Report 2017–2020

MAX PLANCK INSTITUTE
FOR RESEARCH ON
COLLECTIVE GOODS

Report
2017–2020

Please note:
For technical reasons concerning the print layout,
some pages in this document have been left empty.

Table of Contents

A. A Short History of the Institution

A.   A Short History of the Institution

The Max Planck Institute for Research on Collective Goods was founded in 1997 as a temporary project group "Common Goods: Law, Politics and Economics" and transformed into a permanent institute in 2003. Its mission is to study the law, economics, and politics of collective goods, defined to encompass all those goods whose provision and enjoyment are treated as community concerns.

In the early years, the institute had teams of lawyers and political scientists, led by Christoph Engel (who leads the *Behavioral Law and Economics Group*) and Adrienne Héritier. When Adrienne Héritier left in 2003 to accept a joint chair at the European University Institute and the Schuman Centre in Florence, the Max Planck Society appointed economist Martin Hellwig to replace her. After Martin Hellwig's retirement in 2017, Matthias Sutter, an experimental economist, succeeded him as new co-director and established the *Experimental Economics Group*. At this point, therefore, the institute consists mainly of lawyers and applied economists.

In addition, there is a small group of psychologists. Initially brought in by Christoph Engel to support his *behavioral law-and-economics* approach to institutional analysis, in 2007 this turned into the first independent Research Group *Intuitive Experts*, led by Andreas Glöckner and run until 2013. Today, the institute hosts three independent Research Groups, led by Anna Baumert (*Moral Courage*), Susann Fiedler (*Economic Cognition*), and Fabian Winter (*Mechanisms of Normative Change*).

From the beginning, the work of the institute had three main goals: It aimed to better understand collective-goods problems, to find better solutions, and to understand the political, legal and economic processes of defining problems and choosing solutions. In the years of the project group, major research efforts concerned

- the law and politics of waste management,

- the governance of the Internet, and

- the transformation of the nation state into a multi-level system of governance.

Martin Hellwig and his group have mainly focused on the mechanism design foundations of the theory of collective goods, and on the analysis and mitigation of the financial crisis.

Today, the major research efforts of the institute are concerned with

- the analysis of incentive problems in public-good provision,

- behavioral law and economics,

- the analysis of credence goods markets and how to design better institutions,

- the experimental investigation of the development of economic preferences in childhood and adolescence.

The different lines of research show that the institute aims at striking a balance between fundamental research and applied work with practical implications for society. Research objectives and strategies are laid out in this report.

B. Publications in Target Journals

B. Publications in Target Journals

Publications in Target Journals

In 2009, following a recommendation by the Max Planck Society, the institute has defined a list of top journals, separately for each of the disciplines represented in the institute. Consulting with the researchers, this list has been last revised in January 2019 to reflect the current composition of the institute. If a paper is accepted for publication in the list the researchers (with a TVöD contract) receive a bonus. Category 1 means full bonus, and category 2 half a bonus. To express clearly which journals are regarded as flagship journals all information is published in the institute's wiki.

In this section, we list all publications between 2017 and 2020 that have (or, in the case of directors and group heads, would have) qualified for a bonus. For researchers who have left the institute, only publications are listed that go back to work undertaken at the institute. For researchers currently working at the institute, all publications that would have qualified for a bonus are listed, even if they have been published before a researcher joined the institute.

Journals that published articles by MPI scholars between the years 2017 and 2020 are marked in bold in the following list.

Law
Category 1:

American Law and Economics Review

Criminology – *new since 2019*

International Review of Law and Economics – *only until 2018*

Journal of Empirical Legal Studies

The Journal of Law and Economics

The Journal of Law, Economics and Organization

Journal of Legal Analysis

The Journal of Legal Studies

Category 2:

Archiv für die civilistische Praxis

Archiv des öffentlichen Rechts

Common Market Law Review – *only until 2018*

Der Staat

Die Verwaltung

European Journal of International Law – *only until 2018*

Golddammer's Archiv für Strafrecht – *only until 2018*

International Journal of Constitutional Law – *only until 2018*

Journal of Competition Law and Economics – *only until 2018*

Journal of Experimental Criminology – *new since 2019*

Journal of Quantitative Criminology – *new since 2019*

Law and Human Behavior

Law and Society Review – *new since 2019*

Modern Law Review – *only until 2018*

Oxford Journal of Legal Studies – *only until 2018*

Psychology, Public Policy and Law

ZGR Zeitschrift für Unternehmens- und Gesellschaftsrecht

ZHR Zeitschrift für das gesamte Handelsrecht

Economics
Category 1:

The American Economic Review

Econometrica

Journal of Political Economy

Quarterly Journal of Economics

The Review of Economic Studies

Category 2:

American Economic Association: Papers & Proceedings – *only until 2018*

American Economic Journal: Applied Economics

American Economic Journal: Economic Policy

American Economic Journal: Microeconomics

The Economic Journal

European Economic Review

Games and Economic Behavior

International Economic Review

Journal of Economic Theory

The Journal of Finance

Journal of Human Resources

The Journal of Industrial Economics

Journal of Labor Economics

Journal of Money, Credit and Banking – *only until 2018*

Journal of Monetary Economics

Journal of Public Economics

Journal of the European Economic Association

Management Science

The Rand Journal of Economics

Review of Economics and Statistics

Review of Economic Dynamics – *only until 2018*

The Review of Financial Studies

Psychology

Category 1:

Behavioral and Brain Sciences – *only until 2018*

Current Directions in Psychological Science – *only until 2018*

Journal of Personality and Social Psychology

Personality and Social Psychology Review

Psychological Bulletin – *only until 2018*

Psychological Review

Psychological Science

Category 2:

Cognition

Cognition and Emotion – *only until 2018*

Cognitive Psychology – *new since 2019*

Emotion – *new since 2019*

European Journal of Personality – *new since 2019*

European Review of Social Psychology – *new since 2019*

Journal of Behavioral Decision Making – *only until 2018*

Journal of Economic Psychology – *only until 2018*

Journal of Experimental Social Psychology

Journal of Experimental Psychology (i.e., **General**, LMC, Applied)

Journal of Personality – *new since 2019*

Journal of Risk and Uncertainty – *only until 2018*

Judgment and Decision Making

Organizational Behavior and Human Decision Processes – *only until 2018*

Personality and Social Psychology Bulletin – *new since 2019*

Psychonomic Bulletin and Review – *only until 2018*

Social Psychological and Personality Science – *new since 2019*

Thinking and Reasoning – *only until 2018*

Sociology – new category since 2019

Category 1:

The American Journal of Sociology – *new since 2019*

American Political Science Review – *new since 2019*

American Sociological Review – *new since 2019*

Social Forces – *new since 2019*

Category 2:

European Sociological Review – *new since 2019*

Social Science Research – *new since 2019*

Social Networks – *new since 2019*

Sociological Science – *new since 2019*

The Journal of Politics – *new since 2019*

Interdisciplinary

Category 1:

Nature

Science

Category 2:

Nature Communications

PNAS

All publications of the years from 2017 to 2020 are listed on the following pages (last update on 24th November 2020). Institute scholars are marked in bold.

2020 and forthcoming
(including also "Revise & resubmit")

Author	Journal	Details	Title
Alvarez Benjumea, Amalia	*Social Science Research*	Vol. 92 (2020), November, article 102480	Exposition to xenophobic content and support for right-wing populism: The asymmetric role of gender
Alvarez Benjumea, Amalia; Winter, Fabian	*PNAS*	Vol. 117 (2020), 37, September, pp. 22800-22804	The breakdown of anti-racist norms: A natural experiment on hate speech after terrorist attacks
Anvari, F.; **Olsen, Jerome**; Wing, Y. H.; Feldman, G.	*Journal of Experimental Social Psychology*	Vol. 92 (2021), January, 104052, available online 16 October 2020	Misprediction of affective outcomes due to different evaluation modes: Replication and extension of two distinction bias experiments by Hsee and Zhang (2004)
Barron, K.; Harmgart, H.; Huck, S.; **Schneider, Sebastian O.; Sutter, Matthias**	*Review of Economics and Statistics*	Revise & resubmit	Discrimination, narratives and family history: An experiment with Jordanian host and Syrian refugee children
Baumert, Anna; Maltese, S.; Reis, D.	*Social Psychological and Personality Science*	Vol. 11 (2020), 7, pp. 899-907	A cross-cultural study of justice sensitivity and its consequences for cooperation
Mõttus, R.; … **Baumert, Anna**; et al.	*European Journal of Personality*	Forthcoming	A pragmatic and pluralistic personality research: Different goals beget different methods
Baumert, Anna; Li, Mengyao; Sasse, Julia; Skitka, L.	*Journal of Experimental Social Psychology*	Vol. 88 (2020), May, article 103951	Standing up against moral violations: Psychological processes of moral courage
Bignoni, M; **Bortolotti, Stefania**	*Games and Economic Behavior*	Revise & resubmit	Economic polarization and antisocial behavior: An experiment
Boosey, L.; **Brookins, Philip**; Ryvkin, D.	*Management Science*	Vol. 66(11), pp. 5128-5150	Information disclosure in contests with endogenous entry: An experiment
Boosey, L.; **Goerg, Sebastian**	*Games and Economic Behavior*	Vol. 124 (2020), November, pp. 254-280	The timing of discretionary bonuses: Effort, signals, reciprocity
Cerrone, Claudia; Hermstrüwer, Yoan; Robalo, Pedro	*Games and Economic Behavior*	Revise & resubmit	Debarment and collusion in procurement auctions: An experiment
Cerrone, Claudia; Feri, F.; Neary, P.	*American Economic Review*	Revise & resubmit	Ignorance is bliss: A game of regret
Chatziathanasiou, Konstantin	*Der Staat*	Forthcoming	Sozioökonomische Ungleichheit: Verfassungstheoretische Bedeutung, verfassungsrechtliche Reaktionen
Chowdhury, S.; **Sutter, Matthias**; Zimmermann, K.	*Journal of Political Economy*	Revise & resubmit	Economic preferences across generations and family clusters: A large-scale experiment
Christensen, D.; Dube, O.; **Haushofer, Johannes**; Siddiqi, B.; Voors, M.	*Quarterly Journal of Economics*	Forthcoming	Building resilient health systems: Experimental evidence from Sierra Leone and the 2014 Ebola outbreak
Dang, J.; Barker, P.; **Baumert, Anna**; et al.	*Social Psychological and Personality Science*	First published online April 3, 2020	A multilab replication of the ego depletion effect
Dertwinkel-Kalt, M.; Köster, M.; **Sutter, Matthias**	*European Economic Review*	Vol. 130 (2020), November, article 103593	To buy or not to buy? Price salience in an online shopping field experiment
Egger, D.; **Haushofer, Johannes**; Miguel, E.; Niehaus, P.; Walker, M.	*Econometrica*	Revise & resubmit	General equilibrium effects of unconditional cash transfers: Experimental evidence from Kenya

Engel, Christoph; Timme, S.; **Glöckner, Andreas**	*Psychology, Public Policy and the Law*	Vol. 26 (2020), 3, pp. 333-352	Coherence-based reasoning and order effects in legal judgments
Engel, Christoph; Weinshall, K.	*Journal of Empirical Legal Studies*	Vol. 17, (2020) issue 4, pp. 641-897	Manna from heaven for judges: Judges' reaction to a quasi-random reduction in caseload
Evans, A. M.; **Fiedler, Susann**	*Journal of Experimental Social Psychology*	Vol. 90 (2020), September, article 104007, published 6 June 2020	Editorial: Process tracing methods in social psychology
Fiedler, Susann; **Hillenbrand, Adrian**	*Games and Economic Behavior*	Vol. 121 (2020), May, p. 232-252	Gain-loss framing in interdependent choice
Glätzle-Rützler, D.; Lerget-porer, P.; **Sutter, Matthias**	*Games and Economic Behavior*	Revise & resubmit	Collective intertemporal decision and heterogeinty in groups
Haushofer, Johannes C.; Metcalfe, J. A.	*Science*	Vol. 368 (2020), issue 6495, pp. 1063-1065. Online: 05 June 2020	Which interventions work best in a pandemic?
Heinz, Matthias; Jeworrek, S.; Mertins, V.; Schumacher, H.; **Sutter, Matthias**	*The Economic Journal*	Vol. 23 (2020), November, pp. 2546-2568	Measuring indirect effects of unfair employer behavior on worker productivity: A field experiment
Hermstrüwer, Yoan	*Archiv des öffentlichen Rechts*	forthcoming	Fairnessprinzipien der algorithmischen Verwaltung: Diskriminierungsprävention beim staatlichen Einsatz von Machine Learning
Holzmeister, F; Huber, H.; Kirchler, M; **Lindner, Florian**; Weitzel, U.; Zeisberger, S.	*Management Science*	Published online 16 April 2020	What drives risk perception? A global survey with financial professionals and laypeople
Kassis, M.; Schmidt, S.; Schreyer, D.; **Sutter, Matthias**	*Games and Economic Behavior*	Revise & resubmit	Measuring the value of managerial decision in dynamic team tournaments: Evidence from a natural field experiment
Kiessling, Lukas; Radbruch, J.; Schaube, S.	*Management Science*	Revise & resubmit	Self-selection of peers and performance
Li, Mengyao; Leidner, B.; Fernandez-Campos, S.	*Personality and Social Psychology Bulletin*	Vol. 46 (2020), 3, pp 424-438	Stepping into perpetrators' shoes: How ingroup transgressions and victimization shape support for retributive justice through perspective-taking with perpetrators
Li, Mengyao; Leidner, B.; Petrovic, N.; Prelic, N.	*Personality and Social Psychology Bulletin*	Published online August 1, 2020	Close or distant past? The role of temporal distance in responses to intergroup violence from victim and perpetrator perspectives
Petersen, Niels; **Chatziathanasiou, Konstantin**	*Archiv des öffentlichen Rechts*	Vol. 144 (2019), 4, pp. 501-535, published 07 July 2020	Empirische Verfassungsrechtswissenschaft: zu den Möglichkeiten und Grenzen quantitativer Verfassungsvergleichung und Richterforschung
Rauhut, H.; **Winter, Fabian**	*PNAS*	Revise & resubmit	The increasing dominance of networking in the production of knowledge
Romano, Angelo; **Sutter, Matthias**; Liu, J; Yamagishi, T.; Balliet, D.	*Nature Communications*	Conditionally accepted	National parochialism is ubiquitous around the
Sasse, Julia; Halmburger, A.; **Baumert, Anna**	*Emotion*	Forthcoming	The functions of anger in moral courage: Insights from a behavioral study
Weitzel, U.; Huber,C.; Huber, J.; Kirchler, M.; **Lindner, Florian**; Rose, J.	*Review of Financial Studies*	Vol. 33 (2020), 6, pp. 2659-2696	Bubbles and financial professionals
Winter, Fabian; [and others]	*PNAS*	Revise & resubmit	Social mindfulness across the globe

