crisis</td>
<td>26</td>
</tr>
<tr>
<td>17:45</td>
<td>Alexander Konon</td>
<td>Entrepreneurial Decision Making, Personality Traits, and Subjective Learning</td>
<td>29</td>
</tr>
<tr>
<td>19:00</td>
<td>Heinrich H. Nax</td>
<td>A Behavioral Study of “Noise” in Coordination Games</td>
<td>36</td>
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<tr>
<td>19:30</td>
<td>Evangelos Pouranas</td>
<td>Self-regulatory Information Sharing in Participatory Social Sensing</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Giulia Andrighetto</td>
<td>Bringing Diversity In: How Individual Heterogeneity and Institutional Background Shape Cooperative Decision-Making</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Yosuke Kira</td>
<td>Rotational Cooperation in the Repeated Missing Hero Dilemma</td>
<td>32</td>
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<tr>
<td></td>
<td>Caleb Koch</td>
<td>A Large-Scale Study on Groundwater Usage</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Peter Lewisch</td>
<td>From Spontaneous Cooperation to Spontaneous Punishment: Distinguishing the Underlying Motives Driving Spontaneous Behavior in First and Second Order Public Goods</td>
<td>34</td>
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<tr>
<td></td>
<td>Simone Righi</td>
<td>The Importance of Direct and Indirect Reciprocity for the Emergence of Cooperation</td>
<td>38</td>
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<tr>
<td></td>
<td>Áron Székely</td>
<td>Collective Reputations Suffer from the Tragedy of the Commons</td>
<td>39</td>
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<tr>
<td></td>
<td>Luca Tummolini</td>
<td>Understanding Collaboration: A Conditional Game-Theoretic Approach</td>
<td>40</td>
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### Friday, 27 May (Morning)

**A3 Prosocial Behaviour I**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Title</th>
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<tbody>
<tr>
<td>09:00</td>
<td>Fabian Winter</td>
<td>Cooperation and Coordination in Games with Population Uncertainty</td>
</tr>
<tr>
<td>09:30</td>
<td>Yen-Sheng Chiang</td>
<td>Sharing with Neighbours – A Simulation Model on How Altruistic Giving Improves Economic Inequality in Networks</td>
</tr>
<tr>
<td>10:00</td>
<td>Michalis Drouvelis</td>
<td>Prosociality Spillovers of Social Motivators for Work</td>
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</table>

**B3 Environment I**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Title</th>
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<tbody>
<tr>
<td>09:00</td>
<td>Pat Barclay</td>
<td>“Greener Than Thou”: Partner Choice Creates Competition to Save the Environment</td>
</tr>
<tr>
<td>09:30</td>
<td>Jürgen Fleiß</td>
<td>Social and Environmental Value Orientations</td>
</tr>
<tr>
<td>10:00</td>
<td>Ulf Liebe</td>
<td>A Simple Method for Measuring Anthropocentric and Ecocentric Behavior in Large-Scale Surveys</td>
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</table>

**A4 Behavioural Theory III**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00</td>
<td>Chris Snijders</td>
<td>Exploring the Click-trail: Using Students’ Learning Management System Data to Predict Course Performance. A Small Big Data Analysis</td>
</tr>
<tr>
<td>11:30</td>
<td>Thomas Voss</td>
<td>The Contribution of Game Theory to General Social Theory</td>
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<tr>
<td>12:00</td>
<td>Johannes Zschache</td>
<td>Multi-agent Melioration Learning</td>
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</table>

**B4 Environment II**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Title</th>
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<tbody>
<tr>
<td>11:00</td>
<td>Florian Lottermoser</td>
<td>Sustainable Decision Modes</td>
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<tr>
<td>11:30</td>
<td>Sebastian Mader</td>
<td>Predictors of National CO2 Emissions: Do International Commitments Matter?</td>
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<tr>
<td>12:00</td>
<td>Tobias Rüttenauer</td>
<td>Environmental Justice in Germany: Evidence from Spatial Time-Series Analysis</td>
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### Friday, 27 May (Afternoon)

**Room HG G 60 “Semper Aula”**

#### A5 Social Networks I

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>17:00</td>
<td>Charlotte Corrodi</td>
<td><em>How do Goal Structures and Close Social Contacts Associate with Stress?</em></td>
<td>54</td>
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<tr>
<td>17:30</td>
<td>Timon Elmer</td>
<td><em>The Co-evolution of Emotional Well-being with Weak and Strong Friendship Ties</em></td>
<td>55</td>
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<tr>
<td>18:00</td>
<td>Matthias Leiss</td>
<td><em>How Communication Networks Help Achieve Collective Goals</em></td>
<td>56</td>
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#### B5 Prosocial Behaviour II

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>17:00</td>
<td>Jérôme Hergueux</td>
<td><em>Cooperation in a Peer Production Economy: Experimental Evidence from Wikipedia</em></td>
<td>57</td>
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<tr>
<td>17:30</td>
<td>Laura Metzger</td>
<td><em>The Relationship between Social Preferences, Self-Image Concerns and Informed Charitable Giving</em></td>
<td>58</td>
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<tr>
<td>18:00</td>
<td>Robert Neumann</td>
<td><em>Charitable giving in the field: Evidence from a quasi-experiment at bottle refund automats in Germany</em></td>
<td>59</td>
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**Room HG E 3**

#### A6 Social Networks II

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>18:45</td>
<td>Alessandro Lomi</td>
<td><em>From Ties to Events: Social Interaction and the Contingent Effect of Network Structure</em></td>
<td>60</td>
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<tr>
<td>19:15</td>
<td>Amnon Rapoport</td>
<td><em>The Braess Paradox in Directed Networks with Mixed Externalities</em></td>
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<td>19:45</td>
<td>Tobias Wolbring</td>
<td><em>The Generalized Matthew Effect in Science: Do Nobel Prize Effects Spread in Citation Networks?</em></td>
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#### B6 Social Norms I

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<tr>
<td>18:45</td>
<td>Joël Berger</td>
<td><em>Social Norm Enforcement in the City and the Train. Evidence from (Quasi-)Experimental Field Studies</em></td>
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<tr>
<td>19:45</td>
<td>Lucas Molleman</td>
<td><em>Social Interaction Effects in Norm Compliance</em></td>
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<tr>
<td>Time</td>
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<tr>
<td>09:00</td>
<td>Andreas Tutic</td>
<td>Martin Neumann</td>
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<tr>
<td>09:30</td>
<td>Andreas Tutic</td>
<td>Heiko Rauhut &amp; Fabian Winter*</td>
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<tr>
<td>09:30</td>
<td>Coffee Break</td>
<td>Coffee Break</td>
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<tr>
<td>10:30</td>
<td>Vincenz Frey</td>
<td>Zsófia Boda</td>
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<tr>
<td>11:00</td>
<td>Wojtek Przepiorka</td>
<td>David Kretschmer</td>
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<td>11:30</td>
<td>Werner Raub</td>
<td>Lars Leszczensky</td>
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<tr>
<td>12:00</td>
<td>Janine C. Weeting</td>
<td>Wout Ultee</td>
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**Saturday, 28 May**

Room HG G 60 “Semper Aula”

**A7 Public Goods and Social Cooperation III**

- **09:00** Andreas Tutic (p. 67)
  - Status Characteristics and the Provision of Public Goods – Experimental Evidence

**B7 Social Norms II**

- **09:00** Martin Neumann (p. 68)
  - Sanction Recognition. A Conceptual Model of Extended Normative Reasoning

- **09:30** Heiko Rauhut & Fabian Winter* (p. 69)
  - Types of Normative Conflicts and the Effectiveness of Punishment

**A8 Reputation and Trust**

- **10:30** Vincenz Frey (p. 35)
  - Social Contagion and Chaotic Outcomes: A Model of Social Protest

**B8 Discrimination and Ethnicity**

- **10:30** Zsófia Boda (p. 75)
  - Social Effects on Racial Perception

- **11:00** David Kretschmer (p. 76)
  - Size Matters: Minority Labor Market Discrimination in a Dynamic Hiring Model with Employer Learning

**11:30**

- **11:00** Wojtek Przepiorka (p. 71)
  - The Production of a Reputation Premium: Bargain Hunting and Herding in eBay Auctions

- **11:30** Werner Raub (p. 72)
  - Testosterone Administration Moderates Effect of Social Environment on Trust in Women Depending on Second-to-Fourth Digit Ratio

- **12:00** Lars Leszczensky (p. 77)
  - Does Ethnic Classroom Composition Affect Identity-Based Friendship Choices of Immigrant and Native Adolescents?

- **12:00** Janine C. Weeting (p. 73)
  - Trusting Your Promise Because You Are Like Me – Identity Signals in Strategic Decision Making

- **12:00** Wout Ultee (p. 78)
  - Effects of Small-scale Settings on Homonegativity among Dutch Secondary School Students

**Coffee Break**
## Poster Session

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<td>20:00–20:45</td>
<td>Stefano Bennati</td>
<td>The Role of Information in Group Formation</td>
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<td>Heidi Bruderer Enzler</td>
<td>The Shadow of the Future: Survey-based Results on Environmentally Friendly Behavior</td>
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<td>Stefano Duca</td>
<td>Assortative Matching with Inequality in Voluntary Contribution Games</td>
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<td>Jennifer Gewinner</td>
<td>Fraud in Science. A Systematic Analysis of “Retraction Watch” Data.</td>
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<td>Marc Höglinger</td>
<td>Do Descriptive Norms Save Lives? The Case of Organ Donation</td>
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<td>Julia Jerke</td>
<td>Publication Bias in Economics</td>
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<td>Ladina Rageth</td>
<td>Measuring the Social Status of Education Programmes: Applying a New Measurement to Dual Vocational Education and Training in Switzerland</td>
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<td>Áron Székely</td>
<td>Can Legal and Social Norm Approaches Counter Mafias?</td>
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Dinners and Lunches

Thursday, 26 May

Meeting point
21:00 Commihalle (Stampfenbachstrasse 8)
Optional, individual orders; self-payment

Friday, 27 May

Lunch
13:10 Dozentenfoyer (ETH main building HG, Floor J)
For participants registered for lunch only

Conference Dinner
20:45 uniTurm (University of Zurich main building, Floor M)
For participants registered for dinner only

Saturday, 28 May

Lunch
12:30 Clausiusbar (ETH building CLA, Floor D)
For participants registered for lunch only

Boat Trip to Rapperswil
17:30 Boat Trip (departure from pier “Bürkliplatz”)
Tram no. 9 (direction Triemli) from station “ETH/Universitätsspital” to “Bürkliplatz”

20:15 Ristorante Pizzeria De Medici (Fischmarktstrasse 8, 8640 Rapperswil)
Tel.: +41 55 2103878 / www.de-medici.ch

Return from Rapperswil with the S-Bahn to Zurich Main Train Station
Part II

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Plenary Speakers

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4 Social Interactions and Macro-Level Dynamics
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Plenary Speakers

Introductory Lecture:

**Strategic Interactions and Society. Endogenizing Beliefs and Opportunities**

Andreas Diekmann (Chair of Sociology, ETH Zurich, Zurich, Switzerland)

**Abstract:** Many if not most interactions in society have strategic character. An action is defined as “strategic” when the consequences of ego’s action depend on the action of alter. Situations of strategic interaction are numerous in daily life, business, and politics. Pioneers like Erving Goffman or Raymond Boudon recognized the importance of strategic interaction in sociological analysis long ago. Other peoples’ opportunities of actions form ego’s strategic context. The dynamics of the impact of the strategic context on ego’s action can be modeled and analyzed by means of game theory. We will discuss three examples of strategic interaction models: “Diffusion of responsibility”, Boudon’s “logic of relative frustration”, and the problem of social exchange and trust. We demonstrate the effects of the strategic context on the opportunities and beliefs of actors. In contrast to non-strategic decision theory, preferences (“desires”), beliefs and opportunities (the components of Hedström’s DBO or Gintis’ BPC scheme) are not assumed as exogenous. The analysis of the strategic context contributes to a better understanding of the micro-level effects and the macro-level implications. However, the strict rationality requirements of game models are often violated. In these situations, evolutionary models based on principles of learning and adaptions are more adequate than models based on assumptions of strict rationality.