2019

Author	Journal	Details	Title
Bade, Sophie	*Journal of Economic Theory*	Vol. 180 (2019), January, pp. 81-99	Matching with single-peaked preferences
Balafoutas, L.; **Sutter, Matthias;**	*European Economic Review*	Vol 118, (2019), September, pp. 1-13	How uncertainty and ambiguity in tournaments affect gender differences in competitive behavior
Bigoni, M.; **Bortolotti, Stefania;** Casari, M.; Gambetta, D.	*The Economic Journal*	Vol. 129 (2019), 619, April, pp. 1139-1152	At the root of the North-South cooperation gap in Italy: Preferences or beliefs?
Boosey, L.; **Brookins, Philip;** Ryvkin, D.	*Games and Economic Behavior*	Vol. 113 (2019), January, pp. 756-769	Contests between groups of unknown size
Engel, Christoph	*Journal of Empirical Legal Studies*	Vol. 16 (2019), December, 4, pp. 881-908	When does transparency backfire? Putting Jeremy Bentham's theory of general prevention to the experimental test
Fehr, D.; Heinemann, D.; **Llorente-Saguer, Aniol**	*Journal of Monetary Economics*	Vol. 103 (2019), May, pp. 123-136	The power of sunspots: An experimental analysis
Fehr, D.; **Sutter, Matthias**	*Games and Economic Behavior*	Vol. 113 (2019), January, pp. 448-460	Gossip and the efficiency of interactions
Glaser, M.; **Iliewa, Zwetelina;** Weber, M.	*Journal of Finance*	Vol. 74 (2019), 6, December, pp. 2997-3039	Thinking about prices versus thinking about returns in financial markets
Goerg, Sebastian; Kube, Sebastian; Radbruch, J.	*Management Science*	Vol. 65 (2019), 9, September, pp. 4063-4078	The effectiveness of incentive schemes in the presence of implicit effort costs
Hamann, Hanjo	*Journal of Empirical Legal Studies*	Vol. 16 (2019), 3, September, pp. 671-688.	The German Federal Courts dataset 1950-2019: From paper archives to linked open data
Himmler, Oliver; Jäckle, R.; Weinschenk, P.	*American Economic Journal: Applied Economics*	Vol. 11 (2019), April, pp. 114-142	Soft commitments, reminders, and academic performance
Langenbach, Pascal	*Journal of Law, Economics, and Organization*	Vol. 35 (2019), 2, pp. 364-393	Inherited institutions: Cooperation in the light of democratic legitimacy
Rahal, Rima M; Fiedler, Susan	*Journal of Experimental Social Psychology*	Vol. 85 (2019), November, article 103842	Understanding cognitive and affective mechanisms in social psychology through eye-tracking
Sutter, Matthias; Zoller, Claudia; Glätzle-Rützler, D.	*European Economic Review*	Vol. 111 (2019), January, pp. 98-121	Economic behavior of children and adolescents: A first survey of experimental economics results
Zhang, Nan; Winter, Fabian; Aidenberger, A.; Rauhut, H.	*European Sociological Review*	Vol. 35 (2019), 4, August, pp 582-597	Prosocial behavior in interethnic encounters: Evidence from a field experiment with high- and low-status immigrants

2018

Author	Journal	Details	Title
Admati, A.R.; DeMarzo, P.M.; **Hellwig, Martin F.**; Pfleiderer, P.	*Journal of Finance*	Vol. 73 (2018), 1, February, pp. 145-198	The leverage ratchet effect
Albrecht, F.; **Kube, Sebastian**; **Traxler, Christian**	*Journal of Public Economics*	Vol. 165 (2018), September, pp. 1-16	Cooperation and norm enforcement: The individual-level perspective
Alvarez Benjumea, Amalia; **Winter, Fabian**	*European Sociological Review*	Vol. 34 (2018), 3, June, pp 223-237	Normative change and culture of hate: An experiment in online environments
Angelovski, A.; Di Cagno, D.; **Güth, Werner**; Marazzi, F.; Panaccione, L.	*Journal of Economic Psychology*	Vol. 67 (2018), August, pp. 116-134	Behavioral spillovers in local public good provision: An experimental study
Bachi, Benjamin; Spiegler, R.	*Games and Economic Behavior*	Vol. 107 (2018), January, pp. 298-315	Buridanic competition
Balafoutas, L.; Fornwagner, H.; **Sutter, Matthias**	*Nature Communications*	Vol. 9 (2018), no. 4359, 6 pages	Closing the gender gap in competitiveness through priming
Bar-Gill, O.; **Engel, Christoph**	*Journal of Law and Economics*	Vol. 61 (2018), 3, August, pp. 525-553	How to protect entitlements: An experiment
Bouton, L.; **Llorente-Saguer, Aniol**; Malherbe, F.	*Games and Economic Behavior*	Vol. 102 (2017), March, pp. 179-198	Unanimous rules in the laboratory
Cooper, D. J.; **Sutter, Matthias**	*International Economic Review*	Vol. 59 (2018), 3, August, pp. 1547-1569	Endogenous role assignment and team performance
Eguia, J.X.; **Llorente-Saguer, Aniol**; Morton, R.; Nicolo, A.	*Games and Economic Behavior*	Vol. 109 (2018), May, pp. 465-483	Equilibrium selection in sequential games with imperfect information
Engel, Christoph; Goerg, Sebastian	*European Economic Review*	Vol. 105 (2018), June, pp. 51-70	If the worst comes to the worst: Dictator giving when recipience of implicit effort costs
Engel, Christoph; Klement, A.; Weinshall, K.	*Journal of Empirical Legal Studies*	Vol. 15 (2018), 4, pp. 708-731	Diffusion of legal innovations: The case of Israeli class actions
Franzen, A.; Mader, S.; **Winter, Fabian**	*Journal of Experimental Psychology: General*	Vol. 17 (2018), 12, pp. 1950-158	Contagious yawning, empathy, and their relation to prosocial behavior
Ghaffari, Minou; **Fiedler, Susann**	*Psychological Science*	Vol. 29 (2018), 11, pp. 1878-1889	The power of attention: Using eye gaze to predict other-regarding and moral choices
Hamann, Hanjo	*Archiv für die civilistische Praxis*	Vol. 218 (2018), 2-4, pp. 430-437	Diskussionsbericht zum Referat von Katja Langenbucher
Hamann, Hanjo	*Archiv des öffentlichen Rechts*	Vol. 143 (2018), 2, pp. 282-311	70 Jahre Marginalien des deutschen Staatsrechts: Nachschau auf ein vergessenes Kapitel der Nachkriegspublizistik
Hillenbrand, Adrian; **Winter, Fabian**	*Games and Economic Behavior*	Vol. 109 (2018), May, pp. 65-81	Volunteering under population uncertainty
Jekel, M.; **Glöckner, Andreas**	*Journal of Behavioral Decision Making*	Vol. 31 (2018), pp. 265-279	How to identify strategy use and adaptive strategy selection: The crucial role of chance correction in weighted compensatory strategies

Kirchler, M.; **Lindner, Florian;** Weitzel, U.	*Journal of Finance*	Vol. 73 (2018), 5, pp. 2271-2302	Rankings and risk-taking in the finance industry
Marewski, J.N.; Bröder, A.; **Glöckner, Andreas**	*Journal of Behavioral Decision Making*	Vol. 31 (2018), 2, pp. 181-198	Some metatheoretical reflections on adaptive decision making and the strategy selection problem
Mischkowski, D.; **Glöckner, Andreas;** Lewisch, P.	*Organizational Behavior and Human Decision Processes*	Vol. 149 (2018), November, pp. 59-72	From spontaneous cooperation to spontaneous punishment: Distinguishing the underlying motives driving spontaneous behavior in first and second order public good games
Mischkowski, D.; Thielmann, I.; **Glöckner, Andreas**	*Journal of Experimental Social Psychology*	Vol. 74 (2018), January, pp. 85-97	Think it through before making a choice: Processing mode does not influence social mindfulness
Olsen, Jerome	*International Review of Law and Economics*	Vol. 56 (2018), December, pp. 42-52	Emotions and tax compliance among small business owners: An experimental survey
Rahal, Rima-Maria	*Behavioral and Brain Sciences*	Vol. 41 (2018), e214, published online 27 December 2018	The fire burns within: Individual motivations for self-sacrifice. In response to: Dying for the group: towards a general theory of extreme self-sacrifice (Behavioral and brain science, Vol. 41 (2018), e192)
Romano, Angelo; Balliet, D.; Yamagishi, T.; Liu, J. H.	*PNAS*	Vol. 115 (2018), 5, pp. E846-847	Reply to de Dreu: Shared partner nationality promotes ingroup favoritism in cooperation
Sutter, Matthias; Angerer, S.; Glätzle-Rützler, D.; Lerget-porer, P.	*European Economic Review*	Vol. 106 (2018), July, pp. 21-34	Language group differences in time preferences: Evidence from primary school children in a bilingual city
Traxler, Christian; Westermaier, F.G.; Wohlschlegel, A.	*Journal of Public Economics*	Vol. 157 (2018), January, pp. 78-94	Bunching on the Autobahn? Speeding responses to a 'notched' penalty scheme
Winter, Fabian; Zhang, Nan	*PNAS*	March 13, 2018. 115(11), pp. 2722-2727	Social norm enforcement in ethnically diverse communities

2017

Author	Journal	Details	Title
Balafoutas, L.; Kerschbamer, R.; **Sutter, Matthias**	*The Economic Journal*	Vol. 127 (2017), 599, pp. 1-18	Second-degree moral hazard in a real-world credence goods market
Bassarak, C.; Leib, M.; Mischkowski, D.; Strang, S.; **Glöckner, Andreas**	*Journal of Behavioral Decision Making*	Vol. 30 (2017), 4, pp. 964-975	What provides justification for cheating: Producing or observing counterfactuals?
Bigoni, M.; **Bortolotti, Stefania;** Parisi, F.; Porat, A.	*Journal of Empirical Legal Studies*	Vol. 14 (2017), 3, pp. 527-574	Unbundling efficient breach: An experiment
Boosey, L. A.; **Brookins, Philip;** Ryvkin, D.	*Games and Economic Behavior*	Vol. 105 (2017), September, pp. 212-229	Contests with group size uncertainty: Experimental evidence
Bouton, L.; **Llorente-Saguer, Aniol;** Malherbe, F.; Benoit, J.-B.; Castanheira, M; Esponda, I.	*Journal of Political Economy*	Vol. 126 (2018), February, pp. 107-149	Get rid of unanimity rule: The superiority of majority rules with veto power
Buijze, R.; **Engel, Christoph;** Hemels, S.	*Journal of Empirical Legal Studies*	Vol. 14 (2017), 4, pp. 858-885	Insuring your donation: An experiment

De Grauwe, P.; Ji, Y.; **Steinbach, Armin**	*International Review of Law and Economics*	Vol. 51 (2017), August, pp. 29-37	The EU debt crisis: Testing and revisiting conventional legal doctrine
Dorrough, Angela; Glöckner, Andreas	*Journal of Behavioral Decision Making*	Vol. 30 (2017), 2, pp. 582-609	Race for power in public good games with unequal, unstable punishment power
Engel, Christoph; Zhurakhovska, Lilia	*The Journal of Legal Studies*	Vol. 46 (2017), 1, pp. 1-50	You are in charge: Experimentally testing the motivating power of holding a judicial office
Frankenreiter, Jens	*Journal of Empirical Legal Studies*	Vol. 14 (2017), 4, pp. 812-857	The politics of citation at the ECJ: Policy preferences of EU member state governments and the citation behavior of members of the European Court of Justice
Gangadharan, L.; **Nikiforakis, Nikos**	*European Economic Review*	Vol. 100 (2017), November, pp. 143-156	Normative conflict and the limits of self-governance in heterogeneous populations
Gizatulina, Alia; **Hellwig, Martin F.**	*Journal of Economic Theory*	Vol. 170 (2017), July, pp. 385-416	The generic possibility of full surplus extraction in models with large type spaces
Gneezy, U.; Gravert, C.; Saccardo, S.; **Tausch, Franziska**	*Games and Economic Behavior*	Vol. 102 (2017), March, pp. 445-454	A must lie situation: Avoiding giving negative feedback
Hamann, Hanjo; Hoeft, Leonhard	*Archiv für die civilistische Praxis*	Vol. 217 (2017), 3, pp. 311-336	Die empirische Herangehensweise im Zivilrecht: Lebensnähe und Methodenehrlichkeit für die juristische Analytik?
Hermsträwer, Yoan; Dickert, S.	*International Review of Law and Economics*	Vol. 51 (2017), August, pp. 38-49	Sharing is daring: An experiment on consent options, chilling effects and a salient privacy nudge
Huber, J.; Kirchler, M.; Kleinlercher, D.; **Sutter, Matthias**	*The Economic Journal*	Vol. 127 (2017), Feature Issue, pp. F610-F631	Market vs. residence principle: Experimental evidence on the effects of a financial transaction tax
Kerschbamer, R.; **Sutter, Matthias**; Dulleck, U.	*The Economic Journal*	Vol. 127 (2017), 600, pp. 393-416	How social preferences shape incentives in (experimental) markets for credence goods
Llorente-Saguer, Aniol; Zultan, R.	*European Economic Review*	Vol. 95 (2017), June, pp. 84-102	Collusion and information revelation in auctions
Morell, Alexander	*Archiv für die civilistische Praxis*	Vol. 217 (2017), 1, pp. 61-106	Rechtssicherheit oder Einzelfallgerechtigkeit im neuen Recht des Delistings
Petersen, Niels	*European Journal of International Law*	Vol. 28 (2017), 2, pp. 375-385	The International Court of Justice and judicial politics of identifying customary international law
Robalo, Pedro; Schram, A.; Sonnemans, J.	*Journal of Economic Psychology*	Vol. 62 (2017), October, pp. 130-154	Other-regarding preferences, in-group bias and political participation: An experiment
Romano, Angelo; Balliet, D.	*Psychological Science*	Vol. 28 (2017), 10, pp. 1490-1502	Reciprocity outperforms conformity to promote cooperation
Romano, Angelo; Balliet, D.; Yamagishi, T.; Liu, J. H.	*PNAS*	Vol. 114 (2017), 48, pp. 12702-12707	Parochial trust and cooperation across 17 societies
Romano, Angelo; Balliet, D.; Wu, J.	*Journal of Experimental Social Psychology*	Vol. 71 (2017), July, pp. 59-67	Unbounded indirect reciprocity: Is reputation-based cooperation bounded by group membership?
Steinbach, Armin	*Die Verwaltung*	Vol. 50 (2017), 4, pp. 507-536	Das behördliche Unabhängigkeitsparadigma im Wirtschaftsverwaltungsrecht: eine funktionell-rechtliche Perspektive

Steinbach, Armin	*Der Staat*	Vol. 56 (2017), 4, pp. 621-651	Religion und Neutralität im privaten Arbeitsverhältnis
Thielmann, I.; **Hilbig, Benjamin**	*Journal of Behavioral Decision Making*	Vol. 20 (2017), 2, pp. 446-452	Should versus want: On the relative contribution of injunctive norms and preferences on trust decisions

C. Research Program

C.I Behavioral Law and Economics

C.I Behavioral Law and Economics

Director: Prof Dr Dr h.c. Christoph Engel

Postdocs

Phil Brookins, PhD (economics, joined in 2016 from Florida State University, left in 2019 for University of South Carolina)

Claudia Cerrone, PhD (economics, joined in 2016 from Royal Holloway, left in 2020 for Middlesex University)

Dr Stefanie Egidy (law, joined in 2016 from Würzburg and Yale Universities)

Dr Jens Frankenreiter (law, joined in 2017 from ETH Zurich, left in 2019 for Columbia University)

Dr Dr Hanjo Hamann (law and economics, joined as postdoc in 2016)

Dr Dr Yoan Hermstrüwer (law and economics, joined as post-doc in 2017)

Dr Dr Pascal Langenbach (law and economics, joined as post-doc in 2018)

Prof Dr Dr Alexander Morell (law and economics, left in 2020 for Mannheim University)

Dr Lawrence O'Hara (law, joined in 2018 from Bucerius Law School)

Dr Rima-Maria Rahal (psychology, joined in 2020 from Tilburg University)

Dr Frederike Zufall (law and computer science, joined in 2020)

Part-Time

Prof Dr Andreas Glöckner (psychology, Cologne University)

Prof Dr Sebastian Kube (economics, Bonn University)

External Habilitation Project

Dr Dana Burchardt (law), Free University Berlin

Doctoral Students

Dr Konstantin Chatziathanasiou (law, Dr jur., Bonn 2018)

Dr Leonhard Hoeft (law, Dr jur. Bonn 2018, internal)

Nina Grgić-Hlača (computer science, joined in 2020, joint with MPI Saarbrücken)

Dr Svenja Hippel (economics, Dr rer. pol., Jena 2018)

Mahdi Khesali (law, joined in 2020)

Kirsten Marx (economics, joined in 2020)

Johannes Rottmann (law, joined in 2020, joint with University of Bonn)

Cornelius Schneider (economics, joined in 2016)

Marcel Schubert (economics and computer science, joined in 2017)

Maj-Britt Sterba (economics, joined in 2017)

Martin Sternberg (law, joined in 2018)

Matthew Trail (law, joined in 2020)

Dr Eugenio Verrina (economics, Dr rer. pol., Cologne 2020)

Yuqi Wang (economics, joined in 2020)

At Cologne University, but attached to the IMPRS and group

Dr Carina Hausladen (economics and computer science, Dr rer. pol., Cologne 2020)

Lisa Lenz (economics)

Alexander Schneeberger (economics)

The core mission of the group is research on behavioral law and economics. Hence, in its core, the work is interdisciplinary. Since the group is headed by a lawyer, this report is written from a legal angle. But much of the work in the group could also be interpreted as contributions to behavioral institutional economics, or to behavioral economics more broadly. The primary market for former postdocs in law is German law schools. To be considered in this market, postdocs must pass habilitation and must have a portfolio that matches demand. To a lesser extent, this constraint also affects doctoral students in law. This constraint explains why the lawyers in the group cannot exclusively focus on law and economics (whether behavioral or not) and must, in particular, be more plural in the methods they use, including doctrine. For the group, this framework condition is not only a limitation. It explains why it is, for each legal scholar at the group, to find her personal way of combining rigorous empirical analysis with a substantial legal topic of obvious relevance for the discipline. What holds the group together is the commitment to serious empirical analysis, not one single legal topic.

The work of the group largely benefits from cooperation with the behavioral economics group, with the three independent research groups, and with emeritus professor Werner Güth. Where the links are particularly prominent, this report hints at them. All PhD students are part of the International Max Planck Research School. Since 2016, PhD students in economics are jointly hired with the Cologne Graduate School. Beginning with the 2020 cohort, PhD students in law also receive dedicated upfront training. We are grateful to Cologne University for making this possible, in the framework of our joint graduate school. The program is tailor-made to the specific needs of the individual scholar. In particular, it brings them up to speed for interdisciplinary collaboration. This invites a focus on methods, including mathematics and modelling, game theory, microeconomics, statistics, and experimental design. Despite the fact that three students are paid by Cologne University, their work is covered by this report, since in practice there is deliberately no distinction according to formal attachment to either Cologne University or the institute.

From the vantage point of law, the group publishes on five issues: defining normative problems that call for legal intervention (1), understanding the effect of legal intervention (2), judicial and administrative decision-making (3), empirical methods (4), and, last but not least, translations of empirical findings into the legal discourse (5).

1. Normative Problems Calling for Legal Intervention

Any legal intervention curtails individual freedom. Under German constitutional law, this statement even implies that any legal intervention is constructed as an interference with a constitutionally protected right; if no more specific right is applicable, the intervention comes under the purview of the general clause in Art. 2 I Basic Law. Consequently, any legal intervention needs justification. Under the principle of proportionality, it must pursue a legitimate aim, it must be conducive to achieving this aim, it must be the least intrusive intervention, and it may not be out of proportion, given the intensity of the intervention, on the one hand, and the pursued goal, on the other hand. While other constitutions are less encompassing, they also enshrine the principle of "teleological" interpretation: ambiguous legal rules should be interpreted such that they foster the goal the rule is meant to achieve. Even without invoking the constitution, this doctrinal principle follows from an interpretation of legal rules as attempts at governing society. In this perspective, interpretation should be attentive to the social purpose the rule is supposed to serve.

Any of these doctrinal approaches builds a bridge between interpreting the law and policy-making. It turns doctrine into a subsidiary exercise in legal policy-making. It is a technology for empowering administrative agencies and courts. This is why legal orders are differently upfront about this aspect of doctrine. But even if the language is more cautious (as in particular in the originalist school of US constitutional law), a certain dose of policy-making by adjudication is hard to avoid.

Whenever a legal scholar, explicitly or implicitly, engages in policy-making, she must get the facts right. Is there a normative problem in the first place that calls for legal intervention? In which precise ways can this problem be defined? In essence this boils down to the law making a causal claim. There is a social ill. It originates in the behavior of discernible individuals. As long as this behavior goes unchecked, the social ill will persist, or aggravate, for that matter.

The classic illustration is what is in the name of the institute. Society faces a "collective-goods problem". If one borrows the assumption of "standard preferences" from (welfare) economics, the normative problem can be precisely defined. The explanatory model makes two interconnected assumptions: individuals only care about their own profit, and they expect everybody else to do the same. If payoffs are such that (a) every individual makes the highest profit if all others cooperate and she defects and (b) every individual makes the lowest profit if she cooperates and all others defect, the situation can be modeled as a prisoner's dilemma. The game is dominance-solvable, meaning that the individual does not need beliefs about the choices of her (possibly unknown) interaction partners. Whatever they do, she is best off defecting. This feature of the game constitutes the dilemma. Multiple situations that have indeed met with legal intervention can be analyzed with this model, including most environmental problems, contributions to the provision of infrastructure, police and

the military, or financial stability. In the past, all parts of the institute have analyzed many of these problems. The group has chiefly done so from a behavioral angle. It has aimed at understanding in which contexts and under which framework conditions the predictive power of the standard economic model is less good. In which cognitive and motivational ways must the standard model be modified? How robust are these qualifications?

During the period covered by this report, within this framework the group has been most interested in risk and uncertainty, deliberate ignorance, heterogeneity, and normativity. This more basic research has been supplemented by a number of studies addressing applied normative problems from a behavioral angle.

Risk and Uncertainty Most conflicts of life that might call for legal intervention are fraught with uncertainty. In the law and economics literature, the uncertainty is usually modelled as risk. While the agent does not know in which ways the risk will materialize, she can calculate its expected value. If one can make this assumption, in principle the classic apparatus of microeconomic theory applies. The additional piece of information one needs to predict choices is an individual's risk preference. Yet, if the individual interacts with another individual in the face of risk, she needs information about that individual's risk preference, or must replace information with her beliefs. Engel, Fedorets et al. (2020) had the good fortune to run an experiment on the Intervention Sample of the German Socio-Economic Panel. This has given them access to a pool of households in which they had pairs of parents or pairs of children interact. It turned out that household members not only have a fairly precise sense of the risk tolerance of other family members. The risk preferences of household members are not independent of each other either. Through mating and co-development, risk preferences do not converge, but go in tandem. This helps the law understand in which ways households are arrangements for collective risk management. This research is related to the work of the behavioral economics group, for instance on cooperativeness over the lifespan (Romano, Bortolotti et al. 2020), and on genetic influences on risk tolerance (Linnér, Biroli et al. 2019).

Modeling uncertainty as risk is a convenient simplification, and sometimes necessary for tractability. Yet, uncertainty may be even deeper. The classic apparatus still applies if possible realizations of a lottery are not distributed symmetrically, or if decision-makers face a compound lottery, i.e., a lottery over lotteries. The decision problem gets considerably more involved, though, if even the state space is only partly defined (for instance by excluding losses) or if decision-makers have simply no idea about the consequences their choice may have. Considering deeper uncertainty is important from the perspective of legal policy-making, as in many situations of

life the possible distributions of events are not known ex ante. Engel and Goerg (2018) investigate the topic in a dictator game where the endowment of the recipient, and hence her deservingness, is uncertain. They have a surprising finding: the less the potential donor knows, the more she gives. This suggests that participants shy away from being responsible for exposing the recipient to the worst of all possible situations.

When individuals face deeper uncertainty, empirically they are unlikely to model the situation by a subjective state space, with subjective probabilities assigned to each element they deem conceivable. Rather, individuals will dissolve the ambiguity by constructing meaning. One powerful technique to do so is a narrative. Hillenbrand and Verrina (2020) demonstrate a normatively relevant asymmetry. If the experimentally induced narrative favors prosocial action, it has the expected effect. By contrast, a narrative that favors selfishness only has a negative effect on individuals who are prosocial in the first place. If their social value orientation classifies them as rather selfish, the negative narrative backfires. This suggests that narratives interact with self-esteem.

Uncertainty need not be out there. It may be the (intended or unintended) consequence of institutional intervention, from private parties by designing choice architectures, or from the law. Constitutional law has for a long time been concerned with the potential for induced uncertainty to trigger a chilling effect. Hermstrüwer and Dickert (2017) test the effect in the lab. In their setting, the deterrent effect is smaller than expected. Participants are surprisingly prepared to do what they are told, even if this implies that their selfish behavior is made public on the internet.

Deliberate Ignorance Some behavioral patterns are easy to assess: one would want that people care about the well-being of others, or do not cheat, for example. Yet, is it normatively unambiguous that individuals retrieve and use the available information? From a deontological perspective, one may think so. But what if one knows in advance that there is no chance to act upon the information, as in the case of a disease for which there is no cure? And what if one expects that one will not be able to neglect the information, for instance when learning that a spouse has been unfaithful? Or what if using the information amounted to prohibited discrimination, so that blinding oneself may be the technique to protect an endangered group? Hertwig and Engel (2020) have convoked a week-long symposium at which, based on a series of commissioned background papers, a highly select group of psychologists, economists, political scientists, sociologists, philosophers, lawyers, and computer scientists have jointly drafted a series of memoranda that chart this understudied topic.

Hillenbrand and Hippel (2020) study a practical application. In principle, online trade empowers consumers. They can

conveniently compare the offers of multiple suppliers. Yet, this is not easy for consumers to do without leaving electronic traces. Suppliers can exploit these data to infer how urgently a consumer needs their products. This gives a supplier scope for price discrimination. Forward-looking consumers anticipate the effect and refrain from actively searching, for fear of otherwise getting a bad deal. This is indeed what Hillenbrand and Hippel (2020) find in a lab experiment.

Cerrone, Feri et al. (2020), in a paper that is under "revise and resubmit" status with the *American Economic Review*, add a game-theoretic twist and test the situation in the lab. If two individuals are regret-averse, they may agree not to choose an option that is profitable in expectation, to make sure that it remains unknown whether the risk of failure would have materialized.

Heterogeneity In a way, once one adopts a behavioral perspective to the analysis and design of legal rules, one opens Pandora's box. There are not only many behavioral effects. These effects not only, at least partly, interact with each other; what is even more troublesome is that hardly any behavioral effect is universal. Often the heterogeneity does not merely create noise. The effect is not only differently pronounced for different individuals. The heterogeneity is patterned. Some individuals show an effect that is qualitatively different from the effect shown by others. Understanding the character of the heterogeneity, and ultimately even having proxies for the character of the trait in specific individuals, is of critical importance for the design of legal interventions (see already Engel 2005). If the intervention must be uniform, one needs a sense of the overall effect. Is it better to leave the social problem unchecked in some individuals if this prevents a counter-productive effect for too many others? This concern is particularly relevant if the intervention risks crowding out normatively desirable behavior by a large group of the population. In other contexts, it may be possible for the law to rely on sufficiently precise signals for behavioral types. Then different interventions may target different parts of the population. It is even conceivable that the law adopts a two-step approach. In the first step, it generates type information, which it exploits in the second step. This is where the topic touches upon economic mechanism design (which, however, would have to be behaviorally informed to tackle the challenge in question). These are key questions Pascal Langenbach will address in his habilitation thesis.

If information about behavioral heterogeneity is available, individuals can exploit it to overcome, themselves, what they may consider to be a behavioral weakness. Cerrone (2020) models the approach for the case of procrastination. If an individual prefers not to be alone (for instance, when preparing for an exam), she can team up with another individual she expects to be less vulnerable to the weakness. Yet if preferences are

common knowledge, and both individuals are sophisticated about their own behavioral traits, group formation constitutes an interesting behavioral game.