Article for download on the website of the conference or Research Gate.
Degustibus est Disputandum. The Emerging Science of Preference Formation

Ernst Fehr (University of Zurich)

Abstract: In modern economics individuals’ preferences are taken as given. They are the unmoved movers of action. Preferences are, however, formed by social, economic and biological forces. This lecture will document recent insights into preference formation and how this helps explain hitherto unexplained (or insufficiently explained), yet important, phenomena such as the impact of poverty on time and risk preferences which may contribute to behaviors that reinforce poverty, the role of culture and social norms in health-related behaviors, the psychological sources of war and conflicts, or the impact of nuclear catastrophes on risk taking and time discounting.
Reflections on the Evolution of Social Order

Michael Hechter (Arizona State University / University of Copenhagen)

Abstract: The problem of social order – that is, how social order can evolve among a set of individual agents – is one of the foundational issues in the social and biological sciences. As such, research in a vast number of academic specialities is potentially relevant to it. Sociologists’ attention was drawn to the problem in Parsons’s The Structure of Social Action (1937), which foreshadowed Olson’s discussion of the free-rider problem three decades later. Olson’s principal insight was that collective action in large groups of unrelated individuals could only take place when potential free riders were provided with incentives sufficient to align their personal interests with those of their collectivity. Subsequent work in this tradition held that monitoring and sanctioning mechanisms were required to deter free riding. Support for these conclusions has been found in many biological systems, as well. However, some new strands of research have suggested that the original emphasis on rational egoistic behavioral assumptions in this literature needs to be qualified. Experimental evidence has revealed the significance of pro-social motivations among some individuals, suggesting that the free-rider problem may be less onerous than previously imagined. Likewise, some evolutionary biologists have argued – in contrast to strict individual selectionists – that group selection plays an important role in the evolution of cooperation. In this talk I will discuss the viability and limits of an approach to the problem of social order based principally on monitoring and sanctioning mechanisms.
Abstract: As Jon Elster emphasized many years ago, the social sciences can be said to address two fundamental questions: (1) Why do individuals do what they do? (2) Why do individuals bring about the social outcomes they do when they do what they do? It is often assumed that a proper answer to (2) requires a proper answer to (1), but in this lecture it will be argued that this assumption is not only unwarranted but often is counterproductive as well because efforts to simultaneously explain both (1) and (2) typically leads to fictional accounts with little or no explanatory value. The argument is illustrated with results from our recent research on segregation dynamics in Sweden.
Economic Harmony: An Epistemic Theory of Economic Interactions

Ramzi Suleiman (University of Haifa)

Abstract: We propose an epistemic theory of economic interactions. The theory retains the rationality principle, but alters the utility function by adding an epistemic benchmark to account for the aspiration level of each interacting player. We define the utility of each player $i$ as $u_i(x_i) = \frac{x_i}{A_i}$, where $x_i$ is the player’s actual payoff and $A_i$ is his or her aspired payoff. We interpret the players’ utilities in a given interaction as their respective satisfaction levels, and underline the “harmonious” states at which the levels of satisfaction of all players become equal. We test the proposed model, termed “economic harmony theory”, using large sets of experimental data from several symmetric and asymmetric, two-person and $n$-person games, and compare its predictions to the predictions of standard game theory and other models of interactive human behavior. Interestingly, for the standard ultimatum game, the theory predicts a division of $\Phi$ and $1 - \Phi$ for the proposer and responder, respectively, where $\Phi$ is the famous Golden Ratio ($\approx 0.62$), most known for its aesthetically pleasing properties. We also apply the theory to predicting field data on perceptions of pay satisfaction and on actual employees’ salaries in many countries around the world.
Methodological Dilemmas in Social Science

Michael Macy (Cornell University)

Abstract: For the past half century, survey research has emerged as the mainstay of quantitative social science, especially in population studies, opinion research, and social psychology. Surveys are typically administered to a stratified random sample that deliberately differs from the underlying population the sample is intended to represent, resulting in an explanatory “streetlamp bias” that privileges demographic explanations of social life. Digital records of online behavior address this bias but introduce the opposite problem — a paucity of demographic information. These new sources of data can be most effective when used to complement survey results, which I will illustrate with recent studies from our lab on “lifestyle politics.” I will also show how simulation can be used in the absence of “ground truth” to identify and diagnose methodological problems in both survey research and observational studies with online data.
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Experimental Action Research in Transdisciplinary Processes: Measuring Effects of Best Practice and Mutual Learning among Science and Practice

Roland W. Scholz (Danube University Krems)

Abstract: Transdisciplinarity has become a third mode of using and utilizing science. Transdisciplinary processes link (targeted, real-world, and problem based) interdisciplinary process with mitigation in multi-stakeholder discourses. Mutual learning among scientists and practitioners (who are believed to have different knowledge/epistemics) and the development of socially robust orientations are seen as main products/outcomes of transdisciplinary processes. The presentation shows and discusses how Kurt Lewin’s experimental action research can be embedded in transdisciplinary processes to measure the effects products/outcomes of transdisciplinary processes. We present the (a) transdisciplinary development of the SMAP (smallholder access to phosphorus) method and (b) the transdisciplinary application of this method and its evaluation by means of experimental action research. Methodologically, we present one option of evaluating the product/outcome of td-processes (or more general of science-practice collaboration). Practically, we show (i) how “high tech agricultural means” (e.g., farm specific soil testing) and (ii) how the development of fertilization strategies in learning process among (local) scientists and farmers (when including the key actors of the farmer’s supply chain, i.e., fertilizer importers, fertilizer traders, local banks, extension officers, etc.) can contribute to significantly increase Kenya smallholder farmers’ yield. The development and application of the method followed the Zurich 2000 conception of transdisciplinarity and realized—in particular—co-leadership by scientists and practitioners. An ANOVA-based design allows to measure what increase of yield refers to the use of best technology (i.e., farm-specific, soil testing-based fertilization recommendation) and farmers learning in transdisciplinary processes.
Resolving Persistent Uncertainty by Self-organised Consensus to Mitigate Market Bubbles

Didier Sornette (ETH Zurich)
Sandra Andraszewicz (ETH Zurich)
Ryan O. Murphy (University of Zurich)
Philipp Rindler (ETH Zurich)
Dorsa Sanadgol (ETH Zurich)

Abstract: Standard approaches for researching the most dramatic and shocking illustration of mis-pricing and mis-forecasting, namely market bubbles, assume that underlying security price is given. This assumption is simplistic and detached from reality. Therefore, we propose a new paradigm tailored to study coordination in complex systems, such as financial markets, that accounts for fundamental uncertainty in complex social systems, such as financial markets, that accounts for fundamental uncertainty. This new context has features from prediction markets that have been shown previously to mitigate price bubbles in classical asset market experiments. Our setup is more realistic as it offers multiple securities that are continuously traded over days and, importantly, there is no “true” underlying price. Nonetheless, the market is designed such that its rationality can be evaluated. Quick consensus emerges early yielding pronounced market bubbles. The overpricing diminishes over time, indicating learning, but does not disappear completely. Traders’ price estimates become progressively more independent via a collective realization of communal ignorance, pushing the market much closer to rationality, with forecasts that are close to the realized outcomes.

Keywords: Experimental Economics, Experimental Asset Market, Bubble Uncertainty, Complete Contingent Market
The Role of Expectations in the Current Crisis

Peter Bernholz (University of Basel)


Gegenwärtig scheinen wir uns wieder in einer Situation zu befinden, in der die Marktteilnehmer verunsichert sind und erhebliche Schwierigkeiten haben, rationale Erwartungen zu bilden. Gleichzeitig wird die reale Entwicklung jedoch in starkem Masse durch diese unsicheren und oft pessimistischen Erwartungen mitbestimmt. Das zeigt sich ganz deutlich in dem Umstand, dass selbst ökonomen trotz der hohen staatlichen Schulden (selbst bei angeblich soliden Staaten wie Deutschland, Grossbritannien und der US Bundesregierung on ca. 83.2, 79.9 bzw. 100% des Bruttosozialprodukts) und Defiziten und der überflutung mit Zentralbankgeld eher mit einer Deflationsgefahr rechneten. Tatsächlich ist die monetäre Basis seit Ende 2007 in den USA um fast 220 % und im Euroraum um 87 % gewachsen, also um Beträge, die man sonst nur vor Hochinflationen kannte. Und jetzyt flutet die
EZB sogar mit monatlich 60 Mrd. Zentralbankgeld M0. Der Anstieg in der Schweiz und in Grossbritannien ist sogar noch grosser als in den USA gewesen. Gleichzeitig ist jedoch die vom Publikum, also von Haushalten und Unternehmen verwendete Geldmenge, die aus dem Banknotenumlauf und den Kontokorrenteinlagen besteht, nur sehr wenig gewachsen. Das kann allein durch die negativen Erwartungen des Publikums erklärt werden. Symptomatisch dafür ist auch, dass selbst die Banken grosse Teile der von ihnen bei den Zentralbanken ausgeliehenen Beträge wieder bei diesen deponieren. Schuld an dieser Entwicklung dürfte gegenwärtig vor allem sein, dass es vielen Staaten nicht gelingt, dem Publikum eine glaubwürdige Perspektive für die Reduktion der Staatsschulden in der langen Sicht durch entsprechende institutionelle Vorkehrungen zu bieten.

Was aber wird die Entwicklung sein, wenn die Erwartungen einmal von Vorsicht oder Pessimismus in Vertrauen und Optimismus umschlagen, z. B. wegen eines vielleicht auch nur leichten Aufschwungs der realen Wirtschaft? In diesem Fall könnte die Geld- und Kreditnachfrage aufgrund der riesigen monetären Basis, die die Zentralbanken geschaffen haben, rasch ansteigen und dadurch eine starke inflationäre Entwicklung in Gang setzen, es sei denn, die Nationalbanken könnten die aufgeblähte Zentralbankgeldmenge rasch auf eine normale Höhe zurückführen. Das ist zwar technisch möglich, aber wegen des politischen Drucks gegen die erforderlichen Massnahmen kaum zu erwarten. Denn die notwendige starke Erhöhung der Zinsen würde die staatlichen Defizite massiv ansteigen lassen, und die Politiker würden nicht nur deshalb eine schädliche Wirkung auf ihre Wahlaussichten, sondern auch wegen eines möglichen Wiederanstiegs der Arbeitslosigkeit befürchten.

Aber ist denn ein solcher Umschwung der Erwartungen und daher eine Inflation in der gegenwärtigen Situation wirklich zu befürchten? Besonders angelsächsische ökonomen halten offenbar eine solche Entwicklung für unmöglich und empfehlen daher eine weitere Ausdehnung der monetären Basis. Der Europäischen Zentralbank (EZB) wird sogar in Perversion des Begriffs geraten, als Lender of Last Resort die Staatsanleihen bankrotter oder mit dem Bankrott kämpfender Staaten aufzukaufen, um die Zinsen zu senken, die für ihre Schulden zu zahlen haben. Allerdings wird dabei nicht gesagt, wie auf diese Weise die überschuldung beseitigt werden könnte, es sei denn, man hoffe auf ihre Beseitigung durch Inflation. So ist es vielleicht nicht überraschend, dass es amerikanische ökonomen gibt, die zur überwindung der gegenwärtigen Krise für eine Inflation in Höhe von 4-5 % eintreten. Mit solchen Informationen werden aber die Erwartungen kaum positiv in dem Sinne beeinflusst, dass sie zu einer stabilen Entwicklung der realen Wirtschaft beitragen.

Nun ist es sicherlich zutreffend, dass besonders für Länder wie die Schweiz mit ihrer stark überbewerteten Währung gegenwärtig keine Inflationsgefahr besteht. Aber wird das auch längerfristig so bleiben? Und wie steht es in dieser Beziehung mit der Eurozone, Grossbritannien und den USA?

Aber die Inflation kam, wenn auch wegen der Preiskontrollen verschleiert. Zum Schluss wurde die Reichsmark völlig wertlos.