In several experiments, it has been shown that participants are surprisingly willing to abide by arbitrary rules. Desmet and Engel (2017) draw a parallel to the well-established concept of conditional cooperation. They find that the willingness to abide by rules is conditional as well: the more of their peers they know to follow the rule, the more the experiment participants are willing to obey themselves. Yet, interestingly, in their data, social information about following rules never hurts. Compared with a baseline where participants only know the rule, rule-abiding never decreases when learning how many peers obey, and the information has a positive effect if following the rules is sufficiently prevalent.

It is a stylized fact that, in a linear public good, average contributions start at some intermediate level, and decay over time. Fischbacher and Gächter (2010) explain the decay with the claim that conditional cooperation is imperfect. While conditional cooperators are not outright selfish, they try to outperform their peers, if only slightly. In their reanalysis of these data, Engel and Rockenbach (2020) show that this explanation is not supported by the data. True conditional cooperation turns out to be near-perfect. Yet, far-sighted free-riders mimic conditional cooperators for a while, to sustain the cooperativeness of the group, and then cash in. Consequently, the downward trend results from the fact that (a) sufficiently many group members are reactive and (b) groups are heterogeneous.

The work of the group on behavioral heterogeneity resonates with experiments in the experimental economics group (Bašić, Bortolotti et al. 2020; Sutter and Untertrifaller 2020), and by Werner Güth (Angelovski, Di Cagno et al. 2018).

Normativity A natural interface between the law and the behavioral sciences is normativity. At the highest level of abstraction, normativity can be defined as the motivational effect of knowing that a certain behavior is the norm. This norm may be descriptive (others act in some way) or injunctive (the individual is supposed to behave in a certain way). Engel, Kube et al. (2020) manage descriptive beliefs. In a linear public good, they provide participants with selective information about the average contributions of other participants in the otherwise identical experiment. The sample experiences are either selected to create favorable expectations about cooperation, or unfavorable expectations. They apply the design to a voluntary contribution mechanism, and to a game with punishment and counter-punishment. It turns out that favorable first impressions only have a significant effect in the voluntary contribution mechanism. Unfavorable impressions only have a significant effect in the game with punishment and

counter punishment. They conclude that (a manipulation of) descriptive beliefs only has a sufficiently pronounced effect if the information comes as a surprise.

Adra, Kirchkamp et al. (2020) are interested in the scope of injunctive norms. In their experiment, they investigate whether participants perceive a moral obligation to mutually beneficial cooperation even at the global level. Specifically, they are interested in a spillover effect of a pre-existing cooperative relationship. They find that, at the global scale, this spillover effect only exists if basic needs are in peril. In their experiment, Bašić and Verrina (2020) show that injunctive norms need not collapse with social norms. Individuals can be motivated by normative precepts that are at variance with the social norms prevailing in their context, but commanded by personal norms to which they adhere. Harrs and Sterba (2020) study in which ways personal traumatic experiences with the COVID-19 pandemic moderate the perceived obligation for redistribution.

The fact that an individual is aware of a prevailing injunctive norm does not guarantee that the norm guides her behavior. Krupka and Schneeberger (2020) investigate experimentally to which degree the compliance with group norms is moderated by identification with the group. Irlenbusch, Krupka et al. (2020) test whether past morally desirable behavior leads to moral cleansing, and induces individuals to become less norm-abiding on future occasions. Lenz (2020) explains norm abiding with guilt. She uses a complex experimental design to understand guild dissipation in large groups: does the agent care less about harm inflicted on one out of many? Does she hide behind the possibility that harm might have been caused by other group members? Does she free-ride on the prosocial actions of others? Is guilt reduced because the agent anticipates that the recipient expects one of the former effects?

There is a lively debate in the literature whether normativity (often referred to as morality) is intuitive, and selfishness is deliberate, or the other way around. Hausladen and Nikolaychuk (2020) develop a novel design to test this question for a situation in which the deontological norm against lying coincides with the utilitarian norm against exploiting others (the experimenter) by violating a rule. They modify the canonical die under the cup paradigm and induce intuitive decision-making by time pressure. In their baseline, they use a regular die. In this condition, under time pressure, cheating is more pronounced. Yet the effect disappears if payoff is defined by a color, rather than by the familiar spots on the die.

Applied Topics The projects and results reported thus far are relevant for the law as the investigated effects matter for multiple issues addressed by the law. Yet, there is no one-to-one mapping between a behavioral effect and an existing or debated legal intervention. This is different with the following projects.

Engel and Helland (2020) take one of the key concepts of Oliver Williamson to the lab. Williamson coined the term "fundamental transformation". Before they strike a deal, in many markets buyers are protected by competition between sellers, and sellers are protected by competition among buyers. Yet, often the buyer may only derive the full benefit from the deal if she adjusts her own environment, for instance by changing the production process. Likewise, the seller may only make a profit if she adjusts to this specific demand, counting on follow-up deals. Once the contract has been signed, both sides enter into a relationship. Williamson models it as a relation-specific investment that is sunk. The incentive effects of this transformation are well understood. If buyer and seller maximize profit, they should enter into the relationship if, taking the risk of exploitation into account, the expected value remains positive. In the experiment, Engel and Helland (2020) test whether there is an additional behavioral impediment to trade. It might result from the fact that someone may make a windfall profit; that she risks being exploited; that she risks being exploited by a person she might exploit herself; that she risks being exploited after having voluntarily consented to entering the relationship. Averaging over all observations, there is only an effect of risk aversion. But it results from heterogeneity. If there is a risk of exploitation that is perceived to be involuntary, more participants shy away from trading.

Tax evasion is genuinely hard to study in the field. Those found out to have evaded taxes risk criminal sanctions, and therefore have a strong incentive to remain unknown. This has spurred a lively experimental literature. The standard paradigm imposes a tax, and threatens participants in the lab with a sanction if they are found out to underreport income when, with some probability, they are audited by the computer. If one is interested in tax morale, this paradigm is less than perfect. Engel, Mittone et al. (2020) show that participants report a substantial amount of income even if there is no audit whatsoever. Yet, tax evasion increases if participants are informed that income is heterogeneous. This holds irrespective of the tax regime. If the tax is progressive, participants with low income (who are privileged by the regime) do not trust participants with high income to report correctly (although they do not underreport more than with other tax regimes).

In a series of papers, Nina Grgić-Hlača conceptualizes and tests the fairness of algorithms. She argues that distributional fairness is not the only normatively relevant dimension (Speicher, Heidari et al. 2018), and that, in particular, procedural fairness must be considered as well (Grgić-Hlača, Zafar et al. 2018). She tests her framework by asking lay participants to rate the fairness of algorithmic decision aids for assessing the risk that a defendant will recidivate (Grgić-Hlača, Redmiles et al. 2018).

Over the past decades, tacit collusion has been studied in the lab. One of the robust findings is the negative correlation between the number of suppliers and collusion. While there is still a certain degree of collusion in markets of three, collusion plummets in markets of four or more suppliers (see the meta-study by Engel 2015). Normann and Sternberg (2020) test experimentally whether this also holds when human participants interact with the computer, whether or not they are aware of this.

Engel and Ockenfels (2020) have put a conjecture of the antitrust authorities to the experimental test. The authorities have long been concerned that, via a merger, a "maverick", i.e., a particularly aggressive supplier, leaves the market. Why a supplier would act in this way has normally not been questioned. They use a lab experiment to investigate a behavioral reason, a preference for outperforming competitors, i.e., for relative over absolute payoff.

2. Legal Intervention

Nudging   Nudge units and behavioral insight teams are fuelled by the hope for less intrusive and more effective interventions. A series of projects contributes to this debate, by testing the potential for light-handed intervention. The experiment by Engel, Kube et al. (2020) that has already been reported when discussing the effect of descriptive norms on behavior can also be brought under this rubric. It tests whether manipulating first impressions may help contain a social dilemma.

The paper by Engel and Kurschilgen (2020) provides the correlate on the side of injunctive norms. Again, in a linear public good, and in every period, participants are asked to specify either the optimal or the minimally acceptable level of contributions. In a first study, participants are not guided by their self-set *optimal* norm, but the *minimal* norm manipulation proves effective. This suggests that a properly tailored elicitation of normative expectations is an effective nudge. Yet, in two follow-up studies, originally only motivated by the desire to make the design of the experiment even cleaner, the effect does not replicate. This demonstrates the fragility of the nudge.

Another opportunity for nudging could exploit the desire of participants to behave consistently. One could first have them decide when their decision has no material consequences for themselves, and would hope that there is a normatively desirable spillover to the otherwise identical situation where there is a conflict between the norm and individual profit. Cerrone and Engel (2019) test this intervention experimentally. Unfortunately, this nudge does not work.

An experiment by Albrecht and Schubert (2020) is not motivated by the intention to find a nudge, but can be exploited for the purpose. Experimental economists have been interested in the priming effect of language. Languages that require a discernibly different tense for addressing events expected for the future are correlated with higher degrees of saving. Yet, obviously, a person's mother tongue cannot be randomly assigned. The authors exploit a peculiarity of the German language. Speakers have a choice between using the present tense and using the specific future tense. The authors randomly assign participants to a condition that uses either of them, but find no stable effect on patience (also see Sutter, Angerer et al. 2018).

The work of the group on nudging resonates with projects undertaken by the experimental economics group (Balafoutas, Fornwagner et al. 2018; Rockenbach, Tonke et al. 2020; Sutter, Rosenberger et al. 2020).

Compliance   It cannot be taken for granted that new laws shift behavior in the intended direction. The reason need not be resistance. If a new law remains ineffective, this may simply result from imperfect adaptation. The reason is not motivational, but (broadly speaking) cognitive. Engel, Klement et al. (2018) use data from Israel to show that this effect may even obtain in legal professionals. In the interest of providing better protection and deterrence, Israel has largely widened the scope for class action. Yet, the data show that it took several years before plaintiff lawyers picked up the new remedy on a broad scale. The paper discusses which assumptions about Bayesian updating must be made for rationalizing the observed pattern by way of profit maximization. A more plausible explanation is sociological. Attorneys only jump on the bandwagon once the use of the remedy in the industry spreads.

In a related vein, Frankenreiter and Hermstrüwer (2020) use the entry into force of the general data-protection regulation as an exogenous shock. On a weekly basis, they scrape the privacy policies from a list of major companies. The data show that firms from the U.S. are much less likely to adapt their policies. The authors interpret this as evidence against a "Brussels effect".

It is an old concern that data may remain "in the books". Engel, Heine et al. (2020) exploit a trace of the colonial past of Pakistan to test the effect experimentally. While under British rule, Pakistan was united with India. Pakistan is predominantly a Muslim country, while India is predominantly Hindu. In the Hindu tradition, wealth is kept in the family upon the death of the father, going entirely to the eldest son. The Sharia thinks otherwise, and even makes the rule unwaivable. Motivated by the fact that daughters receive a dowry, two thirds of the father's property go to all his sons, but one third goes to all the daughters. During colonial times, the Hindu custom spilled

over to Pakistan. Since independence, the Sharia is the law of the land in matters of inheritance. Yet, anecdotal evidence has it that the rule is routinely circumvented by exerting pressure on the daughters to sign a deed, after the death of their father, that leaves all the wealth with the eldest son. Engel, Heine et al. (2020) test experimentally whether the anecdotal evidence gets it right, and to which degree it is supported by either male or female participants.

Why is the law not as effective in protecting consumers as the legislator hoped? Barnes and O'Hara (2020) investigate a cognitive channel. While consumer-protection legislation in the UK is far-reaching, it requires consumers to take the initiative. The authors test whether the set of rules is simply too complicated for the typical beneficiary.

Engel and Kramer (2020) test, in a vignette study, whether consumers refrain from taking legal action because they are deterred by the ambiguity of the law. If the ambiguity is made salient, less lay participants indicate that they would seek legal advice. When, by contrast, they are informed that, on average, seeking advice substantially improves both the probability of success and subjective satisfaction, substantially more participants indicate that they would seek advice. Unexpectedly, however, it turns out that abstract information is more effective than concrete information about the experiences an individual's peer has made in a related case.

The COVID-19 pandemic has made it inevitable to curtail individual freedom substantially. O'Hara and Rahal (2020) use a series of vignettes to study whether the willingness to comply with these measures depends on the source of the normative expectation: legislative, administrative, or merely informal. They also test whether the source of the expectation affects the degree to which it is perceived as constraining freedom.

Under ordinary circumstances, it is as undesirable from a deontological perspective that people break the law as it is from a utilitarian perspective. The law has been promulgated for a purpose, after all. A fairness problem comes on top. If it becomes known that some addressees violate a rule, those who abide by it may consider themselves to be the suckers and stop following the rule themselves. Against this backdrop, the idea that motivates the experiment by Mill and Schneider (2020) is surprising: could it be that, everything considered, society is better off when tolerating a certain degree of tax evasion by top earners? Enforcing the rules against everybody might deter productive effort and, in turn, reduce the overall tax return. This is indeed what they find in the lab.

Enabling Rules Legal rules need not be constraining. It can be, by contrast, their purpose to enable private parties to engage in individually and socially beneficial exchange. It has often been argued that this is the main purpose of property. But is

it really necessary, for the purpose, to be as rigid as assigning absolute, *in rem* rights? In a world of forward-looking, profit-maximizing agents, this would not be necessary. A properly designed liability rule would also induce individuals to refrain from taking foreign goods. This is not, however, what Bar-Gill and Engel (2018) find in an experiment. It turns out that the inefficiency results from a clash in fairness norms. One group of individuals behaves in the spirit of standard theory and is the less likely to take the more they have to pay for doing it. Yet, another group exhibits the diametrically opposite pattern: the higher the compensation, the less they have inhibitions to take. This divergence in fairness norms can also be found in the beliefs of participants whose good might be taken.

The absolute right *in rem* might also be preferable for a cognitive reason. Perfectly rational, profit-maximizing individuals would not take foreign goods if they expected them to be taken back. In theory, this gives scope for another substitute for the absolute right. It suffices if taking is costly, and the amount of money that relevant agents can use for taking is common knowledge. Bar-Gill and Engel (2020) test this channel in the lab. It turns out that anticipating even a single round of taking is too much. The only intervention that helps is personal experience with taking (possibly) being pointless. Consequently, property is also preferable, as it drastically reduces cognitive load.

The traditional law and economics interpretation of intellectual property rests on the claim that intellectual achievements are (pure) public goods. Others can put them to productive use without reducing their value. In this logic, the legal order introduces a temporal monopoly to establish a quid pro quo: the inventor may exclude others from using the achievement unless they have paid for it. This creates incentives for the inventor to engage in socially productive innovation. In the U.S., the incentive interpretation also dominates the copyright discourse. European law thinks otherwise. It sees the main motive for protecting intellectual creativity in the author's self-esteem. She wants to be recognized – also, but not exclusively – by a chance for making money with her work. In a field experiment, Bechtold and Engel (2017). present photo artists with a series of second-price auctions to elicit their willingness to trade the possibility of a buyer to use their work without mentioning their name, to alter the work, or to destroy it. In their large majority, participants are unwilling to trade these rights in the first place. If they are happy to grant either right, they ask for very high prices.

The enabling function of auctions results from the way how they organize and standardise trade. In a series of papers, Phil Brookins has investigated both theoretically and experimentally in which ways the organizing effect suffers if bidders do not know ex ante whom they are going to meet in the auction, and how sophisticated their competitors will be. If the number

of competitors is known, theory predicts that individuals decrease their effort when the number of competitors increases. Under population uncertainty, however, this comparative static only holds when the individual entry probability is high. When entry probabilities are sufficiently low, the probability of being the only participant in the contest is much larger than zero, which leads to a reduction in effort. Boosey, Brookins et al. (2017) largely confirm this theoretical result experimentally. Boosey, Brookins et al. (2019) model population uncertainty, both within and between groups, if the competitive agent is a group. If the number of entrants in an auction is initially unknown and endogenous, Boosey, Brookins et al. (2020) find that disclosing this number only affects effort if the payoff from not participating in the auction is high.

Money is a uniform currency. It makes everything comparable with everything else. In many contexts, this is a desirable, liberating property. The legal order can leave it to each individual which goods and services she desires sufficiently to forego the opportunity to acquire alternative objects. Yet, for some commodities, society considers trade in exchange against money to be repugnant. One widely accepted application is higher education. Most legal orders do not allow the most attractive schools to auction off places. If compensation by paying a higher price is impossible, one needs a mechanism that matches the preferences of applicants and suppliers. Designing such matching mechanisms has recently been a very active area of economic research. In the developed countries, the matching mechanisms that are actually in use are legal in nature. Yet, the law as a discipline has paid little attention as yet. This is where the habilitation project of Yoan Hermstrüwer is situated (Hermstrüwer 2020).

Designing matching mechanisms is far from trivial if all actors have well-behaved preferences and are perfectly rational. However, the law is rightly not interested in the agents populating economic models. It must govern the lives of real people. These people exhibit a multitude of behavioral effects (see Kirchler, Huber et al. 2016). One such effect is the topic of an experiment by Cerrone, Hermstrüwer et al. (2020). In practice, student admission is often governed by the deferred acceptance mechanism. It is known to lead to inefficiencies. These inefficiencies can be mitigated if students consent to a priority waiver. While the logic of the argument is not difficult to explain to a theoretician, one cannot expect first to educate all future students about potentially perverse incentive effects. The experiment tests whether it suffices to make the waiver the default, or whether efficiency adjustments must be imposed.

The German clearinghouse for university admissions (ZVS) has not overlooked the potential for gaming the system inherent in their mechanism. But rather than replacing it with a mechanism theory showing to be strategy-proof, on their web-

site they give advice how to strategize. Hermstrüwer (2019) experimentally compares this solution with a strategy-proof alternative. The German solution fares surprisingly well, which the author explains with a concern for envy.

In some contexts, freedom of contract sufficiently empowers the parties to design themselves a desirable institutional innovation. Buijze, Engel et al. (2017) start from such a development. An increasing fraction of donations is channelled through intermediaries. Why would donors prefer this indirect route, although the intermediary keeps a fraction of the donation, and hence the donor's ultimate goal is achieved less? The authors hypothesize that one reason could be aversion against the risk of money a donor gives being subverted. In this reading, a sufficiently prominent intermediary implicitly insures the donation against subversion, by putting her own reputation at risk. They test in the lab whether donors facing such a risk are willing to even pay for explicit insurance. This willingness to pay turns out to be pronounced.

Sanctions Many legal rules are backed up with the threat of sanctioning those who violate them. Criminal-law theory has singled out a whole panoply of purposes punishment may serve. One of them prominently goes back to the thinking of Jeremy Bentham. He posits that the only legitimate purpose is general deterrence. Others who might be tempted to break the law realize that society is vigilant and anticipate that the suffering from the sanction does not outweigh the benefit from breaking the rule. This is why Bentham advocates complete transparency. Engel (2019) uses a linear public good to put the claim to the experimental test. It turns out that transparency actually backfires. It is practically not possible to merely inform the public about punishment. At the same time the public also learns about the prevalence of the infraction. This information has a crime-enhancing effect that dominates the crime-deterring effect.

From a forward-looking law and economics perspective, it does not make a difference whether the legal reaction to hurting another person is the obligation to compensate this person for the damage, or a fine of equal size. A rational, profit-maximizing agent anticipates the cost. If this cost (if needs be multiplied by the probability of detection and enforcement) outweighs the benefit, she will refrain from harming the other person. In the experiment by Baumann, Friehe et al. (2020), the equivalence does not hold. Investments in care are higher with liability. The authors explain the finding with inequity aversion.

In the practice of criminal law, sanctions are not only imperfectly enforced. Typically, would-be perpetrators do not even know the probability of a sanction being administered. If they were to maximize the expected profit, they would have to use Bayes rule to update their original belief about enforcement, in the light of every new piece of information. As the object of

estimation is a probability, estimates should not change with the severity of the sanction, provided severity is held constant. In their experiment, however, Friehe, Langenbach et al. (2020) find that participants react more sensitively to new information about the likelihood of punishment if they know punishment to be severe.

Collusion is a pervasive concern in public procurement. Public entities have developed a domain-specific solution. If firms are found out to rig bids, they are "debarred" from future contracts for a specified period of time. In their experiment, Cerrone, Hermstrüwer et al. (2018) show that the sanction can backfire. If the market is small, excluding a competitor may give the remaining providers scope for tacit collusion.

Crime is not uniformly distributed in the population. While most citizens are never apprehended, let alone convicted, others have a long, documented criminal history. Breaking the vicious cycle, and having offenders desist from their criminal careers, is a prominent goal of criminal policy, in particular with juvenile offenders. However, experience shows that the goal is not easy to achieve. The Cologne regional court approached the institute and asked it to evaluate a program specifically designed to stop the criminal career of juveniles. A probation officer intensely influences their lives for the duration of half a year. The court allowed Engel, Goerg et al. (2020) randomly to assign the intervention. Unfortunately, overall, the desired significant effect on the recidivism rate does not obtain. But there is a local effect. Participants just eligible for the program, as defined by the competent judge, are less likely to recidivate when put into the program.

3. Rule Application and Rule Generation

The guiding principle of the work reported in the previous sections is behavior. If the law wants to achieve its stated goals, it should take into account that citizens are not profit-maximizing machines. Behavioral effects matter for the definition of the social concern to which the law reacts, and for the expectation about the way in which addressees will react to legal intervention. Yet, the law is not made, and it is not applied either, by machines. Judges and administrators are humans as well, as are those involved in making new laws. The third pillar of the work of the group is understanding in which ways legal thinking about rule generation and rule application has to be refined when taking behavioral effects into account. Most of this work has focused on the judiciary, but a number of studies also address administrators and legislators.

Strategic Judges? Richard Posner once famously wrote: "What do judges maximize? The same thing everybody else does." Judges are humans. Humans certainly have the potential to be selfish. Why should that not matter for judges? Sever-

al papers have aimed at casting new light on this old question. In her habilitation project, Stefanie Egidy investigates whether, and if so, in which ways, the German Constitutional Court strategically interacts with the parties, in the interest of attracting cases that make it possible for the court to rule on issues high on its agenda (Egidy 2020). Bechtold, Frankenreiter et al. (2018) conduct interviews with judges and attorneys to demonstrate that forum shopping has a complement in forum selling. In the interest of establishing the Düsseldorf court as an attractive place for patent litigation, the court has established a practice of assigning cost that is conspicuously plaintiff-friendly.

Yet, in an experiment, Engel and Zhurakhovska (2017) do not find any sign of selfishness. In a linear public good, they assign the power to punish active members to an outsider, at a cost to herself. Outsiders use the opportunity (and make less money), and they predominantly do so in the interest of disciplining free-riders. This suggests that a person who, like a judge, has been assigned an office aims at fulfilling the expectations that come with the position. Exploiting a quasi-natural experiment in Israel, Engel and Weinshall Margel (2020) show that judges react to a reduction in their workload by exerting more effort on each case. They benefit from the additional leeway to do a better job.

In his habilitation thesis, Morell (2020b) argues normatively. He posits that the legal order should be concerned if a plaintiff fails in court because she cannot prove a legitimate claim. He proposes relying on a technique borrowed from mechanism design, to make this undesirable outcome less likely. If the judge has reason to believe that the defendant could produce the missing evidence, but does not do so for strategic reasons, the judge should commit to deciding for the plaintiff if the defendant withholds the evidence.

Ideological Judges? In the complementary political-science literature, judges are normally not assumed to maximize income or leisure, but to advance ideological causes strategically. This is usually referred to as the attitudinal model. One way of proving the model to be true is relating the decisions judges make on the court with the political party of the president who has appointed them. In the past, the only possibility to establish this link was coding. In a prominent dataset, William Landes and Richard Posner have applied this technique to U.S. circuit-court judges, and have established a clear ideology effect. Hausladen, Schubert et al. (2020) have picked this paper to make a contribution to a contest for replication in empirical legal studies. Using the toolbox of natural language-processing developed by the machine-learning community, they indeed find the ideology effect, using a much broader sample than the original paper.

European legal scholars have traditionally been sceptical about the attitudinal model. It did not seem to resonate with experiences. Frankenreiter (2018) shows that one may have to look in the right place. He exploits the fact that, at the European Court of Justice, judges collaborate with the Advocates General. At the court a bench decides, and the input of individual judges on the ruling is not made public. This makes it difficult to trace ideology. By contrast, in every case there is only a single Advocate General. Jens Frankenreiter shows that there is a pronounced correlation between the integration friendliness of the government that has proposed the Advocate General for the position, and the content of the advisory opinions she issues. In a companion paper, Frankenreiter (2017) explains the citation behavior of judges at the European Court of Justice with the policy preferences of governments.

One channel through which courts can reach their ideological goals is indirect. The ruling may have an effect on public opinion which, in turn, affects policy-makers. Langenbach and Schneider (2020) investigate this channel for the case of the European Court of Human Rights. Specifically, with the help of a vignette study, they test whether the impact on public opinion is moderated by the channel through which the case has been brought before the court.

Coding one year of all publicly available decisions by the German Constitutional Court, however, Engel (2020a) does not find any trace of the ideological position of the political party that has selected the Justice, and the decisions the court takes when she is on the bench.

Normative Ambiguity Legal decision-making is fraught with ambiguity. On the normative side, frequently more than one generally accepted normative concern is competing with each other. Critically, normative theory shows that the competing concerns may normally not be translated into each other, or into one overarching normative currency. There is, for instance, a conflict between the efficiency goal of maximizing wealth and the distributional goal of reducing the gap between individual income or wealth. Likewise, there is no overarching norm from which to derive the optimal balance between the interest of drivers in unhindered movement, and the interest of those organizing a demonstration to stir up public attention. Still, decisions must be made. This is when practising lawyers engage in "balancing". While the ultimate outcome cannot be determined in the abstract, courts have developed doctrinal tools for this purpose, most prominently the constitutional principle of proportionality. Egidy and O'Hara (2020) use vignettes to test the ways in which this doctrinal tool reduces variance and makes outcomes more predictable.

Engel and Rahal (2019) are interested in the underlying mental process. They present lay participants, in a torts setting, with a series of vignettes that are characterized by different types and degrees of normative conflict. Their dependent variable is the way in which participants process keywords for the competing normative concerns that are displayed on a single computer screen. This makes it possible to use eye-tracking and collect participants' gaze patterns. Participants exhibit more and longer fixations if there is normative conflict. If the concern is an amount of damages that would ruin the defendant (so that compensation is in conflict with deterrence), participants are significantly more likely to focus on the compensation item (see also the same methodology used in the context of an economic game (Fiedler and Hillenbrand 2020)).

Factual Ambiguity Normally, there is no need to go to court if the facts of the case are undisputed. In practice, however, often even after the judge has heard the evidence, a degree of uncertainty remains. Very often, expected values cannot be calculated either. The uncertainty about the facts has a qualitative nature. There is ambiguity. The case can be seen in more than one light. Engel and Güth (2018) explain why it is not only very difficult, but also inadequate, for a court to decide based on classic decision theory, which would typically mean subjective probabilities over a subjective state space. They model an alternative approach that is based on the concept of satisficing, and on explicit normative weights assigned to the risk of false positives versus false negatives.

Engel, Timme et al. (2020) build on earlier work showing that, empirically, in the face of factual ambiguity decision-makers find the outcome with the help of their intuition. The underlying subconscious mental process can be modelled as parallel constraint satisfaction. Decision-makers reason bidirectionally, from the evidence to potential outcomes, but also from potential outcome back to the evidence. In this process, the perception of the evidence is gradually distorted until a coherent narrative of the case can be constructed. The project investigates the ways in which the sequence of hearing the evidence affects this intuitive process. It turns out that there is no provisional construction of meaning that becomes sticky. Rather, the evidence presented last has the highest impact on the decision. In principle, from the perspective of the presumption of innocence this is good news, as the defendant is not cornered by the prosecution initially supporting the charge. It is, however, problematic if a legal order, like the American one, allows prosecution to rebut the defendant's last word.

Bias Judges are humans. Human decision-making can be biased. Is judicial decision-making biased in the same way as in lay participants? A sizeable literature has studied this question, and has had mixed results. Some biases seem to be near-universal, while others seem to be held in check by professional education and the institutional framework of legal decision-making. Morell (2020a) tests experimentally whether German judges fall prey to biases in the same way as U.S. judges. Chatziathanasiou (2019) reports the critical debate

about a *PNAS* paper claiming that judicial decision-making is erratic, with stricter parole decisions meted out to prisoners whose cases are heard shortly before the judge has lunch.