Entrepreneurial Decision Making, Personality Traits, and Subjective Learning

Alexander Konon (DIW Berlin)
Alexander Kritikos

Abstract: We present a dynamic occupational choice model with a learning algorithm that is simultaneously capable to explain entrepreneurial entry, exit, and survival. According to our model, those individuals decide to become entrepreneurs who expect their productivity to be highest when managed by themselves. As we further assume that individuals have incomplete information about their own non-cognitive skills, which are relevant for entrepreneurial processes, entrepreneurial entry in our model is driven by overconfidence in the own skills. After entry, entrepreneurs receive noisy feedback from the market. Depending on a set of traits different from those driving the entry process into the market, entrepreneurs decide to either stay in or leave the market. We show that our learning-based model generates survival rates decreasing at decreasing rates and captures findings on the earnings puzzle according to which median entrepreneurs do not earn more than median wage workers.
**Bringing Diversity In: How Individual Heterogeneity and Institutional Background Shape Cooperative Decision-Making**

Giulia Andrighetto (European University Institute)
Áron Székely (Institute of Cognitive Sciences and Technologies)
Nan Zhanga (European University Institute)
John D’Attomaa (European University Institute)
Stefania Ottonec (University of Milan-Bicocca)
Ferruccio Ponzanod (University of Eastern Piedmont)
Sven Steinmoa (European University Institute)

**Abstract:** Advancing our understanding of the cognitive basis of human cooperation is fundamental for comprehending human sociality, and for tailoring institutions to encourage prosocial or discourage socially harmful behaviours. Recently, psychologists and economists have applied dual-process theories of decision-making to explore whether humans are instinctively selfish or predisposed towards cooperation, and whether deliberation leads to more selfish choices (Capraro & Cococcioni, 2015; Evans et al., 2015; Frederick, 2005; Sloman, 1996; Kahneman, 2003, 2011; Krajbich et al., 2015; Plessner et al., 2008; Rand et al., 2012, 2014). However, there are reasons to believe that this widely-used view of cooperative decision-making is incomplete in key ways as it abstracts from context and institutional background and does not account for the individual diversity. Institutions vary dramatically from society to society and this variation may shape people’s preferences and norms (Bowles, 1998; Tabellini, 2010; Gachter et al., 2010; Gelfand et al., 2011; Guiso, Sapienza & Zingales, 2006; Henrich et al. 2005; Herrmann et al., 2008), as well as the intuitive strategies they apply in everyday interactions.

We find that context and individual heterogeneity have a substantial influence on the cognitive processes underlying cooperation (see also Krajbich et al., 2015), in addition to institutional diversity. Our evidence draws from a series of public goods experiments, followed by a value-based choice task, that we conducted in three countries (UK, Italy and Sweden) on a total of 736 subjects, with comparable participant pools, but which differ institutionally. We find that countries significantly differ in the proportion of egoistic and prosocial subjects and that intuition always favours the choice in agreement with the preferences of participants. We also find that for both types deliberation favours cooperation. These findings contradict the ‘Social Heuristic Hypothesis’ (Rand et al., 2012, 2014) that posits an intuitive predisposition towards cooperation, with deliberation leading to more selfish choices. Furthermore, we also find that people do not unthinkingly follow their ‘type’, rather their intuitive behaviour changes according to the decision context: in contexts that reproduce more efficient institutions, prosocials and individualists behave more cooperatively when making decisions quickly while with less efficient institutions intuitive cooperation decreases.

**References:**


Rotational Cooperation in the Repeated Missing Hero Dilemma

Yosuke Kira (Tokyo Institute of Technology)
Shimpei Koike (Tokyo Institute of Technology)
Mayuko Nakamaru (Tokyo Institute of Technology)

Abstract: The Missing Hero Dilemma (MHD) is a game in which cooperation by single player achieves benefits for all other players, but cooperation by more than one player do not contribute to the provision of the public good. The models can be applied to social dilemma situations in which costs of punishment and monitoring cause second-order free-riding problem. This paper assumes that the game is played repeatedly and that asymmetric costs, which mean that different players have different costs, exceed the benefit of cooperation. We prove that there exists a sub-game perfect Nash equilibrium in which some players (not necessarily all players) cooperate by rotation. The proposition suggests that rotation intervals can be varied among players, and under some conditions, the equilibrium is sustained if and only if “stronger” players who pay a lower cost of cooperation undertake the role more frequently. This implies that if a few strong players endure frequent duties, the others can be free-riders. In field settings of common property resource management, successful self-organized groups often rotate the role of being the rule enforcer among a part of the group. These findings are consistent with some implications from our model, which will be tested empirically in the future.
A Large-Scale Study on Groundwater Usage

Caleb Koch (ETH Zurich)
Heinrich Nax (ETH Zurich)

Abstract: We conduct a large-scale study of micro-level behavior of a common-pool resource dilemma by analyzing usage of the High Plains Aquifer, which services eight U.S. states. We begin by extending dynamical nonzero-sum differential game theory and postulating how farmers would utilize the shared resource according to private information and strategic assessment of others. We test theoretical predictions using extraction data from Nebraska spanning 7 years with approximately 100,000 observations. In line with theory, we find strong evidence for larger farms using less water-per-acre; furthermore, farmers with larger land-size exhibit more prudence than smaller farmers by curbing water-usage during dry seasons. Seasonal rainfall seasons positively correlate with interaction effects on extraction, which stimulates superfluous appropriation. Despite theory and policy relying on individual concern for resource sustainability, we find no evidence of farmers responding to groundwater depletion. Moreover, we detect ‘anchoring externalities’ in groundwater usage and find when a farmer exceeds twice the groundwater-usage of surrounding neighbors, he exerts a measurable influence and consequently increases the usage of his neighbors.
From Spontaneous Cooperation to Spontaneous Punishment: Distinguishing the Underlying Motives Driving Spontaneous Behavior in First and Second Order Public Goods

Dorothee Mischkowski (University of Göttingen)
Andreas Glöckner (University of Hagen)
Peter Lewisch (University of Vienna)

Abstract: In their influential 2012 paper, Rand, Greene and Nowak argue that human cooperation (as observed in public good games) has an intuitive (spontaneous) core and that this intuitive nature of cooperation translates into shorter decision times in relation to non-cooperative behavior. In our paper, we address the following research questions: (i) Does a similar relationship exist between response time and punishment behavior, when it comes to punishment choices in public good games and, if yes, (ii) is such relationship also driven by the intuitive/spontaneous reaction of prosocial individuals. We investigate these questions by a lab study (N = 123), where participants played an iterated public goods game in groups of four. After each round, a punishment option was given to each player (second-party punishment) with a cost-to-impact ratio of 1 to 4.

Our results are: (i) Yes, average response time for punishment choices is significantly shorter than for non-punishment, but (ii) this relationship is not driven by prosocial individuals. In contrast, punishment decisions are positively related with “negative affect” and with “inequality aversion”. Punishment choices, therefore, are neither “nice and quick” nor “quick and dirty”, but seem to be much more complex than decisions to contribute in public good games.

Details: In line with spontaneous cooperation, we find that punishment behavior in the first round is conducted quicker than non-punishment behavior. The underlying motives of spontaneous punishment, however, differ from those driving spontaneous cooperation. The latter is moderated by Social Value Orientation (SVO) in that it is only valid for prosocials, who gain positive utility from increasing other persons’ welfare. The effect of spontaneous punishment, though, is independent of SVO. Rather, it is mediated by negative affect. We find shorter response times with increasing negative affect, which is in return positively related to punishment behavior. This indicates a retributive character, rather than prosocial motives. Furthermore, punishment leads to an emotional release afterwards. However, reducing punishment to an antisocial retribution act would fall short as punishment is also positively related to inequality aversion. The similar effects of spontaneously conducted cooperation and altruistic punishment behavior may therefore not hide that fact that punishment is the more complex phenomenon, combining a spontaneously conducted, aggressive component but also general fairness concerns.

Keywords: Spontaneous cooperation, spontaneous punishment, response time, social value orientation, negative affect
Social Contagion and Chaotic Outcomes: A Model of Social Protest

Georg P. Mueller (University of Fribourg)

Abstract: The long-term evolution of national data about violent internal conflicts such as protests or riots often display irregular fluctuations. Consequently the modelling of such time-series is in many cases based on random processes, e.g. on contagious Poisson dynamics.

However, the mentioned temporal evolution of conflicts may also be a manifestation of deterministic chaos, e.g. generated by relatively simple difference equations. The author prefers this approach and presents a contagion model, which describes the interaction between three groups: Rebellious actors protesting against government and/or its policies, initially non-rebellious groups which are getting mobilized by imitation of the rebels, and repressive governmental forces, which attempt to curb the rebellion and reduce this way the number of mobilized groups. The integration of the three processes results in a logistic growth model, which has for many parameter configurations equilibria that represent stable shares of mobilized groups. However, for certain other parameter values the mentioned logistic process may result in chaotic fluctuations of the mobilized groups and their conflict actions.

The author analyses the conditions, under which the model becomes chaotic and thus reproduces the observed irregular fluctuations of the real conflict processes. Moreover, his analysis also deals with the question about the possible and the impossible outcomes of this chaos model, which is in so far non-deterministic, as small and thus hardly measurable changes of the initial conditions result in very different final states. The intervals of possible outcomes extracted by this analysis are important for making forecasts about conflicts.

In the last section of the paper the author analyses longitudinal country data about the annual number of protest demonstrations and riots. These data are used for the extraction of the country specific model parameters. In order to generate chaotic conflict fluctuations, the values of these model parameters must be within certain ranges. Thus the mentioned parameter estimates may be used for testing, whether the model reproduces the observed conflict fluctuations at least in a qualitative way: by the very nature of chaotic processes a precise quantitative correspondence between model and data is obviously not possible.

Keywords: Social contagion, social conflicts, riots, protests, international comparisons, chaos theory
A Behavioral Study of “Noise” in Coordination Games

Michael Mäs (University of Groningen)

Heinrich H. Nax (ETH Zurich)

Abstract: ‘Noise’ in this study, in the sense of evolutionary game theory, refers to deviations from prevailing behavioral rules. Analyzing data from a laboratory experiment on coordination in networks, we tested ‘what kind of noise’ is supported by behavioral evidence. This empirical analysis complements a growing theoretical literature on ‘how noise matters’ for equilibrium selection. We find that the vast majority of decisions (96%) constitute myopic best responses, but deviations continue to occur with probabilities that are sensitive to their costs, that is, less frequent when implying larger payoff losses relative to the myopic best response. In addition, deviation rates vary with patterns of realized payoffs that are related to trial-and-error behavior. While there is little evidence that deviations are clustered in time or space, there is evidence of individual heterogeneity.

Keywords: behavioral game theory, discrete choice, evolution, learning, logit response, stochastic stability, trial-and-error
Self-regulatory Information Sharing in Participatory Social Sensing

Evangelos Pournaras (ETH Zurich)

Abstract: Participation in social sensing applications is challenged by privacy threats. Large-scale access to citizens’ data allow surveillance and discriminatory actions that may result in segregation phenomena in society. On the contrary are the benefits of accurate computing analytics required for more informed decision-making, more effective policies and regulation of techno-socio-economic systems supported by ‘Internet-of Things’ technologies. In contrast to earlier work that either focuses on privacy protection or Big Data analytics this paper proposes a self-regulatory information sharing system that bridges this gap. This is achieved by modeling information sharing as a supply-demand system run by computational markets. On the supply side lie the citizens that make incentivized but self-determined decisions about the level of information they share. On the demand-side stand data aggregators that provide rewards to citizens to receive the required data for accurate analytics. The system is empirically evaluated with two real-world datasets from two application domains: (i) Smart Grids and (ii) mobile phone sensing. Experimental results quantify trade-offs between privacy-preservation, accuracy of analytics and costs from the provided rewards under different experimental settings. Findings show a higher privacy-preservation that depends on the number of participating citizens and the type of data summarized. Moreover, analytics with summarization data tolerate high local errors without a significant influence on the global accuracy. In other words, local errors cancel out. Rewards can be optimized to be fair so that citizens with more significant information sharing receive higher rewards. All these findings motivate a new paradigm of truly decentralized and ethical data analytics.
The Importance of Direct and Indirect Reciprocity for the Emergence of Cooperation

Simone Righi (Hungarian Academy of Sciences)
Karoly Takacs (Hungarian Academy of Sciences)

Abstract: Previous studies show that direct and indirect reciprocity are good candidates to explain the fundamental problem of evolution of cooperation between unrelated individuals. The importance of different forms of reciprocity, however, might be differentiated and one form could potentially drive out the feasibility of others. In the Prisoner’s Dilemma played in random networks we show that when present, direct reciprocity gains dominance over network-based indirect reciprocity as well as over network-independent generalized reciprocity. When direct reciprocity is absent, indirect reciprocity strategies are able to become dominant in the population and to supply a higher cooperation rate than that is attainable by direct reciprocity. Forgiveness is a characteristic that improves the performance of all reciprocal strategies in the long run. Population size and network density seems to improve the chances of generalized reciprocity, but these results are purely due to an increased likelihood of non-convergence. Our results are robust to a wide range of conditions, including noise and network dynamics governed by triadic closure or by the search for structural holes.
Collective Reputations Suffer from the Tragedy of the Commons

Áron Székely (Institute of Cognitive Sciences and Technologies)
Giulia Andrighetto (European University Institute)
Luca Tummolinia (Institute of Cognitive Sciences and Technologies)

Abstract: Groups possess and create reputations that can be used by others when deciding how to treat that group and its members. Building a valuable group reputation, and preventing it from being destroyed, has wide-reaching effects in conflict, cooperation, and exchange situations. Notwithstanding its economic and social relevance, however, theory and experimental work is sparse. We argue, and experimentally demonstrate that collective reputations suffer from a problem of overuse leading to a tragedy of the commons. Using a laboratory experiment we explore and contrast group reputation with individual-level reputation. Consistent with our hypotheses, we find that receivers consider both individual and group-level reputations when deciding how to behave, acquiescing to more intimidating reputations. If within-group peer-punishment is possible, group members target low contributors allowing them to create and maintain a valuable reputation, however, in absence of this mechanism, group contributions fall, the shared good of their reputation is undermined, and receivers are not deterred. We also find that earnings differ substantially across treatment. Our results support the view that mechanisms for encouraging contributing actions by group members are crucial and that without such mechanisms the ability of group members to attain beneficial outcomes diminishes, ultimately decreasing the viability of these groups.
Abstract: Successful collaboration rests upon making concerted effort to achieve an outcome. We argue that such concerted effort is based on mutual social influence relationships, an interpersonal structure that serves to coordinate choices and actions. Using the framework of conditional game theory, we provide a model of collaborative choice in the context of the Snowdrift game. Our approach is to endow individuals with conditional utilities that enable them to modulate their preferences as a function of the social influence that others exert on them. In order to do so, we extend the framework to account for influence cycles. We show that when influence cycles are possible, the cooperative outcome in the Snowdrift game becomes a strictly dominant equilibrium.
Cooperation and Coordination in Games with Population Uncertainty

Fabian Winter (Max Planck Institute for Research on Collective Goods)
Adrian Hillenbrand

Abstract: Many situations in our social lives can be described as “games” in the sense that the outcome of our actions also depend on other peoples’ actions. This is particularly relevant in cooperation problems, where the joint efforts of cooperation are a crucial precondition for the provision of social order. However – with extremely few exceptions – the literature on cooperation assumes common knowledge about who is a player and how many players are involved. In this paper, we argue that this assumption is overly restrictive, and not even very common in real-world cooperation problems. We show theoretically that uncertainty about the number of players in a volunteer’s dilemma increases cooperation under quite weak assumptions. We identify additional behavioral mechanisms amplifying and impairing the effect and test these different mechanisms in a controlled laboratory experiments.
Sharing with Neighbours – A Simulation Model on How Altruistic Giving Improves Economic Inequality in Networks

Yen-Sheng Chiang (The Chinese University of Hong Kong)

Abstract: The question of how people divide resources in networks provides a significant view to how economic inequality evolves in a society. The paper presents a simulation model on the role of network topologies in facilitating the improvement of inequality. Actors in the network determine whether to share their resources with network neighbours. The game proceeds until no voluntary sharing is given. Factors at the individual level, such as an actor’s inequality aversion level, and those at the environmental level, such as the network topology, would co-determine how resources are divided in network. The model presents some interesting counterintuitive relationship between individuals’ sharing and the reduction of inequality. While in some networks, sharing helps to improve distributional inequality; in others it may deteriorate inequality. The model can be developed further to illuminate how philanthropy practitioners can coordinate their fund-raising efforts so as to improve the inequality in the most beneficial way.
**Prosociality Spillovers of Social Motivators for Work**

Michalis Drouvelis (University of Birmingham)
Benjamin Marx (University of Illinois at Urbana-Champaign)

**Abstract:** In addition to monetary incentives, work effort may be influenced by motivations related to interpersonal interaction. We study two such social motivators: interdependence with a group and public announcement of performance. In our experiment we employ these treatments in relation to real-effort tasks but then follow completion and payment in each treatment arm with an unrelated opportunity to donate to a local charity. Group interdependence and public performance have some nonlinear effects on work performance but striking spillover effects on subsequent donations. Public announcement of performance doubles the amount donated to charity, but not when compensation depended on the group, even though group interdependence significantly increases the share donating. The results suggest that workplace environment and performance contracts may have important spillover effects on pro-social behavior outside of work.
"Greener Than Thou": Partner Choice Creates Competition to Save the Environment

Pat Barclay (University of Guelph)
Jessica Barker (University of Arizona / Aarhus University)

Abstract: Protecting the environment is cooperative act. Biological markets theory predicts that people will cooperate more when observed, but will cooperate most when competing to be chosen by others. In two studies, we tested whether people will compete to protect the environment, and whether they subsequently benefit from such competitive helping. Participants could donate money to an environmental charity (Sierra Club), and then played a cooperative monetary game (Continuous Prisoner’s Dilemma) with an observer. In both studies, participants donated more when donations were public than when anonymous, but donated the most when such donations could influence whether the observer chose them, i.e. partner choice induced competition to protect the environment. Bigger donors were chosen more often, received more from partners, and gave more to their partners (i.e., environmental donations were an “honest” signal of cooperativeness). By stimulating competitive helping, we can increase people’s support for environmental and other charitable causes.

Keywords: reputation, cooperation, biological markets, competitive altruism, evolutionary psychology, costly signaling, prosocial behavior, sustainability, environmentalism
Social and Environmental Value Orientations

Jürgen Fleiß (University of Graz)

Abstract: Evidence for the relationship between peoples’ social preferences and their environmental concerns is mixed. However, these constructs have commonly been measured by distinct methods that do not facilitate direct comparisons.

We address this gap by using a consistent incentivized measurement method to assess peoples’ social value orientations (SVO) and concurrently their willingness to support environmental and humanitarian endeavors (social and environmental value orientations). Participants made resource allocation choices with real consequences and the experimental design ensured comparability of their revealed preferences (i.e., people’s willingness to make tradeoffs between themselves and different environmental and social causes). We therefore propose an extension of both the concept and the method of measurement of distributive social preferences to causes.

We found that social and environmental value orientations are interrelated, and further that people are generally more willing to pay to benefit people in need, compared to abstract environmental causes. We conclude that interventions to nudge people towards pro-environmental behavior might have a greater impact if the human suffering resulting from global climate change is made more salient.
A Simple Method for Measuring Anthropocentric and Ecocentric Behavior in Large-Scale Surveys

Ulf Liebe (University of Bern)
Benedikt Jahnke

Abstract: Environmental research suffers from the hypothetical character of behavioral measurements and socially desirable responses in surveys. Drawing on previous research, we combine the advantages of incentivized behavioral experiments and large-scale surveys by asking respondents \((n = 2299)\) to allocate 10 euros between an organization for poverty reduction and themselves as well as between an animal rights organization and themselves. Two hundred of the dictator-game-like donations were randomly selected, and both the respondents and the organizations received the corresponding amounts of money. Looking at the differences between the two decisions, we can measure individuals’ anthropocentric or ecocentric orientation. Overall, respondents donate more money for poverty reduction than animal rights protection. As well as plausible gender, income, and attitudinal effects, we find a positive effect of a “social desirability” scale on incentivized donations. We discuss these findings in the light of possible future research into measuring environmental behavior in surveys.

Keywords: dictator game, incentive compatibility, donations, social desirability, large-scale survey
Exploring the Click-trail: Using Students’ Learning Management System Data to Predict Course Performance. A Small Big Data Analysis

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Rianne Conijn (Eindhoven University of Technology)
Ad Kleingeld (Eindhoven University of Technology)
Uwe Matzat (Eindhoven University of Technology)

Abstract: Until very recently, social sciences in general have typically used empirical data to test hypotheses or in general understand human behavior using data collection methods under the control of the researcher. With both experiments and surveys as the main vehicles of empirical data collection, this implies that, in principle, measurement of concepts and their interconnections is designed by the researcher. In several areas of research other kinds of empirical data collection and use are possible, simply because the empirical data is a by-product of the area of interest. One could think about the analysis of email server-logs, of the analysis of freely available Internet data such as Twitter feeds or Facebook posts, or the logs of the online behavior of customers on a retail website. Although there exist as many definitions as there are authors, “Big Data” is the buzz-word that comes to mind here. One key question in this kind of research is whether the extra amount of data that is usually gathered or available (having a couple Gigabyte of data is nothing) has net benefits, given that the data is typically not collected with actual measurement of relevant concepts in mind.

We consider one such case in the area of learning analytics: the use of the “click-trails” of students’ interaction in online courses to predict their study success. Much research in the field of learning analytics has focused on the predictive modelling of student performance with data from Learning Management Systems (LMSs). Unfortunately, these studies suffer from several drawbacks. First, they often use different methodologies, which results in different outcomes that are hard to compare. In fact, even when the same method is used, differences in results are found. In addition, the studies mostly focus on LMS data only, while ignoring student data such as ability, personality, and motivation even though these variables have been found to be significant and robust predictors. Prediction models using learner data and LMS data have rarely been combined or compared.

In the current study we consider 17 “blended” courses at Eindhoven University of Technology (N = 4,900). Contrary to previous research, the standardized setup allows us to use common predictors across all courses. Additionally, we have student data available for a subset of these course so that we can study not only the usefulness of knowing the online behavior of students to predict their study success, but can also combine the relative merits of knowing the online behavior (analyses are ongoing at this point).

Taken together, our results can serve both as a test of the generalizability of previously found effects in learning analytics (the in the learning literature so-called “portability of found results”), as one example of the possible usefulness of having Learning Management System data to work with, and in general as a description of the typical caveats one has to reckon with in this “big data” flavor of research.
The Contribution of Game Theory to General Social Theory

Thomas Voss (University of Leipzig)

Abstract: Some prominent figures in classical sociological theory (e.g., Parsons and Luhmann) have pointed out that the set of core theoretical problems comprises the so-called “double contingency” problem. According to Parsons, even the most elementary social systems (Ego-Alter dyads) are confronted with interaction problems which must be resolved in order to generate a social order (in Hobbes’ sense). Though Parsons and in particular Luhmann seemingly had known some aspects of game theory (of the 1950’s and 1960’s) they did not use game-theoretic tools to analyze problems of “double contingency”. This is amazing since “double contingency” is closely related to the idea of strategic interaction in game theory. The paper will argue that it would be to general social theory’s advantage to adopt game theory as a theoretical tool to analyze interaction problems in general and solutions to “double contingency” problems in particular. This can be demonstrated referring to mechanisms of cooperation and of norm emergence.
Multi-agent Melioration Learning

Johannes Zschache (Leipzig University)

Abstract: Melioration refers to a process of reinforcement learning that has been studied in psychological literature (e.g. Herrnstein and Vaughan, 1980). In this paper, melioration is formalised as an instance of a learning algorithm from artificial intelligence, which has been called Q-learning (Watkins, 1989). It was shown in the past that Q-learning converges to optimal behaviour under certain conditions if single actors are considered. But in the case of social situations with multiple actors, there are no general results about the convergence of this algorithm. Therefore, this paper uses computer simulations to analyse the long-term behaviour of actors who interactively learn by melioration. Various situations that are known from game theory are considered. In many two-persons games, the actors learn to play one of the pure Nash equilibria. If no pure equilibrium exists, the relative frequencies of choice converge to the mixed Nash equilibrium in some of the games.

Keywords: reinforcement learning, melioration, two-persons games, nash equilibrium

References:


Sustainable Decision Modes

Florian Lottermoser (University of Hamburg)

Abstract: Wie lassen sich nachhaltigkeitsorientierte Entscheidungsmodi soziologisch analysieren und systematisieren?

In dieser Präsentation wird ein Analysekonzept für Entscheidungsmodi im nachhaltigen Konsumkontext vorgestellt, das auf eigener empirischer Forschung sowie soziologischer Handlungstheorie basiert. Das Konzept trägt zu zwei Konferenzthemen bei - als empirisch abgeleitetes Modell (how actors make decisions) im Feld der Umwelt- und Nachhaltigkeitsforschung (applications).


Modiwechsel über einzelne Schritte im Entscheidungsprozess hinweg zeigen sich in Modikombinationen.