Decision Aids Judges are not left alone with their difficult task. Although it is not routinely discussed in these terms, the most important decision aid is doctrine. The experimental study by Egidy and O'Hara (2020) testing the guiding effect of the doctrinal elements of the proportionality principle has already been reported. An equally important decision aid are the rules of judicial procedure, like the ones about the sequence in which the parties plead (Engel, Timme et al. 2020). Engel and Zhurakhovska (2018) experimentally investigate the behavioral effect of the obligation to give explicit reasons. In another linear public good, an additional participant does not benefit from the public project, but has authority to discipline the group. She is obliged to justify her decision. The experiment manipulates who receives the reasons: only the experimenter (so that active members only know that reasons exist, but not which reasons are given); the addressee; all group members. The results show that experimental authorities partly substitute words for action, but that this strategy only works if reasons are made public. Frankenreiter (2019) uses machine-learning methods to classify judges' writing styles. It would be a natural follow-up question whether certain writing styles are more effective in generating consistency within judges, compliance with normative expectations of the rule in question, or the willingness of the parties to abide by the ruling.

In recent years, a different type of decision aid has gained prominence. Judges are provided with machine predictions, for instance about the risk of a person who has been apprehended by the police committing another crime before being tried, when released on bail. A pro bono organization, relying on freedom of information legislation, has followed up more than 6,000 cases in which the COMPAS tool has been used for the purpose, and knows the crime record of the defendant. It turns out that the accuracy of the advice is only 68%, and hence fairly low. Grgić-Hlača, Engel et al. (2019) randomly select 50 of these cases, translate them into vignettes, and first ask lay participants provisionally to choose between bail and jail. Thereafter, they receive the actual advice for the case in question. It turns out that only a small fraction of participants react to the advice. If they do, they are more likely to shift from jail to bail. Informing participants about ground truth in cases they have already heard, or giving them a financial incentive to find ground truth, prove ineffective. The only manipulation that has an effect is an incentive to follow the advice, whether accurate or not.

Using the same stimulus material, Engel and Grgić-Hlača (2020) put a ruling of the Wisconsin Supreme Court to the experimental test. In a prominent case, the use of the decision aid has been challenged, both for a lack of accuracy and for the risk of (racial) bias. The Supreme Court has cleared the use, but only on the condition that judges receive the advice together with a list of warnings. The experiment uses the exact same warnings and finds that they have no effect on verdict, only on the estimated probability of recidivism, and on confidence.

In a vignette study, Hermstrüwer and Langenbach (2020) investigate in which ways the perceived procedural fairness of an administrative decision is affected if addressees know that the administration has had access to machine predictions.

Administrative Decision-Making Most of administrative decision-making also consists of an application of the law. Hence in principle all the behavioral effects that are discussed for the judiciary do also matter. Yet in his habilitation thesis, Lawrence O'Hara plans to investigate potential differences in behavioral effects resulting from the fact that the administration does not have a reactive, but a proactive task, and that the individual administrator is reporting to a superior (O'Hara 2020).

Van Aaken, Broude et al. (2020) test a very specific group of international administrators with the help of a vignette study. Humanitarian negotiators have to "dance with the devil". They regularly face a conflict between pushing the boundaries of the rules they are supposed to obey, and failing to help those who dearly, if not existentially, need this help. The vignettes test under which conditions humanitarian negotiators strike this balance in which way.

Legislative Decision-Making The legislator is not a single person. Potential behavioral effects on legislative decision-making are therefore moderated by the complex institutional arrangement for passing new law. Unpacking this moderating effect is a challenge for the future (see for building blocks of this analysis Engel 2010). At this point, the relevant work of the group focuses of behavioral effects that could plausibly affect all actors involved in this process in approximately the same way (so that it is less worrisome to neglect internal differentiation and process).

Langenbach and Tausch (2019) study experimentally whether the cooperation-enhancing effect of direct-democratic procedures in the present generation also extends to future generations in which no democratic decision takes place. They find an asymmetrical effect: while the cooperative effect of the democratic adoption of a cooperation-enhancing rule vanishes in a future generation, the anti-cooperative effect of the democratic rejection of the same rule persists over generations.

The experimental project by Chatziathanasiou, Hippel et al. (2020a) investigates whether the threat of overthrow stabiliz-

es a constitution. The experiment tests whether the fact that elites can be overthrown by non-elites has a disciplining effect on elites, and a legitimizing effect on an efficient, yet inequitable order; for most experimental groups, this does not turn out to be the case. Yet, a rule that makes redistribution mandatory does indeed stabilize the experimental constitutional order in the face of heterogeneous earning opportunities (Chatziathanasiou, Hippel et al. 2020b).

4. Method Development

Behavioral analysis has a long tradition in psychology and economics. For the most part, it fully suffices to choose wisely among the methods that have been developed by these disciplines. The majority of the empirical projects undertaken by the group use the standard paradigm in experimental economics, i.e., the incentivized, interactive experiment in a physical lab. Ultimately, however, the choice of method must follow the research question. If one is interested in the effect of mating and co-development, random assignment to treatment is impossible. One can at best exploit the fact that the games of life have created variance. We have had the opportunity to test members of households from the German Socio-Economic Panel for this purpose (Engel, Fedorets et al. 2020). If one wants to learn whether a new criminal sanction delivers on promises, a lab experiment with students would not be credible. We have had the good fortune instead to run a field experiment with real convicts (Engel, Goerg et al. 2020). If one wonders whether and in which ways doctrine guides judgement and decision-making, one must present participants with sufficient context, provided by vignettes, to study the effect (Egidy and O'Hara 2020). If one wishes to observe legal reasoning in action, one needs a proxy for mental process, which is provided by eye-tracking (Engel and Rahal 2019). If one needs an objective measure for text as the dependent variable, this can be provided by natural language-processing methods (Hausladen, Schubert et al. 2020). Yet despite the richness of the existing toolbox for behavioral research, sometimes the perfect tool is missing. This is why the group has also engaged in method development.

Precision Experimentalists pride themselves in the cleanliness of their data. After all, it results from random assignment to treatment. Yet, even data that are seemingly crystal-clear may suffer from weaknesses. The standard measure for risk aversion, the test by Holt and Laury (2002), illustrates the point. Experimentalists typically use the point at which a participant switches from choosing the lottery with the smaller spread to the lottery with the larger spread as their measure. If the participant chooses consistently among the 10 pairs of lotteries, with increasing winning probability, this way of condensing the data is perfectly fine. Yet, empirically, a (usually not large, but discernible) minority of participants switches

more than once. Most experimentalists simply discard these data points. There is also a number of proxies for dealing with these cases. Others eschew the problem and use the test by Eckel and Grossman (2008). It forces consistency.

Inconsistent choices are not necessarily bad data. Participants may have switched more than once because they were uncertain. And even if they have been less than perfectly attentive to the task, the estimate of the population effect may be biased if the inconsistent choices suggest a higher (or lower, for that matter) degree of risk aversion than the consistent choices. Engel and Kirchkamp (2019) develop a technique for simultaneously estimating the treatment effect of interest, and risk preferences as a potential determinant. The method weights the individual specific measure of risk aversion with its precision. Since this makes estimation more transparent, they propose a Bayesian approach. But the method could also be used in a frequentist framework, in a precision-weighted structural model.

Detection Lab experiments privilege internal over external validity. This is helpful if one wants to be sure about causality. But extrapolating from lab findings to legal applications always requires a leap of faith. Sternberg and Schubert (2020) plan to use machine-learning methods to extend the scope of experimental methods, in the area of collusive pricing. They plan to proceed in two steps. In the first step, they exploit the fact that, with an in-depth study of the German fossil-fuel market, the German cartel office has documented a case of collusive pricing. They want to use prototype extraction to characterize the collusive pricing pattern. In the second step, they plan to match this pattern with experimental data where they can manipulate conditions such that they are more or less favorable for collusion. If the pattern they find with observational data correlates with a pattern found in the experimental data, there may be room for capitalizing on experimental data in the interest of detecting further instances of collusion in the field.

Heterogeneity Once one takes the possibility into account that a behavioral effect is not uniform, the analysis of experimental data becomes more challenging. Frequently, one has no additional information for matching participants to types. One is forced to extract the type space from the data, and to estimate reactions to treatment conditional on type. In principle, this is what finite mixture models have been developed for. However, they come with a number of limitations that constrain their use with experimental data. One must posit the number of types and cannot infer them from the data. Estimation is with maximum likelihood, which is why one must make distributional assumptions. Finite mixture models are difficult to use if the experiment is repeated or even repeated and interactive, as estimation is already two-dimensional (types and choices), and would have to be three- or even four-dimen-

sional, to accommodate individual and group-specific random effects. In practice, experimental datasets are often simply too small to estimate these data-hungry statistical models.

Engel (2020b) develops an alternative two-step estimator that overcomes these limitations. It requires repeated observations and the assumption that type varies between, but not within, participants. In a first step, one may then regress the choices of each participant on time (and on higher polynomials of time if one suspects nonlinearities). The coefficients of these local regressions can be used as input for a machine-learning classifier. Engel proposes to use CART, as results are then easy to interpret. This first step generates an estimated type per participant. In the second step, this estimate can be interacted with experimental manipulations, to identify a population effect conditional on type.

It has already been explained that the characteristic downward trend in linear public-goods experiments can only be rationalized with the heterogeneity of behavioral types. While this heterogeneity is not disputed in the discipline, very little is known about the composition of the type space. Utility functions have been proposed that would yield conditional cooperation. But it is far from clear whether they do indeed capture the behavioral programs participants adopt in this setting. Engel, Hausladen et al. (2020) compile a dataset with more than 18,000 experimental observations and use machine-learning methods for charting the type space.

As types are allowed to be reactive, two-dimensional clustering of time series is appropriate. Each individual is characterized by the pattern of her own choices over time, as potentially reacting to the mean contribution of the remaining group members in the previous period. They use simulation to find the best configuration of the algorithm, and in particular the number of clusters to be estimated. For reactive types, it does not suffice to estimate as many clusters as one expects to have types; depending on the experiences they make, participants with identical, reactive choice programs exhibit patterns that look completely different. Using this methodology, they find multiple hitherto untheorized types in the experimental data. Many of these patterns suggest that participants are actually selfish, but use various strategies to maintain the level of cooperation in the group that they want to exploit. Many choice patterns also suggest exploration. Participants only gradually adjust to experiences once they become more confident that they have gained a sense of the likely development of choices in their group.

Text Analysis The law does not normally produce data, but words. Quantitative methods require the translation of words into data. Several projects have dealt with this challenge. In principle, this is obviously a task for natural language processing. Yet, judicial opinions are not Twitter. They are much more

organized, and they rely much more on professional context. Hausladen, Schubert et al. (2020) adapt the methodology to this different class of text, for instance by separately coding citations and quotations, by excluding headings (as they might contain judges' names), or by putting dissenting opinions into a separate dataset. They demonstrate how supervised learning can be used to extend hand-coding of a small fraction of the data to a much larger dataset.

Hanjo Hamann spearheads the movement towards applying corpus linguistics to legal text. Vogel, Hamann et al. (2018) summarize the activities, and introduce the tool to the legal community.

Empirical Methods for the Law As they mature, most empirical disciplines have developed discipline-specific techniques for data generation and data analysis. The standard design of economic experiments is a good illustration. Social psychology has a much longer experience in isolating behavioral effects. Yet, the typical behavioral economist wants to test formal theory. This makes it possible to use much simpler, and thereby cleaner, designs, and to create additional credibility by the no-cheating norm and by financial incentives. The characteristic feature of the legal discipline is its proximity to legal practice. At least implicitly, legal scholars tend to argue normatively. They want to suggest more effective ways of addressing social ills. And they take into account that any improvement must be implemented by administrators and judges. Engel (2018a) discusses the ways in which empirical methods should be adjusted to this disciplinary task.

A straightforward, but important, adjustment concerns significance-testing. Making a false causal claim is not the only concern. In the spirit of the precautionary principle, the law may rely on quantitative evidence, since it alerts the law to a serious risk of a false negative decision. An additional challenge, not faced by most of the social sciences, is the contentious nature of legal decision-making. The goal of the parties is not finding the truth, but influencing the decision-maker in their favor. If they expect the decision to be based on quantitative evidence, they likely try to doctor the evidence. On the other hand, legal decision-making is often adversarial. The opponent will also be heard. This opens up an avenue for imperfect, but institutionally contained, quantitative evidence.

5. Translation

The definitional feature of the group is the application of methods from the social sciences to legal issues. A natural audience for this work is the empirical legal movement. As the group is interdisciplinary, it also publishes in economics, psychology, and computer science. Yet, the group not only wants to address specialists. It wants to help the legal community at large with

defining normative problems more precisely, designing more effective legal interventions, and improving the procedure by which legal professionals reach decisions. It cannot be taken for granted that this wider audience is literate in quantitative methods. It is necessary for them to benefit from the results generated with the toolbox of the social and behavioral-science translation.

Translation is a critical component in the habilitation projects of all senior lawyers in the group. Alexander Morell relies on insights from mechanism design to develop his solution for closing the gap between legal rights and success in the courtroom (Morell 2020b). Stefanie Egidy reinterprets movements by the courts, and the German Constitutional Court in particular, as strategic litigation, using concepts from game theory to conceptualize the observations. She checks empirically whether the development of the jurisprudence of the Constitutional Court is consistent with this explanation, and discusses it from the normative vantage point of constitutional law (Egidy 2020). Hanjo Hamann uses empirical methods to cast light on one of the most opaque provisions of private law, the right of the tenant to reduce the rent if the landlord fails to fix a defect (Hamann 2020). Yoan Hermstrüwer reacts to the fact that German public law has almost completely neglected the techniques developed by economic mechanism design, and matching procedures in particular. He not only explains the logic to the legal community, and discusses comparative advantages of competing solutions; he also develops the appropriate legal apparatus for evaluating the mechanisms (Hermstrüwer 2020). In a similar vein, Pascal Langenbach reflects on the observation that most behavioral effects are heterogeneous in the definition of the goals of public-law rules, discussing the design and the constitutionality of heterogeneous responses by the legal order (Langenbach 2020). Lawrence O'Hara relies on behavioral economics and social psychology to develop legal principles for a subfield of public law that academia has almost completely left to practitioners: the internal organization of administrative authorities (O'Hara 2020).

All of these (existing or emerging) books are situated at the interface between the respective social or behavioral science and legal scholarship. The social-science expertise of the author is indispensable to the endeavor. But the purpose of the book is not applying quantitative methods. The books care about being accessible to the legal community. More importantly even, they investigate in which ways results and insights from the social and behavioral sciences call for a reinterpretation of existing legal rules and concepts, and for the design of new institutional interventions.

Four of the five habitation projects are situated in public law. One may argue that (German) public law has less intensely engaged with the social and behavioral sciences than private law, in particular, and, as this is not a separate discipline in the German tradition, also criminal law due to its criminology branch. At any rate, work that analyzes public law from a behavioral angle is scant. A collective endeavor of the public lawyers at the institute is meant to fill the void (Engel, Egidy et al. 2020).