References:


Figure 1: Empirische Basis (45 Interviews mit Hamburger ökostrom-Kund/innen 2013/14)
Predictors of National CO2 Emissions: Do International Commitments Matter?

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Abstract: Carbon dioxide emissions are the main cause of anthropogenic climate change and play a central role in discussions on climate change mitigation. Previous research has demonstrated that national carbon dioxide emissions are driven mainly by population size and wealth. However, the variation in per capita emissions of nations with similar standards of living and similar population is huge. In this paper we investigate the drivers of national per capita carbon dioxide emissions over and above already known factors. In particular, we extend previous research by taking into account countries’ shares of imports and exports, indicators of political interventions such as energy prices, and the use of regenerative energy sources. Moreover, we also examine whether international commitments, such as the ones made by many nations at climate summits of the United Nations, matter. We use country-level data from 1980 to 2014 and estimate fixed effects panel regression models. In accordance with former research we find no environmental Kuznets curve with respect to carbon dioxide per capita emission levels. However, higher energy prices and the availability of alternative energy sources both reduce emissions. Furthermore, voluntary international environmental commitments also motivate countries to reduce carbon dioxide emissions.

Keywords: Environmental Sociology, CO2 Emissions, Environmental Kuznets Curve, IPAT, STIRPAT, Global Environmental Behavior
Environmental Justice in Germany: Evidence from Spatial Time-Series Analysis

Tobias Rüttenauer (TU Kaiserslautern)
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Abstract: The spatial analysis of environmental quality and socioeconomic composition on the level of spatial units has become a standard tool of empirical research in the field of environmental justice studies. The majority of prior research relies on cross-sectional spatial data and hence cannot adequately study the causal mechanisms leading to the unequal distribution of environmental quality. Thus, it remains a puzzle whether selective move-in, selective-move out, discrimination by the industry, discrimination by housing agents, or a combination of these factors lead to an uneven distribution of environmental harm across social groups. In addition, most of the research has been conducted in the US context and empirical results from continental Europe and especially Germany are rare.

In this paper we study the spatial distribution of environmental quality and its connection to socio-economic factors in Germany between 2001 and 2012. In addition to cross-sectional studies, we include the dimension of time into the spatial analysis and investigate the causal mechanisms producing the distribution of environmental pollution. The study relies on a combination of data from the European Pollutant Emission Register and socio-economic data on the level of German municipalities. Using spatial fixed effects models, we test hypotheses on causal mechanisms while controlling for spatial autocorrelation. However, we need to be aware of potential problems arising due to the use of spatially aggregated data.
How do Goal Structures and Close Social Contacts Associate with Stress?

Charlotte Corrodi (ETH Zurich)

Abstract: Sometimes individuals face difficulties when trying to reconcile their goals related to distinct life spheres (e.g. family life and professional life). Such goal conflicts correlate with psychological distress (Kelly, Mansell, & Wood, 2015). A possible explanation for this finding is provided by cognitive dissonance theory (Festinger, 1962) as individuals pursuing incompatible goals seem to face more internal conflicts (Riedinger & Freund, 2008).

Looking at intra-individual processes only, however, might not provide a full explanation for how exactly goal conflicts develop, and how this leads to distress. Since goal achievement is a socially embedded process (Fitzsimons & Finkel, 2010), it is also important to consider interpersonal dependencies. Here we suggest three such mechanisms. First, social support experienced in social relations might buffer stress (Cohen & Wills, 1985) and facilitate goal achievement (Brunstein, Dangelmayer, & Schultheiss, 1996). Second, in line with balance theory (Heider, 1958), persons might experience stress if their judgment of a goal is negated by the judgment of a person important to them. Third, being part of several distinct groups might reinforce the appearance of goal conflicts as each additional group might constrain an individual’s acts a bit more (Krackhardt, 1999).

Accordingly, the present study investigates the relationship between individuals’ level of stress, the relational structure of their goals, and of their close social contacts based on these mechanisms. The data of the present study consist of the responses of 67 Bachelor students at a Swiss university. For our analysis, we combine results of individual level measures, an ego-network questionnaire, a goalnetwork questionnaire, and a questionnaire on relations between the participants’ close social contacts and goals (e.g., support and desirability of goals). The association of stress with structural features of individuals’ goal- and ego-networks is tested in a linear regression model.

References:


The Co-evolution of Emotional Well-being with Weak and Strong Friendship Ties

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Zsófia Boda (ETH Zurich)
Christoph Stadtfeld (ETH Zurich)

Abstract: Social ties strongly affect individual’s well-being. But how exactly? In this study, we aim at understanding the role of three social mechanisms - social integration, social influence, and social selection - in the co-evolution of weak and strong friendships ties with emotional well-being. We hypothesize that socially integrated individuals with extensive and dense friendship networks report higher levels of emotional well-being and that individuals are influenced by their close friends’ emotional wellbeing. We use longitudinal friendship data of 126 individuals from the Friends and Family study (Aharony et al., 2011). The application of ordered stochastic actor-oriented models allows us to test hypotheses on weak- and strong-tied friendship networks simultaneously. The results do not support our social integration hypotheses but indicate that individuals with higher emotional wellbeing tend to have more strong-tied friends. We also do not find conclusive evidence for social influence through strong ties but weak evidence for homophily processes regarding emotional well-being in strong-tied networks. In this study, we unfold the two-directional nature of social integration and social influence mechanisms of emotional well-being by combining those with mechanisms of social selection. Furthermore, we emphasize the importance of considering different tie strengths for various social processes.

Keywords: Social networks, ordered stochastic actor-oriented models, emotional well-being, well-being, social integration, social influence, social selection
How Communication Networks Help Achieve Collective Goals

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Emöke-Ágnes Horvát (Northwestern Institute on Complex Systems)
Dirk Helbing (ETH Zurich)
Brian Uzzi (Northwestern Institute on Complex Systems / Kellogg School of Management, Northwestern)

Abstract: We study how structure and dynamics of the communication network of a large hedge fund influence the fund’s trading activity. Setting up 20,000 natural experiments, we analyze the decision-making of small teams as they execute transactions in US equities with a volume of 335 billion USD. Our findings indicate that a large fraction (33%) of the sequences of buys and sells is statistically indistinguishable from a random walk and non-lucrative. Most interestingly, random trades can be associated with certain characteristics of the communication network inferred from emails and instant messages even when considering the information inflow due to business news and direct email contact with other institutional investors and investment banks. Specifically, a more clustered and balanced internal communication, as well as a more diverse external network of information sources are strongly associated with nonrandom and thus more profitable trading. A model accounting for these effects explains randomness with high out-of-sample prediction accuracy. Our results indicate how individual decision-makers can structure their interactions in complex environments to achieve individual and collective goals.

Knowledge about how groups of individuals self-organize to achieve a common goal in complex environments is needed to advance our understanding of collective behavior and network performance. To address this issue Guimera et al. (2005) proposed a dynamic model of group assembly mechanisms involving team size, diversity and collaboration networks. They report that the assembly mechanisms determine performance for teams within both artistic and scientific fields. In particular when it comes to risky decisions in complex systems, successful self-organization of a team crucially depends on the communication flow among its members. Eckmann et al. (2004) observe in a dynamic network of e-mail traffic the development of selforganized structures that turn out to be functional and goal-oriented. Saavedra et al. (2011) report how day traders use their instant messaging network to synchronize behavior, thereby boosting individual and collective performance. In terms of the structure of the communication network, neither dispersed nor concentrated networks most effectively respond to informational uncertainty (Wu et al., 2004; Easley and Kleinberg, 2010). In the best case group cognition emerges allowing organization-dependent cognitive capacities that go beyond the simple aggregation of the cognitive capacities of individuals (Theiner et al., 2010).

To investigate the performance effects of communication networks we analyze the information exchange and trading activity at a hedge fund. Hedge funds are great examples of organizations, i.e. the most pervasive human infrastructures for making consequential decisions. On the one hand, most of the communication occurs digitally and is therefore accessible to scientific analysis, on the other hand profitability provides a clear metric of success.

Keywords: human behavior, collective decision-making, self-organization, group performance, communication networks
Cooperation in a Peer Production Economy: Experimental Evidence from Wikipedia

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Yochai Benkler (Harvard Law School)
Mayo Fuster Morell (Open University of Catalonia)

Abstract: We experimentally elicit social motives among Wikipedia contributors and extend the literature on public goods provision beyond its current focus on explaining the quantity of contributions with an analysis of individual collaborativeness and policing activities among platform administrators. The size of Wikipedia also allows to explore the relevance of the theory for “super contributors”. Reciprocity, altruism and social image motives all strongly relate to subjects’ field contributions. More reciprocal and altruistic subjects are more collaborative when contributing, while subjects who reveal social image concerns start relatively more editing conflicts. Decreased experimental trust is associated with increased policing activity among Wikipedia administrators.

Keywords: field experiment, public goods, social preferences, peer production, internet, wikipedia
The Relationship between Social Preferences, Self-Image Concerns and Informed Charitable Giving

Laura Metzger (ETH Zurich)

Abstract: Previous experiments have shown that individuals act considerably less prosocial when they can avoid information about the welfare consequences of their actions, than in situations in which such welfare consequences are known. This finding has been explained with social image or self-image concerns: the desire to appear fair or altruistic to others or oneself. When information is transparent, image concerns can result in prosocial behavior, whereas ignorance can be used as a pretext for selfish behavior. The first part of this study investigates the occurrence of “strategic ignorance” in a laboratory experiment on international charitable giving, and its effect on observed donation (prosocial) behavior, compared to the effect of informed decision making. The empirical analysis leans on a theory that considers self-image concerns as a driver for prosocial behavior, next to altruism and materialistic preferences. The theory predicts that self-image driven types with low social preferences will stay ignorant about the welfare consequences of their decisions and act selfishly, while prosocial individuals will seek information and act prosocially. Indeed, we find that individuals who have low social preferences and (as the data suggests) might have image concerns are more likely to ignore a donation’s welfare outcome and donate less than prosocial types. However, we also find that 50% of the deliberately uninformed individuals are prosocial and donate to charity. This result has not been observed in other studies and cannot be clearly explained with the relevant theories. The analysis in the first part rests on the assumption that social preferences are a key driver donation behavior. In the second part, we test how well social preferences really explain the variation in observed donation behavior in comparison to other relevant explanatory variables. It appears that social preferences are in fact the strongest driver of the observed donation behavior.
Charitable giving in the field: Evidence from a quasi-experiment at bottle refund automats in Germany

Robert Neumann (Dresden University of Technology)

Abstract: The study of the emergence of a social norm of helping strangers by donating money to charities or non-profit organizations has been scrutinized from different perspectives. Theoretical approaches like warm glow behavior or feelings of social obligation to help others have mostly been tested using either laboratory settings that come with the usual drawbacks or as field experiments during survey interviews that were conducted to mobilize donors. Additionally, a few field experiments have highlighted the importance of framing decision contexts by providing descriptive cues about the social expectations to enhance contribution to a collective good. Using a unique research design from a supermarket chain in Germany, we systematically alter the information provision of the decision context at bottle refund machine that has the option to donate the refund. By that, we are able to test competing hypotheses about the emergence of a social norm of helping by donating money to a charitable organization.
From Ties to Events: Social Interaction and the Contingent Effect of Network Structure

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Daniele Mascia (Catholic University of Rome)
Viviana Amati (University of Konstanz)
Francesca Pallotti (University of Greenwich)

Abstract: Underlying the notion of social interaction is a general conception of action as directed individual behavior: one social entity (sender) produces a behavior directed toward one or more entities (receivers). Examples of social entities include individuals and collective actors. Examples of directed behavior include communication, resource transfer, signaling and similar forms and symbolic interaction. The concept of action as directed behavior is what makes it possible to bring social networks ideas, models and measures to bear on the analysis of individual behavior. Network-analytic concepts such as reciprocity, assortativity or transitivity are not defined in a world with no social interaction, where - for example - individual behavior is directed exclusively toward the maintenance or change of an internal state, or where social selection is random.

However useful, social network representations have also constrained the empirical analysis of social interaction by aggregating observable sequences of directed behavioral events into binary states or “ties” that are typically not directly observable. For this reason, current studies of social interaction based on available social network models emphasize the “structure” of interaction - where “structure” is defined by the aggregation of time-ordered relational event sequences into ties linking senders and receivers. Ties defined in this way change at a slower rate than the individual directed behavior underlying them. In many cases, network models based on aggregate events are not adequate to interpret social interaction in terms of directed individual behavior. Nevertheless, structuralist conceptions of social interaction remain prevalent in non-experimental sociological research.