Hamann and Hoeft (2017) alert German private lawyers to the perils of survey research. Petersen and Chatziathanasiou (2019) and Petersen and Chatziathanasiou (2020) explain the potential of empirical research for comparative constitutional law, and for the analysis of judicial decision-making. Frankenreiter and Livermore (2020) discuss the potential of computational methods for legal research. Frankenreiter and Dumas (2019) do the same for natural language processing. Engel (2018b) surveys experimental contributions to criminal law.

References

Adra, A., Kirchkamp, O., Sterba, M.-B. and Ungwang, L. (2020). *Large-scale Cooperation and Moral Obligations*.

Albrecht, F. and Schubert, M. (2020). *The Effect of Grammatical Variation on Economic Behavior*.

Angelovski, A., Di Cagno, D., Güth, W., Marazzi, F. and Panaccione, L. (2018). Does Heterogeneity Spoil the Basket? The Role of Productivity and Feedback Information on Public Good Provision. *Journal of Behavioral and Experimental Economics*, 77, 40-49.

Balafoutas, L., Fornwagner, H. and Sutter, M. (2018). Closing the Gender Gap in Competitiveness Through Priming. *Nature Communications*, 9(1), 1-6.

Bar-Gill, O. and Engel, C. (2018). How to Protect Entitlements. An Experiment. *Journal of Law and Economics*, 61(3), 525-553.

Bar-Gill, O. and Engel, C. (2020). Property is Dummy Proof. An Experiment. *MPI Discussion Paper* 2020/2.

Barnes, V. and O'Hara, L. (2020). *Legal Literacy and its Driving Factors. The Case of UK Consumer Law*.

Bašić, Z., Bortolotti, S., Cappelen, A. W., Gneezy, U., Salicath, D., Schmidt, S., Schneider, S. O., Sutter, M. and Tungodden, B. (2020). Heterogeneity in Effort Provision: Evidence from a Lab-in-the-Field Experiment.

Bašić, Z. and Verrina, E. (2020). *Social Norms, Personal Norms and Image Concerns*.

Baumann, F., Friehe, T. and Langenbach, P. (2020). *Fines versus Damages: Experimental Evidence on Care Investments*.

Bechtold, S. and Engel, C. (2017). *The Valuation of Moral Rights. A Field Experiment*.

Bechtold, S., Frankenreiter, J. and Klerman, D. (2018). Forum Selling Abroad. *Southern California Law Review*, 92, 487-556.

Boosey, L., Brookins, P. and Ryvkin, D. (2017). Contests with Group Size Uncertainty. Experimental Evidence. *Games and Economic Behavior*, 105, 212-229.

Boosey, L., Brookins, P. and Ryvkin, D. (2019). Contests Between Groups of Unknown Size. *Games and Economic Behavior*, 113, 756-769.

Boosey, L., Brookins, P. and Ryvkin, D. (2020). Information Disclosure in Contests with Endogenous Entry. An Experiment. *Management Science*, 66(11), 5128-5150.

Buijze, R., Engel, C. and Hemels, S. (2017). Insuring Your Donation. An Experiment. *Journal of Empirical Legal Studies*, 14, 858-885.

Cerrone, C. (2020). Doing it When Others Do. A Strategic Model of Procrastination. *Economic Inquiry*, forthcoming.

Cerrone, C. and Engel, C. (2019). Deciding on Behalf of Others Does Not Mitigate Selfishness: An Experiment. *Economics Letters*, 183, 108616.

Cerrone, C., Feri, F. and Neary, P. R. (2020). *Ignorance is Bliss. A Game of Regret*.

Cerrone, C., Hermstrüwer, Y. and Kesten, O. (2020). *School Choice with Consent. An Experimental Study*.

Cerrone, C., Hermstrüwer, Y. and Robalo, P. (2018). Debarment and Collusion in Procurement Auctions. R&R: *Games and Economic Behavior*.

Chatziathanasiou, K. (2019). Der hungrige, ein härterer Richter? Zur heiklen Rezeption einer vielzitierten Studie. *JuristenZeitung*, 74, 455-458.

Chatziathanasiou, K., Hippel, S. and Kurschilgen, M. (2020a). Do Rights to Resistance Discipline the Elites? An Experiment on the Threat of Overthrow. *MPI Discussion Paper* 2020/27.

Chatziathanasiou, K., Hippel, S. and Kurschilgen, M. (2020b). Property, Redistribution, and the Status Quo. A Laboratory Study. *Experimental Economics*.

Desmet, P. and Engel, C. (2017). *People Are Conditional Rule Followers*.

Eckel, C. C. and Grossman, P. J. (2008). Forecasting Risk Attitudes. An Experimental Study Using Actual and Forecast Gamble Choices. *Journal of Economic Behavior & Organization*, 68(1), 1-17.

Egidy, S. (2020). *Strategische Prozessführung*.

Egidy, S. and O'Hara, L. (2020). *Structured Balancing of Interests. How Structured Decision-Frameworks Affect the Rationality of Balancing Decisions in Constitutional Law*.

Engel, C. (2005). *Generating Predictability. Institutional Analysis and Institutional Design*. Cambrige, Cambridge University Press.

Engel, C. (2010). The Behaviour of Corporate Actors. A Survey of the Empirical Literature. *Journal of Institutional Economics*, 6, 445-475.

Engel, C. (2015). Tacit Collusion. The Neglected Experimental Evidence. *Journal of Empirical Legal Studies*, 12, 537-577.

Engel, C. (2018a). Empirical Methods for the Law. *Journal of Institutional and Theoretical Economics*, 174, 5-23.

Engel, C. (2018b). Experimental Criminal Law. A Survey of Contributions from Law, Economics and Criminology. *Empirical Legal Research in Action*. W. v. Boom, P. T. Desmet and P. Mascini. Cheltenham, 57-108.

Engel, C. (2019). When Does Transparency Backfire? Putting Jeremy Bentham's Theory of General Prevention to the Experimental Test. *Journal of Empirical Legal Studies*, 16(4), 881-908.

Engel, C. (2020a). Does Efficiency Trump Legality? The Case of the German Constitutional Court. *Selection and Decision in Judicial Process Around the World. Empirical Inquiries*. Y.-C. Chang. Cambridge, Cambridge University Press, 261-286.

Engel, C. (2020b). Estimating Heterogeneous Reactions to Experimental Treatments. *Journal of Economic Behavior & Organization*, 178, 124-147.

Engel, C., Egidy, S., Hermstrüwer, Y., Hoeft, H., Langenbach, P. and O'Hara, L. (2020). *Verhaltenswissenschaftliche Analyse des öffentlichen Rechts*.

Engel, C., Fedorets, A. and Gorelkina, O. (2020). Risk Taking in the Household. Strategic Behavior, Social Preferences, or Interdependent Preferences? *MPI Discussion Paper* 2018/14, revised 2020.

Engel, C. and Goerg, S. J. (2018). If the Worst Comes to the Worst. Dictator Giving When Recipient's Endowments Are Risky. *European Economic Review*, 105, 51-70.

Engel, C., Goerg, S. J. and Traxler, C. (2020). *Evaluating Intensive Probation for Juvenile Offenders. Evidence from Germany*.

Engel, C. and Grgić-Hlača, N. (2020). *Machine Advice with a Warning about Machine Limitations. Experimentally Testing the Solution Mandated by the Wisconsin Supreme Court*.

Engel, C. and Güth, W. (2018). Modeling a Satisficing Judge. *Rationality and Society*, 30, 220-246.

Engel, C., Hausladen, C. and Schubert, M. (2020). *Charting the Type Space. The Case of Linear Public Good Games*.

Engel, C., Heine, K. and Rana, S. (2020). *Law in the Books. Experimentally Testing the Power of Social Norms to Invalidate the Law*.

Engel, C. and Helland, E. (2020). Does the Fundamental Transformation Deter Trade? An Experiment. MPI Discussion Paper 2020/23.

Engel, C. and Kirchkamp, O. (2019). How to Deal with Inconsistent Choices on Multiple Price Lists. *Journal of Economic Behavior & Organization*, 160, 138-157.

Engel, C., Klement, A. and Weinshall Margel, K. (2018). Diffusion of Legal Innovations: The Case of Israeli Class Actions. *Journal of Empirical Legal Studies*, 15, 708-731.

Engel, C. and Kramer, X. (2020). *How Do Laypeople Navigate the Maze of the Law? A Vignette Study*.

Engel, C., Kube, S. and Kurschilgen, M. (2020). *Managing Expectations. How Selective Information Affects Cooperation*.

Engel, C. and Kurschilgen, M. (2020). The Fragility of a Nudge. The Power of Self-set Norms to Contain a Social Dilemma. *Journal of Economic Psychology*, 81, 102293.

Engel, C., Mittone, L. and Morreale, A. (2020). Tax Morale and Fairness in Conflict. An Experiment, *Journal of Economic Psychology,* 81, 102314.

Engel, C. and Ockenfels, A. (2020). Maverick: Experimentally Testing a Conjecture of the Antitrust Authorities . In: *Advances in the Sociology of Trust and Cooperation*. V. Buskens, R. Corten, C. Snijders (eds.). deGruyter: Berlin/Munich/Boston, 357-390.

Engel, C. and Rahal, R.-M. (2019). *Justice is in the Eyes of the Beholder. Eye Tracking Evidence on Balancing Normative Concerns in Torts Cases*.

Engel, C. and Rockenbach, B. (2020). What Makes Cooperation Precarious? *MPI Working Paper*.

Engel, C., Timme, S. and Glöckner, A. (2020). Coherence-Based Reasoning and Order Effects in Legal Judgments. *Psychology, Public Policy, and Law*, 26(3), 333-352.

Engel, C. and Weinshall Margel, K. (2020). Manna from Heaven for Judges. Judges' Reaction to a Quasi-Random Reduction in Caseload. *Journal of Empirical Legal Studies,* 17(4), 722-751..

Engel, C. and Zhurakhovska, L. (2017). You Are in Charge: Experimentally Testing the Motivating Power of Holding a Judicial Office. *Journal of Legal Studies*, 46, 1-50.

Engel, C. and Zhurakhovska, L. (2018). *Do Explicit Reasons Make Legal Intervention More Effective? An Experimental Study*.

Fiedler, S. and Hillenbrand, A. (2020). Gain-loss Framing in Interdependent Choice. *Games and Economic Behavior*, 121, 232-251.

Fischbacher, U. and Gächter, S. (2010). Social Preferences, Beliefs, and the Dynamics of Free Riding in Public Good Experiments. *American Economic Review*, 100, 541-556.

Frankenreiter, J. (2017). The Politics of Citations at the ECJ. Policy Preferences of EU Member State Governments and the Citation Behavior of Judges at the European Court of Justice. *Journal of Empirical Legal Studies*, 14(4), 813-857.

Frankenreiter, J. (2018). Are Advocates General Political? Policy Preferences of EU Member State Governments and the Voting Behavior of Members of the European Court of Justice. *Review of Law & Economics*, 14(1), 20160037.

Frankenreiter, J. (2019). Writing Style and Legal Traditions. *Law as Data: Computation, Text, and the Future of Legal Analysis*, Santa Fe Institute Press, 153-190.

Frankenreiter, J. and Dumas, M. (2019). Text as Observational Data. *Law as Data: Computation, Text, and the Future of Legal Analysis*. M. A. Livermore and D. Rockmore, Santa Fe Institute Press, 59-70.

Frankenreiter, J. and Hermstrüwer, Y. (2020). *Privacy's Great Shock: The GDPR and Privacy Polices around the Globe*.

Frankenreiter, J. and Livermore, M. A. (2020). Computational Methods in Legal Analysis. *Annual Review in Law and Social Sciences*, 16, 39–57.

Friehe, T., Langenbach, P. and Mungan, M. (2020). *Sanction Severity Influences Learning About Enforcement Policy. Experimental Evidence*.

Grgić-Hlača, N., Engel, C. and Gummadi , K. P. (2019). Human Decision Making with Machine Assistance. An Experiment on Bailing and Jailing. *Proceedings of the ACM on Human-Computer Interaction*.

Grgić-Hlača, N., Redmiles, E. M., Gummadi , K. P. and Weller, A. (2018). *Human Perceptions of Fairness in Algorithmic Decision Making. A Case Study of Criminal Risk Prediction*. Proceedings of the 2018 World Wide Web Conference.

Grgić-Hlača, N., Bilal Zafar, M., Gummadi , K. P. and Weller, A. (2018). *Beyond Distributive Fairness in Algorithmic Decision Making, Feature Selection for Procedurally Fair Learning*. Thirty-Second AAAI Conference on Artificial Intelligence.

Hamann, H. (2020). *On Quantifying Habitability. Judicial Methods to Calculate Rent Reduction in Tenancy Contracts*.

Hamann, H. and Hoeft, H. (2017). Die empirische Herangehensweise im Zivilrecht. Lebensnähe und Methodenehrlichkeit für die juristische Analytik? *Archiv für die civilistische Praxis (AcP)*, 217(3), 311-336.

Harrs, S. and Sterba, M.-B. (2020). *Lost Control. Personal Experiences during the COVID-19 Pandemic and Preferences for Redistribution*.

Hausladen, C., Schubert, M. and Ash, E. (2020). Text Classification of Ideological Direction in Judicial Opinions. *International Review of Law and Economics*, 62, 105903.

Hausladen, C. and Nikolaychuk, O. (2020). *Color me Honest! Time Pressure and (Dis-)Honest Behavior*.

Hermstrüwer, Y. (2019). *Transparency and Fairness in School Choice Mechanisms*.

Hermstrüwer, Y. (2020). *Öffentliche Verteilungsverfahren. Matching im Öffentlichen Recht*.

Hermstrüwer, Y. and Dickert, S. (2017). Sharing is Daring. An Experiment on Consent, Chilling Effects and a Salient Privacy Nudge. *International Review of Law and Economics*, 51, 38-49.

Hermstrüwer, Y. and Langenbach, P. (2020). *Perceived Fairness of Algorithmic Administration. An Experiment*.

Hertwig, R. and Engel, C. (Eds.) (2020). *Deliberate Ignorance. Choosing Not to Know*. Cambridge (Mass), MIT Press.

Hillenbrand, A. and Hippel, S. (2020). *Strategic Inattention in Product Search*.

Hillenbrand, A. and Verrina, V. (2020). *The Differential Effect of Narratives on Prosocial Behavior*.

Holt, C. A. and Laury, S. K. (2002). Risk Aversion and Incentive Effects. *American Economic Review*, 92, 1644-1655.

Irlenbusch, B., Krupka, E. and Schneeberger, A. (2020). *Moral Cleansing*.