Awareness of the limitations of network models of social interaction is gradually diffusing (Butts, 2009), and new classes of relational event models have been proposed to alleviate the consequences of these limitations (Brandes, Lerner, and Snijders, 2009; Butts, 2008; Perry and Wolfe, 2013; Vu, Pattison and Robins, 2015). Building on these recent developments in statistical models for sequences of observations with complex dependencies, in this paper we want to probe deeper the theoretic and analytical implications of representing social interaction as observable time-ordered sequences of directed (or “relational”) individual behavior. The main objective of the paper is not to question the relevance of structuralist explanations, but to articulate a more fluid conception of “structure” as contingent on - and emergent from time-ordered sequences of relational events connecting pairs of social actors. Our analysis focuses on time variation in the structural properties of relational event networks and on their connection with micro-mechanisms of local dependence that control directed individual behavior. As a preliminary proof of concept, we present results of an analysis of data that we have collected on patient transfer relations observed among hospital organizations located within a small regional community in central Italy. Extant literature and extensive fieldwork we have conducted support the claim that interhospital patient transfer represents a meaningful social interaction process involving social selection, and a considerable amount of communication, collaboration, and coordination (Iwashyna, 2012; Iwashyna et al., 2009; Lomi and Pallotti, 2012). The analysis is conducted at the lowest possible level of aggregation in the study of social interaction, that of individual relational events connecting sender and receiver actors (organizations in our case). The sample we analyze includes all of the 3,461 patient transfer events observed from 2005 to 2008.
among the 35 hospitals operating in the region. The sample also includes all the potential relational events that could have happened - but did not happen during the observation period (approximately 46,000).

The analysis reveals the presence of significant calendar effects in the formation of interorganizational network structures (Thaler, 1987): the relational mechanisms generating the sequences of observed events vary significantly across days of the week. We take this result as evidence of the contingent and time-dependent nature of social structure that social interaction simultaneously produces, and is produced by. We frame this empirical result in the more general context of theoretical accounts (Abbott, 1997; Emirbayer, and Mische, 1998; Stark and Vedres, 2006; White, 1992; White and Godart, 2007) that emphasize the role of time ordering as a fundamental principle of social organization.

References:
The Braess Paradox in Directed Networks with Mixed Externalities

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Abstract: The Braess Paradox (BP) illustrates an important counterintuitive observation that adding links to a directed network with usage externalities may raise the costs of all users. Research on the BP traditionally focuses on choice of routes in congestible networks. In this paper, we propose and experimentally test a new and more dramatic version of the BP with mixed externalities, where the network exhibits both congestion (negative externalities) and cost-sharing (positive externalities) characteristics. Our design also involves experimental manipulation of choice observability where players choose routes simultaneously in one condition and sequentially in the other. We report robust behavioral evidence in support of the BP in both conditions. In nine of 10 sessions in the basic network, subjects converged to the welfare-maximizing equilibrium. Once the basic network was augmented by an additional link, a major proportion of the subjects switched to a new route, resulting in a 37% average increase in individual travel cost across conditions.

Keywords: Braess Paradox; networks; positive and negative network externalities; choice observability; experiments
The Generalized Matthew Effect in Science: Do Nobel Prize Effects Spread in Citation Networks?

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Rudolf Farys (University of Bern)

Abstract: The Matthew Effect is well-known and has been extensively studied in the sociology of science and beyond. In this paper we highlight and test a widely neglected implication of Merton’s theoretical argument which is of high theoretical and practical relevance: status gains might diffuse and lead to a Generalized Matthew effect. Focusing on Nobel Laureates in Economics for the years 2000-2008 we study this proposition on the basis of citation data from the Web of Science 1900-2012. In order to rule out confounding due to general and paper-specific time trends in citation data we construct a synthetic control group by a combination of coarsened exact matching and entropy balancing. As can be seen in figures 1-3, we find that citation impact of Nobelists’ work (wave 1) increases in absolute terms and compared to the control group. However, we find no increase in the citation impact of papers which were cited by the Nobelist (wave 2) and of papers which were cited by these cited papers (wave 3).
Social Norm Enforcement in the City and the Train. Evidence from (Quasi-)Experimental Field Studies

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Wojtek Przepiorka (Utrecht University / University of Oxford)
Debra Hevenstone (University of Bern / University of Zurich)

Abstract: Research on the prevalence and nature of norm enforcement in everyday social interactions is still rare. In laboratory experiments, people are willing to negatively sanction norm violations at a cost to themselves – a behavioral tendency called ‘altruistic punishment’. However, the degree to which these findings can be generalized to social interactions outside of the lab is still debated. Only a small number of field experiments have been conducted and initial results suggest that punishment is less frequent outside of than in the lab. In a series of (quasi-)experimental field studies conducted in the city (New York, Zurich, Bern) and in the train (between Zurich, Bern and Basel), we systematically violated the anti-littering norm and the silence norm, respectively. Findings indicate that both norms are universally enforced, but the anti-littering norm to a substantially lower degree than the silence norm. Moreover, norm enforcement is significantly more common in Switzerland than in New York. We also find that individuals’ propensity to enforce a social norm is sensitive to the costs of and benefits from doing so. For instance, individuals prefer more subtle forms of enforcement to direct punishment, likely because the former reduce the risk of retaliation.
The Moral Psychology of Liberals and Conservatives Can Predict Public Opinion Dynamics

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Irina Vartanova (Stockholm University)
Fredrik Jansson (Linköping University)
Kimmo Eriksson (Stockholm University)

Abstract: The public opinion on moral issues in the US has become more liberal for some issues, such as attitudes towards gay rights, while it has remained mostly stable for others, such as abortion. Only rarely does it become more conservative. Meanwhile, the population ratios of liberals and conservatives have remained largely unaltered over time. What is it then that drives moral norm change in the liberal direction in society? In this work we build on Moral Foundations Theory (Haidt 2007) and investigate the assumptions and predictions made by a recent mathematical model (Eriksson and Strimling 2015) on the dynamics of public opinion, in order to identify a micromechanism that could explain the outcome. In more detail, liberals tend to rely on a narrower set of moral foundations than do conservatives. According to the model, this fact should influence the speed and direction of moral norm change among both Liberals and Conservatives. Through web-based surveys and experiments, we find that participants’ behaviour is in line with the assumptions of the model, in that moral foundations predict what kind of arguments individuals use to persuade others, and who is persuaded by which arguments. Furthermore, the model successfully predicts the speed and direction of moral norm change with respect to existing longitudinal survey data on 74 moral issues. We found a general trend among liberals towards positions supported by arguments based on the moral foundations that liberals accept, i.e., ‘Harm’ and ‘Fairness’. As predicted by the model but contrary to intuitions about ongoing political polarisation the same general trend towards more liberal positions was found also among conservatives.

References:
Social Interaction Effects in Norm Compliance

Lucas Molleman (Nottingham School of Economics)
Daniele Nosenzo
Simon Gaechter

Abstract: We report the results of a novel, large-scale experiment ($N = 4,450$) to quantify the impact of social influence on norm compliance. In the experiment subjects are asked to comply with an arbitrary behavioral rule at some cost to themselves. No financial sanctions apply if the rule is violated, and thus compliance reflects an intrinsic preference for norm-following. We first study the individual characteristics that correlate with this preference for norm-following. We find that norm-following individuals tend to be relatively risk-averse and more patient. We then measure whether preferences for norm-following can be weakened or strengthened by subtle cues about the behaviour of others in the task: depending on the treatment, subjects are displayed on their screen the behavior of 0, 1, 2, 3, 4, 5 or 6 other participants, who either follow or violate the arbitrary rule. Across 28 treatments, we map out all possible scenarios where the n other participants are either all compliant, or all non-compliant, or any possible mixture of partial compliance in between. We find large and statistically significant effects of others’ behavior on norm-following. However, this social influence effect is strongly asymmetric: observing “good” examples of compliance has virtually no impact on norm-following, but “bad” examples of non-compliance have a powerful negative effect on norm-following. These effects are similar regardless of the number of other participants observed: it is not the number of good/bad examples that a subject observes that matters, but rather whether or a single bad example is observed. Overall, we estimate that observing a bad example can double the probability of norm violation. Moreover, we find that this negative effect persists (albeit weakened) over time and spillovers to a subsequent repetition of the task where the subjects act again in isolation.
Status Characteristics and the Provision of Public Goods – Experimental Evidence

Andreas Tutic (Leipzig University)

Abstract: We present experimental evidence on the workings of status characteristics in problems involving the provision of public goods. According to Status Characteristics Theory (SCT), status differentials affect performance expectations which in turn affect the power and prestige hierarchy in group tasks. Applied to problems of collective action, SCT suggests several intriguing hypotheses (cf. Simpson et al., 2012). Most importantly, the theory holds that high-status actors show a greater initiative in and overall contribute more to the provision of public goods. Among other things, we put this hypothesis to a strict experimental test. Our experimental design involves the volunteer’s timing dilemma as the group task as well as several experimental conditions which differ regarding the type of status characteristic implemented to differentiate status groups. Our results validate the central hypothesis cited above and also shed light on a controversial question in SCT regarding the relative strength of diffuse and specific status characteristics on performance expectations.

Keywords: volunteer’s timing dilemma, social status, public goods, small-group research
Sanction Recognition. A Conceptual Model of Extended Normative Reasoning

Martin Neumann (University of Koblenz)

Abstract: The talk investigates a central terminus in rational choice theories of norms: The notion of sanctions. Sanctions are an unexplained theoretical term for investigating norm conformity. Agent-based models inspired by evolutionary game theory show that the evolution of cooperation can be enforced by sanctions. However, in behavioral terms, sanctions are a form of aggression. An empirical investigation of the violent collapse of a criminal group reveals that interpretation is necessary for recognizing as sanction. In the absence of specific conditions for securing social order such as the state monopoly of violence this interpretation remains ambiguous and error prone.
Types of Normative Conflicts and the Effectiveness of Punishment

Heiko Rauhut (University of Zurich / ETH Zurich)

Fabian Winter (Max Planck Institute for Research on Collective Goods)

Abstract: While the current literature focuses on how social norms generate cooperation, the issue of norm-related conflict deserves more attention. We develop a new typology of normative conflict by combining Coleman’s (1990) distinction between conjoint and disjoint norms with our own classification of commitment-related and content-related normative conflicts (Winter et al. 2012). We outline a theory of how the four resulting types of normative conflict can be ordered. We provide real-life examples and typical game-theoretical conceptualizations of the four cases and show how they can be sorted according to their conflict potential and the extent with which conflict can be restored by punishment. Then we discuss for each of the types a prototypical laboratory study and demonstrate how our theory can be applied and confirmed. We conclude with a discussion of how previously anomalous empirical results can be re-thought and understood in light of our theory. Finally, we give suggestions for prospective empirical micro-level corroborations and suggestions for mechanism design.
Reputation cascades

Vincenz Frey (Utrecht University)
Arnout van de Rijt

Abstract: Reputation systems are lauded for their effectiveness in fostering trust between strangers. In this chapter, we study a previously overlooked side-effect: The production of reputational differentiation between equally trustworthy individuals. This endogenous inequality is caused by feedback effects in the reputation-building process. “Reputation cascades” driven by trustors choosing to exchange with partners who have shown themselves to be trustworthy can make entry difficult for those who lack a reputation, while allowing established parties to perpetuate their dominance. Results from a laboratory experiment support the prediction that information sharing leads not only to higher levels of honored trust but also to higher inequality among trustees. We conclude that while large reputation systems enabled by modern technology facilitate large volumes of otherwise unviable transactions, they may also set in motion reputational snowballs that generate unfounded inequities.
The Production of a Reputation Premium: Bargain Hunting and Herding in eBay Auctions

Wojtek Przepiorka (Utrecht University)
Ozan Aksoy (Nuffield College, Oxford)

Abstract: Reputation matters in online auction markets. Sellers with more positive and fewer negative customer ratings receive higher bids and attain higher sales. It has been shown theoretically and empirically that buyers produce this reputation premium by trading off prices against the uncertainty they face with regard to sellers' trustworthiness. However, finding a good bargain at a low risk of being cheated (or otherwise dissatisfied) is time consuming and therefore costly. Buyers may thus resort to “cheaper” strategies and simply join auctions which have received a bid already. Although such herding will necessarily lead to higher bidding competition, it may be rational if the presence of other bidders is a sign of good item quality and seller reputation. Based on a large sample of eBay auctions of a homogenous good (\(N \approx 91,000\)), we investigate whether buyers’ herd behaviour could undermine eBay’s reputation mechanism. First, we find evidence for herding. The lower the initial price of an item and the earlier an item receives its first bid, the more bidders bid on that item driving up the item’s final price. Second, the herding we observe might be rational because sellers with a better reputation set lower initial prices and receive their first bids earlier. Finally, even after controlling for herding in our statistical analyses, we find a significant and substantial effect of a seller’s reputation on an item’s final price.
Testosterone Administration Moderates Effect of Social Environment on Trust in Women Depending on Second-to-Fourth Digit Ratio

Werner Raub (Utrecht University)
Vincent Buskens
Nynke van Miltenburg
Estrella R. Montoya
Jack van Honk

Abstract: Animal research has established that effects of hormones on social behaviour depend on characteristics of both individual and environment. Insight from research on humans into this interdependence is limited, though. Specifically, no prior testosterone experiments in humans scrutinized the interdependency of testosterone with the social environment. Nonetheless, recent testosterone administration studies in humans repeatedly show that a proxy for individuals’ prenatal testosterone-to-estradiol ratio, second-to-fourth digit-ratio (2D:4D ratio), influences effects of testosterone administration on human social behaviour. Here, we systematically vary the characteristics of the social environment and show that, depending on prenatal sex hormone priming, testosterone administration in women moderates the effect of the social environment on trust. We use the economic trust game and compare one-shot games modelling trust problems in relations between strangers with repeated games modelling trust problems in ongoing relations between partners. As expected, subjects are more trustful in repeated than in one-shot games. In subjects prenatally relatively highly primed by testosterone, however, this effect disappears after testosterone administration. We argue that impairments in cognitive empathy may reduce the repeated game effect on trust after testosterone administration in subjects with relatively high prenatal testosterone exposure and propose a neurobiological explanation for this effect.
Trusting Your Promise Because You Are Like Me –
Identity Signals in Strategic Decision Making

Janine C. Weeting (University of Groningen)
Rafael Wittek (University of Groningen)
Andreas Flache (University of Groningen)
Russell Spears (University of Groningen)

Abstract: Appearing trustworthy is crucial in manifold situations of strategic social interaction. People are able to enhance the chances of being perceived as trustworthy by means of effective signaling. However, what signals should a person display in order to be perceived as trustworthy?

Identity signals were proposed to be effective signals that reveal the trustworthiness of an individual (Bacharach and Gambetta, 2001). Categorical identity signals are signals that reveal the trustworthiness of an individual that is a member of a specific category (or group). Whenever a receiver holds a positive belief about a category and interacts with a member of that category, displaying the identity signals that identify the person as a member would enhance the perceived trustworthiness of that person.

We aim to investigate to what extent identity signaling can be an effective means of signaling trustworthiness and address the question to what extent ‘natural’ identity signals (i.e. indices; e.g. nationality, race) and acquired costly identity signals (e.g. language or dialect of a certain group, that an individual invested in learning) influence the perceived trustworthiness of an individual. In addition to that, we investigate to what extent promises that are given by a person are more trusted when the individual displays indices or an acquired costly identity signal.

Based on signaling theory (Bacharach & Gambetta, 2001; Gambetta, 2008) we hypothesize that individuals with a positive belief about a certain group would perceive a member who displays indices rather than acquired costly identity signals as more trustworthy and would trust the promises more. Based on social identity theory (Turner & Tajfel, 1979) and signaling theory, we hypothesize that members of the same group (in-group) who display indices are perceived as more trustworthy than individuals of a different group (out-group) and their promises. Based on the theory of shifting standards (Biernat, 1991) we generate the contradicting hypothesis that a member of the out-group who displays an acquired costly identity signal but not an indices is perceived as most trustworthy and promises are trusted most, since the out-group member actively invested in acquiring an identity signal of the ingroup. In laboratory experiments we test the hypotheses in a setting of a ‘visitation evening’ were students select new candidates for their student house. In this setting the candidates need to interact strategically with the house mates and need to signal effectively their trustworthiness in order to enhance the chances of being selected. Our main focus lies on how participants perceive the identity signals candidates use in order to appear trustworthy. Participants are 80 female Dutch first-year students of the University of Groningen. They have the task to select one out of four female candidates as a new housemate. The candidates are either Dutch (in-group member) or German (out-group member) students who reveal their nationality (indices) or what language they learned in a language course (Dutch or English; acquired costly identity signal). In addition to that, the candidates address important issues of living together in a student house, and make similar promises regarding joining social activities with the housemates on a regular basis and cleaning shared facilities in the house. Participants then rate the candidates on a number of characteristics, including trustworthiness, friendliness, and warmth. Furthermore, participants rate how credible the candidate’s promises are and how likely the candidates will fulfil these promises. In addition to that,
participants fill in a number of questionnaires in order to measure stereotypes about Dutch and German students, their familiarity with the setting of a ‘visitation evening’, and their level of ingroup identification. Finally, participants select whom out of the four candidates they would like to become the new housemate.

Results and implications of this research aim to contribute to the understanding of how individuals can effectively signal trustworthiness via identity in strategic social interaction.
Social Effects on Racial Perception

Zsófia Boda (ETH Zurich)

Abstract: In this paper, we investigate the fluidity of racial perceptions. Our goal is to better understand why discrepancies are often found between someone’s racial self-identification and his or her race perceived by others. We offer three different groups of micro-level mechanisms that shape how individuals perceive each other’s race in closed communities. Using a sample of high school students, we find evidence for friendship bias, that is, a friendship increases the tendency to categorize others in the same race as oneself. We also find evidence for the role of perceived social position: those popular amongst minority peers are likely to be perceived as minority members themselves, and those popular amongst majority peers as majority members; however, those perceived to make friendship efforts towards the majority group that are mostly unreciprocated are also perceived as minorities. Finally, social influence is also found to play a role in this: students tend to accept their peers’ perceptions about others’ race, and they are particularly affected by their friends’ opinions. The context for this paper is a collection of 12 small high school classes (N = 386) in Hungary, and the sample consists of two ethnic groups: the Roma minority group and non-Roma Hungarians. Our approach is based on estimating stochastic actor-oriented models (SAOMs) developed for the dynamic analysis of small social networks, which has several advantages for this project. First, each social mechanism proposed is analyzed on the micro (dyadic) level without unnecessary aggregation of data; that is, how likely a given individual is to perceive a given peer as a minority member based on their individual characteristics and their social environment. Moreover, we are modeling the evolution of racial perceptions and friendships together over time, therefore we can separate between the effects of friendships on perceptions and that of perceptions on friendships. Finally, using the random coefficient multilevel version of SAOMs makes it possible to analyze multiple school communities together and gain global estimates for each parameter in the model. These together provide us with more robust results about social effects on racial perceptions.
Size Matters: Minority Labor Market Discrimination in a Dynamic Hiring Model with Employer Learning

David Kretschmer (University of Mannheim)

Abstract: This paper proposes a new dynamic model of minority labor market discrimination. In this model, discrimination results from a structural property of the minority group that is almost tautologically linked to the term minority itself—its smaller population size and underrepresentation in the labor market vis-à-vis the majority. This property suffices to produce minority discrimination if employers repeatedly decide on whether to hire majority or minority job applicants based on productivity expectations stemming from their past experiences with workers from these groups.

The model starts with the assumption that, initially, employers’ workforce is mainly composed of majority rather than minority workers—as the minority is small and underrepresented in the labor market. As a consequence, most employers—forming productivity expectations based on the quality of their current employees—have medium expectations for the majority: due to the large number of majority workers, extreme productivities cancel out, resulting in medium expectations. For the minority, employers tend to have either high or low expectations as the low number of minority workers causes outliers to have a large weight in productivity expectations. When making further hiring decisions, those employers with low minority expectations employ majority workers while those with high minority expectations prefer minority employees. The updating of productivity expectations due to this hiring process generally results in a decrease of high expectations and stability of medium expectations: on average, additional workers have medium productivity, driving down the influence of outliers on expectations.

These trends towards stability in medium and decreases in high expectations disadvantage the minority over time: For those employers with low initial minority expectations, majority expectations tend to stay higher than minority expectations as additional majority workers keep majority expectations at medium levels. This is both because additional workers’ productivities tend to be medium and because even extreme additional productivity observations only have small effects on expectations based on the large number of majority workers. For employers with high minority expectations, minority expectations decrease—and rapidly so because further minority worker productivities strongly impinge on expectations as they are based on only few minority employees. If an additional minority worker’s productivity turns out to be very low, it is likely to depress minority expectations so much that the affected employer reconsidered his hiring strategy and decides for majority workers at later points in time. This effect of decreasing minority expectations is not counterbalanced by increases in low minority expectations because under low minority expectations employers continue to hire majority workers, leaving minority expectations unchanged. Overall, it is the initially more dispersed distribution of minority productivity resulting from the low number of minority workers that leads to selective expectation updating with discriminatory effects on the minority.

This model of labor market discrimination has a number of desirable features: it does neither rely on differences in productivity-related characteristics between minority and majority workers nor on inherent employer tastes to derive discriminatory outcomes. On the contrary, minority discrimination follows rather naturally from minority group size and an intuitive hiring process in which employers’ decisions are driven by their past experiences. The paper elaborates the suggested mechanism both intuitively and formally. The formal presentation uses mathematical modeling to rigorously prove minority discrimination in a two-period model and agent-based simulations to demonstrate discriminatory outcomes for longer time horizons. Extensions, the robustness of results to relaxations of model assumptions, and empirically testable implications are discussed.
Does Ethnic Classroom Composition Affect Identity-Based Friendship Choices of Immigrant and Native Adolescents?

Lars Leszczensky (University of Mannheim)
Sebastian Pink (University of Mannheim)

Abstract: It is an established empirical regularity that immigrant youths who strongly identify with the host country have more native friends than those with weaker host country identification. However, it remains unclear which mechanisms bring about this social interaction pattern. On the one hand, it might be a selection story: immigrants with strong host country identification might have stronger preferences for native friends, and they might in turn be more attractive as friends to natives. On the other hand, it might be a social influence story: having native friends or friends with strong host country identification might increase immigrants’ host country identification.

While recent research has not found evidence of friends influencing young immigrants host country identification, it has shown that native students prefer befriending immigrant peers with strong rather than weak host country identification (Leszczensky et al. 2016). Surprisingly, however, contrary to theoretical expectations, no respective preference of high-identifying immigrants for native friends was found.

Following up on these findings, we propose and test an argument that links identification-based friendship choices of both immigrant and native adolescents to the opportunity structure in ethnically diverse schools, i.e., relative group size. In short, we hypothesize that immigrants’ host country identification may especially matter for immigrants’ own friendship choices in schools with particularly high shares of immigrants, because both immigrants can be pickier in these schools. As suggested by conflict theory, by contrast, natives might feel threatened by high shares of immigrants, thus avoiding befriending them irrespective of immigrants’ host country identification.

We empirically test our hypothesis using three waves of longitudinal German network data \((N = 872)\) and stochastic actor-oriented models (SAOM; Snijders et al. 2010). SAOM can be regarded as agent-based simulation models that allow controlling for structural effects of the network itself while separating selection from social influence by simultaneously modeling the co-evolution of networks and individual characteristics (Steglich et al., 2010). By doing so, SAOM make it possible to examine how actors’ goals and opportunities interact to create macro-level patterns that we observe empirically, such as friendship networks in school.

In line with our theoretical argument, we find that in schools with very high shares of immigrants, immigrants who identified more strongly with the host country indeed were more likely to befriend native peers than immigrants with weaker host country identification. In line with conflict theory, by contrast, native students’ friendship choices did not depend on immigrants’ host country identification in schools with high shares of immigrant students.
Effects of Small-scale Settings on Homonegativity among Dutch Secondary School Students

Joris Blaauw (Radboud University Nijmegen)  
Wout Ultee (Radboud University Nijmegen)

Abstract: We model three forms of homonegativity among Dutch secondary school students: overall deprecation of same-sex love, dislike of kissing between two persons of the same sex, and keeping homosexuals at a distance. Guided by the hypothesis that stronger integration into any of society’s groups makes for more adherence to any of their norms, we estimate effects of individual education, ethnicity and sex, as well as the composition of the student population of schools and theirs classes, a school’s sexual diversity program, friends, neighbourhoods, parents, and sport clubs. Parameters of cross-classified linear regression models show that education has a weaker impact than several settings. Students with gayfriendly parents and friends are more positive themselves, while students in classes with many homonegative students are more homonegative. Male, but not female, students who sport intensively are more homonegative. School programs on sexual diversity lower homonegativity of individual students by way of fewer homonegative classmates.

Keywords: Homonegativity; integration; secondary school students; contextual effects; cross-classified linear regression models
# Poster Session

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The Role of Information in Group Formation

Stefano Bennati (ETH Zurich)

Abstract: A study on a set of ancient and recent human skulls (Cieri et al., 2014) finds a gradual feminization of facial features, which reflect a reduction in levels of testosterone. They argue this hormonal change led to reduced aggressivity, in adaptation to the need for more social tolerance. So there must have been a change in the environment that made tolerance a more favorable characteristic than aggressivity.

Quoting Szathmary and Smith (2000), “transitions must be explained in term of immediate selective advantage to individual replicators”. One reasonable explanation is an increased interaction between unrelated individuals. But how could that happen in a world populated by high-testosterone Homo Homini Lupus à la Hobbes?

The question this work is trying to answer is: can groups form spontaneously in an environment that incentivizes selfish behavior? We argue that information can be the driver of group formation, even when the environment does not favor groups and in presence of intra-group competition. We tackle this problem by means of an agent-based evolutionary model of a foraging task. The simulation environment is a squared grid with periodic- boundary conditions. Each cell can contain food, and number of cells containing food is defined by a parameter.

Agents can either eat or move in search of food. Agents perceptions does not allow to see food unless in the same cell as the agent, but it allows to see other agents in the neighboring cells. Fitness is defined as the number of food units consumed. The population competes for the same resources, so the first who discovers a new source will exploit it more than any latecomer. An agent can consume a maximum of one unit of food per timestep. Each food source starts with a random food quantity, whose mean value is high enough to avoid that, on average, a single agent could exhaust a source before any other agent can reach it. Our results are anyway robust to variation of this number.

Whenever a food source is exhausted, a new one is spawned to a random position, this way the total number of food sources remains constant during the whole simulation. Food sources are created according to a uniform probability distribution, so that a high fitness reflects an effective foraging strategy. Our model differentiate itself from previous work by relaxing the following common assumptions: kin selection is possible (Smith, 1964) e.g. agents have tags, agents are able to learn (Duan and Stanley, 2010), the environment favors cooperation (Montanier and Bredeche, 2013), or spatial dispersion is imposed (Grund et al., 2013).

We define two navigation strategies: random walk and herding. Agents of the first group move randomly in the environment, those of the second group instead follow other agents. We find that herding strategy can outperform random walk for low food concentrations, as it is able to exploit information about the behavior of others to find food. Random walk becomes the best performer whenever the food is abundant.

Our results show that group can spontaneously form in an environment that favors selfish behavior, if food is scarce and difficult to find. Frequent contact with unknown individuals might have favored less aggressive behavior, therefore a reduction in testosterone levels.

References:


The Shadow of the Future: Survey-based Results on Environmentally Friendly Behavior

Heidi Bruderer Enzler (ETH Zurich)
Andreas Diekmann (ETH Zurich)

Abstract: We analyze environmentally friendly behavior in the Swiss Environmental Survey 2007 and a follow-up survey once using a behavioral measure from economic research – the subjective discount rate – and once using the psychological “Consideration of Future Consequences” scale. Theoretically, both measures capture a preoccupation with future and present outcomes of behavior and therefore can be considered as two sides of the same coin. For this reason, we hypothesized that both would be valid predictors of pro-environmental behavior.

However, with regard to temporal discounting, we did not find any systematic effects on behavior – despite the fact the analyses were restricted to behaviors that should result in lower financial overall costs for most respondents. Furthermore, the results attest discount rates (at best) a moderate stability over four years. Thus, the results challenge the classic economic assumption that the subjective discount rate represents a personality trait that predicts behavior across different situations. The results on the psychological measure of future orientation, on the other hand, are in line with expectations: the scale was shown to be a reliable instrument that is systematically related to behavior.

The question remains as to why the behavioral measures (discount rates) were not related to behavior while the psychological multi-item scale was. With regard to the prediction of behavior our results clearly contradict the notion that behavioral measures are generally superior to attitude scales. This strongly suggests that future research should be more critical regarding measures of subjective discounting and that it may be advisable to consider using attitudinal instruments instead.
Assortative Matching with Inequality in Voluntary Contribution Games

Stefano Duca (ETH Zurich)

Abstract: Voluntary contribution games are a classic social dilemma in which the individually dominant strategies result in a poor performance of the population. The negative zero-contribution predictions from social dilemma situations give way to more positive (near-)efficient ones when assortativity, instead of random mixing, governs the matching process in the population. Under assortative matching, agents contribute more than what would otherwise be strategically rational in order to be matched with others doing likewise. An open question has been the robustness of such predictions in terms of provisioning of the public good when heterogeneity in budgets amongst individuals is allowed. Here, we show analytically that the consequences of permitting heterogeneity depend crucially on the exact nature of the underlying public-good provision efficacy, but generally are rather devastating. Using computational methods, we quantify the loss resulting from heterogeneity vis-a-vis the homogeneous case as a function of (i) the public-good provision efficacy and (ii) the population inequality.

Jennifer Gewinner (ETH Zurich)
Andreas Diekmann (ETH Zurich)

Abstract: The total number of retractions increases and so does the number of retractions due to scientific misconduct [2]. It seems what once happened behind closed doors of universities is now dragged into the open where the media eagerly awaits the next scientific misconduct scandal. One of these media outlets is the blog “Retraction Watch”. Initiated in August 2010 it resumes until today, reporting on retracted papers and their background stories, always with the aim to find the true cause of retraction, trying to draw the line between scientific mistakes and scientific misconduct.

A content analysis of retraction notices plus the background information given in the “Retraction Watch” blog is yielding a unique information set, as until now, either retraction notices have been analyzed in great numbers but without adding further explanatory information [1, 2 and 4] or only a small number of very specific cases of scientific fraud have been analyzed [3]. The data collection began on the initiation date of “Retraction Watch”, will carry on until March 2012, will estimate 500 blog entries and cover a time span of 20 months (i.e. from August 2010 to March 2012). The content analysis of the blog entries collects information on the following categories: name, academic title and the date of birth of the first author; title of the retracted paper; year of publication; year when retracted; discipline; reason of retraction; country; research institute; journal; impact factor journal; coauthor(s); which party initiated the retraction; sanctions and consequences as well as the publishing date of the blog entry.

Data collection is finished and is counting already 500 analyzed cases of retractions. The data analysis shows that different retraction reasons vary significantly in their retraction time. Furthermore, the impact factor has a significant negative impact on time-to-retraction. A 100% increase of impact factor, for example from 1.5 to 3.0 will result in a shortening of time-to-retraction by 11%.

The unique dataset provided by the “Retraction Watch” blog will enable a deep insight into causes and underlying trends that lie behind the retractions. The authors would be very grateful for obtaining the opportunity to present the results and to benefit from the feedback and the expertise of the conference audience, as by then this project will have reached a crucial point in the research process.

References:


Do Descriptive Norms Save Lives? The Case of Organ Donation

Marc Höglinger (ETH Zurich)

Abstract: Normative influence and, in particular, descriptive norms (Bicchieri 2006, Cialdini 1998) are powerful forces in shaping behavior. Various experimental studies have shown that individual behavior can be manipulated by changing individuals’ expectations about what other people do in a particular situation (e.g., Schultz, Nolan, Cialdini et al. 2007, Diekmann, Przepiorka und Rauhut 2015). We apply this approach in an area which represents a prototypical social dilemma situation and which is of high substantial relevance: the willingness to donate organs after death. Organ shortage is a pervasive problem in Western countries and one of its main reasons is that too few people grant permission for organ donation. Estimates say that approximately 30 persons die every day in the US because they need a donor organ but do not receive one. In order to test whether descriptive norms could increase organ donation willingness, we assigned participants to different descriptive norm messages regarding the stated organ donation willingness in the general population. Then, respondents had to manifest their own willingness to donate. Further, as an additional, unobtrusive measure, we recorded whether participants clicked on a link to a donor card solicitation page. To validate our descriptive norm treatment, we measured believes about the general willingness to donate before and after the descriptive norm treatment (and the elicitation of the own willingness to donate).
Publication Bias in Economics

Julia Jerke (ETH Zurich)
Andreas Diekmann (ETH Zurich)

Abstract: Publication bias is a form of research bias which occurs when the publication of a manuscript depends on the therein reported results. In particular this can imply that a paper reporting significant estimates will be published, whereas a paper of equal methodological quality reporting insignificant results will be rejected. This bias might have two sources. First, publishers tend to prefer manuscripts with novel and significant results since this increases the likelihood of citations. Second, researchers tend to not submit manuscripts with insignificant respectively negative results (the so-called filedrawer effect) or manipulate their data as they anticipate the publishers reasoning. In any case, consequences are a biased scientific literature potentially overestimating effects and causal relationships. Several studies already showed that publication bias is a substantial problem in American and German sociology, social psychology and political science. In this research project we focus on a leading journal of economics and we will answer two questions: is there a publication bias and if so, did it increase over time? To examine whether publication bias exists or not we apply the caliper test. This test focuses on z-/t-values analyzing their distribution at the critical thresholds of significance. It is based on the assumption that in absence of publication bias the frequency of estimates in narrow, equal-sized intervals just above and just below the critical threshold should follow a uniform distribution. Thus, a substantial overrepresentation of estimates in the interval just above the critical threshold is assumed to be an evidence for publication bias. With an impact factor of 6.654, The Quarterly Journal of Economics (QJoE) is one of the leading journals in economics. The sample consists of all quantitative articles published between 1960 and 2013 reporting empirical studies. To test for publication bias we screen these articles thereby extracting z- or t-values, respectively and subsequently analyze their distribution at the common levels of significance. Since the sampling and analyzing process has not been completed yet, no final conclusions can be drawn. But preliminary results indicate that there is no clear evidence for publication bias in QJoE.
Measuring the Social Status of Education Programmes: Applying a New Measurement to Dual Vocational Education and Training in Switzerland

Thomas Bolli (ETH Zurich)
Ladina Rageth (ETH Zurich)

Abstract: This paper proposes a new approach to measuring changes in the social status of education programmes, a type of social status that the literature has greatly neglected so far. We focus on the dual Vocational Education and Training (dual VET) system in Switzerland, which has recently received substantial attention across Europe. We argue that, holding everything else constant, a change in the relative ability of students in an education programme, in relation to the cohort, reflects a change in the social status of that programme. Using PISA scores as a proxy for cognitive ability, we apply this approach to test whether growing knowledge of the education system increases the social status of dual VET in Switzerland. Our results, which focus on immigrant students, confirm that the social status of dual VET increases with these students length of stay in Switzerland, thus reflecting their learning process about the Swiss education system.

Keywords: Social Status, Vocational Education and Training, Apprenticeship
Can Legal and Social Norm Approaches Counter Mafias?

Giulia Andrighetto (European University Institute)
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Abstract: Mafia-type organisations are widespread and highly prosperous economic enterprises that cause social and economic harm to the societies across the globe in which they operate. Despite this, there is limited understanding of their dynamics and the systemic effects of counter-mafia policies. We use an agent-based model of mafias to explicate mafia-citizen-state dynamics and explore the effects that a legal approach and a social norm approach have on key outcomes. In addition to key element of incentives, agents in our model perceive, update, and consider norms when deciding how to behave. We test legal and social counter-mafia policies and find that an approach relying solely on the legal efforts of the state is effective in combatting the mafia, but largely ineffective at changing the behaviours and minds of citizens, ultimately allowing the mafia to regain power if the legal approach weakens. In contrast, a social norm approach attains robust changes in the behaviour and mind of citizens, but is unable to directly affect the mafia. An approach in which both legal and social approaches are used brings about a weakening in the mafia as well as robust changes in citizens’ behaviours and minds. An unexpected but policy relevant result also emerges: violence towards citizens increases when a social norm only approach is used without the backing of the state since citizens resist the mafia without legal backing. This serves as a warning that states should always back citizens with legal power to make it safe for them to initiate bottom-up campaigns.
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