Kirchler, M., Huber, J., Stefan, M. and Sutter, M. (2016). Market Design and Moral Behavior. *Management Science*, 62(9), 2615-2625.

Krupka, E. and Schneeberger, A. (2020). *Compliance with Group Norms*.

Langenbach, P. (2020). *Governing a Heterogeneous Population*.

Langenbach, P. and Schneider, C. (2020). *Courts Shaping Public Opinion. An Experiment on the European Court of Human Rights*.

Langenbach, P. and Tausch, F. (2019). Inherited Institutions. Cooperation in the Light of Democratic Legitimacy. *Journal of Law, Economics, and Organization*, 35(2), 364-393.

Lenz, L. (2020). *Guilt in Multi-Agent Games*.

Linnér, R. K., Biroli, P., [...] Sutter, M., Kong, E., Meddens, S. F. W., Wedow, R., Fontana, M. A., Lebreton, M., Tino, S. P., Abdellaoui, A. and Hammerschlag, A. R. (2019). Genome-wide Association Analyses of Risk Tolerance and Risky Behaviors in over 1 Million Individuals Identify Hundreds of Loci and Shared Genetic Influences. *Nature Genetics*, 51(2), 245-257.

Mill, W. and Schneider, C. (2020). *The Bright Side of Tax Evasion*.

Morell, A. (2020a). *Cognitive Biases in German Judges*.

Morell, A. (2020b). *Der Beibringungsgrundsatz. Eine Rechtfertigung unter besonderer Berücksichtigung der Passivität der nicht beweisbelasteten Partei*.

Normann, H.-T. and Sternberg, M. (2020). *Algorithmic Pricing and Collusion in Hybrid Human-Computer Laboratory Markets. An Experiment*.

O'Hara, L. (2020). *Führung durch Recht*.

O'Hara, L. and Rahal, R.-M. (2020). *Context-dependence of Normative Judgments? Patterns in Perceptions of Normative Force, Risk and Threat, and Ethical Dilemmas – Evidence From a Longitudinal Survey Study During the COVID-19 Epidemic and Beyond*.

Petersen, N. and Chatziathanasiou, K. (2019). Empirische Verfassungsrechtswissenschaft. Zu Möglichkeiten und Grenzen quantitativer Verfassungsvergleichung und Richterforschung. *Archiv des öffentlichen Rechts*, 144, 501-553.

Petersen, N. and Chatziathanasiou, K. (2020). Empirical Research in Comparative Constitutional Law. The Cool Kid on the Block or All Smoke and Mirrors? *International Journal of Constitutional Law (forthcoming).*

Rockenbach, B., Tonke, S. and Weiss, A. (2020). *From Diagnosis to Treatment: An Experiment to Reduce Non-payments for Water.*

Romano, A., Bortolotti, S., Hofmann, W., Praxmarer, M. and Sutter, M. (2020). Generosity and Cooperation Across the Life Span: A Lab-in-the-Field Study. *Psychology and Aging (forthcoming).*

Speicher, T., Heidari, H., Grgić-Hlača, N., Gummadi, K. P., Singla, A., Weller, A. and Bilal Zafar, M. (2018). *A Unified Approach to Quantifying Algorithmic Unfairness. Measuring Individual & Group Unfairness via Inequality Indices.* Proceedings of the 24th ACM SIGKDD International Conference on Knowledge Discovery & Data Mining.

Sternberg, M. and Schubert, M. (2020). *Matching Lab and Field Data on Collusion with the Help of Machine Learning.*

Sutter, C., Rosenberger, W. and Sutter, M. (2020). Nudging With Your Child's Education. A Field Experiment on Collecting Municipal Dues When Enforcement is Scant. *Economics Letters*, 109116.

Sutter, M., Angerer, S., Glätzle-Rützler, D. and Lergetporer, P. (2018). Language Group Differences in Time Preferences. Evidence From Primary School Children in a Bilingual City. *European Economic Review*, 106, 21-34.

Sutter, M. and Untertrifaller, A. (2020). Children's Heterogeneity in Cooperation and Parental Background: An Experimental Study. *Journal of Economic Behavior & Organization*, 171, 286-296.

van Aaken, A., Broude, T., Engel, C. and Luckner, K. (2020). *Does Necessity Know No Law? An Experiment with Humanitarian Negotiators.*

Vogel, F., Hamann, H. and Gauer, I. (2018). Computer-assisted Legal Linguistics. Corpus Analysis as a New Tool for Legal Studies. *Law & Social Inquiry*, 43(4), 1340-1363.

C.II   Experimental Economics

C.II Experimental Economics Group (EEG)

Director: Prof Dr Matthias Sutter

Postdocs

Stefania Bortolotti, PhD (joined in October 2017 from the University of Cologne, left in 2020 for the University of Bologna)

Dr Ranveig Falch (joined in August 2020 from NHH Bergen)

Dr Zwetelina Iliewa (joined in January 2018 from ZEW Mannheim, left in 2020 for the University of Bonn)

Mustafa Kaba, PhD (joined in September 2020 from the European University Institute (EUI) in Florence)

Dr Angelo Romano (psychology) (joined in October 2017 from the University of Amsterdam, left in December 2019 for Leiden University)

Dr Sebastian Schneider (joined in December 2017 from the University of Göttingen)

Dr Sebastian Tonke (joined in May 2019 from the University of Cologne)

Part-Time Researchers at the EEG

Prof Dr Johannes Haushofer (Psychology, Princeton University)

Prof Dr Matthias Heinz (Management, University of Cologne)

Dr Florian Lindner (Economist, in the private sector)

Prof Dr Bettina Rockenbach (Economics, University of Cologne)

Dr Ali Seyhun Saral (Economics, part-time; full-time lab manager at MPI) (joined in January 2018 from Trento University)

Doctoral Students

Dr Zvonimir Bašić (joined in October 2017 from the University of Bonn, doctorate in October 2018)

Dr Lukas Kiessling (joined in May 2019 from University of Bonn, doctorate in February 2020)

Nathan Maddix (joined in November 2017 from Harvard University)

Sofia Monteiro (joined in October 2017 from the University of Cape Town)

Dr Matthias Praxmarer (joined in October 2017 from the University of Cologne, doctorate in October 2018, left in 2021 for private sector)

Shambhavi Priyam (joined in October 2017 from the Poverty Action Lab in Bangalore)

Sebastian Riedmiller (joined in October 2020 from the University of Münster)

Daniel Salicath (joined in October 2017 from the University of San Francisco)

Stefan Schmidt (joined in October 2019 from the University of Bonn)

Dr Anna Untertrifaller (joined in October 2017 from the University of Cologne; funded by the Diligentia Foundation, Cologne; left in April 2019 for the University of Cologne)

Dr Claudia Zoller (joined in October 2017 from the University of Cologne, doctorate in September 2018, left for Management Center Innsbruck in September 2018)

When I was interviewed for the position of director at the MPI in October 2016, I outlined a potential research agenda if I were to become director at the MPI in Bonn. In my presentation back then, I listed three broad domains in which I would like to push the scientific boundaries in the years to come: (i) understanding economic preferences and their formation in childhood and within families and across generations, (ii) applying experimental methods to questions that are relevant for public policy, and (iii) helping people to make better decisions.

In August 2017, I started working at the MPI and founded the "Experimental Economics Group" (EEG), which was intended to complement Christoph Engel's "Behavioral Law and Economics" group with respect to experimental methodology and interest in applied research topics. From fall 2017 to early 2018, I hired twelve members for the EEG, at that time four postdocs and eight doctoral students, from various previous places, including Harvard University, Sciences Po, the University of Bonn and the University of Amsterdam.

Of the eight doctoral students hired in 2017/18, four have finished their PhDs in the meantime, and the other four are expected to defend their respective theses (at the University of Cologne) in 2021. Of the four postdocs hired in 2017/18, two have left for permanent positions at the University of Bologna (Bortolotti; tenured) and the University of Bonn (Iliewa; tenure-track).

While after the establishment of the EEG there was already one evaluation of the (former) scientific advisory council in January 2018, the upcoming evaluation in January 2021 is the first one in which the EEG has been operative for the past three years. In some sense, the current evaluation still comes a bit early for the EEG, because building up the EEG and its research program has taken more time than I had anticipated. In particular, many of the large-scale projects that we have initiated – like building up a household panel in Bangladesh to study the formation of economic preferences within families, or setting up the infrastructure to run field interventions in health-related projects – are only now entering the stage of yielding first results and papers (for which we have high hopes). I will describe this in more detail in the following when presenting the main research topics on which the EEG is working and publishing.

1. Economic Preferences and Their Formation

This is by far the most important research area of EEG, and it is continuing to grow. One of the reasons for this is that one of the major advantages of working for the Max Planck Society is the generous and steady funding of long-term research projects. Using this opportunity, the EEG has set up a panel

of roughly 3,000 households in rural Bangladesh to study the long-term development of economic preferences during childhood and to examine how this formation is shaped and influenced within households. The panel has been jointly set up with Shyamal Chowdhury (University of Sydney) and Hannah Schildberg-Hörisch (University of Düsseldorf). The rural area of Bangladesh (for which the sample is roughly representative) allows us to collect data on the formation of economic preferences in a very poor, underdeveloped country. Despite the large interest in the economics profession to study how non-cognitive skills (like economic preferences) are formed (not the least because of the work of academics like James Heckman and Armin Falk), there is a surprising lack of data from poor countries. So far, most of the work on the formation and intergenerational transmission of economic preferences has originated in rich countries. However, non-cognitive skills might be particularly important to raise poor people out of poverty, which is why we believe that collecting data in poor countries is an indispensable next step in this literature on the formation of such skills and preferences.

Data collection (of experimental choices, personality traits, and demographic variables) is done by a professional survey firm in Bangladesh (ECONS) under the main guidance (and training) by Shyamal Chowdhury. So far, we have been collecting data on risk, time, and social preferences once a year (both in 2018 and 2019), with intermittent data collection for additional projects, and one large intervention study so far with children in primary schools. Due to the COVID-19 pandemic, the time schedule of collecting data has been somewhat interrupted by coming to a halt in 2020, but we are confident to resume regular data collection within 2021. So far, working with this data from Bangladesh has led to several working papers, some of which we consider as having the potential for publication in top journals.

A) Projects with Our Household Sample from Bangladesh

The most advanced project from Bangladesh is Chowdhury, Sutter, and Zimmermann (2020b), which is a current revise-and-resubmit at the *Journal of Political Economy*. This paper (and the others reported in the following) does not yet exploit the panel structure of the data (because we have had only two complete waves since 2018), but investigates with a subset of households how economic preferences of children and parents relate to each other, what determines a potential link between children and parents, and whether it is possible to classify whole families into clusters of economic preferences. Based on data from 544 families (and 1,999 individuals) from rural Bangladesh, Chowdhury et al. (2020b) find a large degree of intergenerational persistence of economic preferences. Both mothers' and fathers' risk, time, and social

preferences are significantly (and largely to the same degree) positively correlated with their children's economic preferences, even when controlling for personality traits and socio-economic background data. The authors discuss possible transmission channels for these relationships within families and find indications that there is more than pure genetics at work. Moving beyond an individual-level analysis, this paper is the first to classify a whole family into one of two clusters, with either relatively patient, risk-tolerant, and pro-social members, or relatively impatient, risk-averse, and spiteful members. Socioeconomic background variables like household income correlate with the cluster to which a family belongs.

The following projects are either under review for the first time, working papers, or close to becoming a working paper.

The first paper to exploit the very large number of households that we have is Breitkopf, Chowdhury, Priyam, Schildberg-Hörisch, and Sutter (2020a). This paper examines whether economic preferences of children can predict their behavior. While lots of the previous literature has reported affirmative evidence for this question, Breitkopf et al. (2020a) exploit the fact that they have data on 4,282 siblings, aged 6 to 16, which is why they can use household fixed effects (to keep the household environment invariant) for their estimations of the link between economic preferences and childhood outcomes. Strikingly, none of the previous papers in this strand of literature has done this (nor has any been able to do this, given their lack of substantial numbers of siblings). Breitkopf et al. (2020a) combine incentivized measures of time, risk, and social preferences with comprehensive information on child behavior and family environment. Using standard cross-sectional specifications, their results confirm the predictive power of children's preferences for behavior. However, when estimating household fixed effects models that allow one to control for all characteristics that are shared by siblings, this predictive power largely vanishes. Even when controlling for an extraordinarily large set of household characteristics, the predictive power of children's preferences for their behavior can only partly be restored when household fixed effects are not used. These results suggest that measures of children's preferences largely reflect a household environment that is shared by siblings, implying that a household environment has a systematic effect on children's economic preferences.

A companion paper – Breitkopf, Chowdhury, Priyam, Schildberg-Hörisch, and Sutter (2020b) – investigates the influence of parenting styles on children's outcomes. Based on recent theoretical models on how parenting styles affect children's

behavior and outcomes, Breitkopf et al. (2020b) use a principal component analysis to classify parenting styles of fathers and mothers as positive or negative. Positive parenting scores high on warm and monitoring parenting styles, and negative parenting on controlling styles. The authors find that positive parenting is positively correlated with study attitudes, self-esteem, and prosociality, while negative parenting is associated with bad outcomes in these dimensions.[1]

The availability of both parents and children to run experiments with all household members in more than 150 villages in rural Bangladesh is the key asset that is exploited in Kiessling, Chowdhury, Schildberg-Hörisch, and Sutter (2020c). They study whether and how parents interfere paternalistically in their children's intertemporal decision-making, which is important for many lifetime outcomes. Based on experimental data from over 2,000 members of 610 families, they find that parents anticipate their children's present bias and aim to mitigate it. More than half of all parents forego money to override their children's choices with implications for the formation and intergenerational transmission of patience: parents willing to interfere have more patient children, but they do not transmit their own time preferences to their children. Rather, the transmission is driven by non-interfering parents. The latter introduces a completely novel twist into the literature on the intergenerational transmission of economic preferences. The paper, however, is also novel, as it develops an incentive-compatible method to study the degree of parental paternalism when interfering with their children's preferences.

In Chowdhury, Schildberg-Hörisch, Schneider, and Sutter (2020a), the authors exploit the advent of the COVID-19 pandemic to assess the effectiveness of an information campaign (as a type of a nudge) as well as of monetary incentives to adhere to social distancing measures to prevent infection and further spread of COVID-19 in rural Bangladesh. Chowdhury et al. (2020a) measure health, knowledge and beliefs, and the compliance with social distancing measures of more than 3,000 participants from 150 villages (with about 20-25 households per village). The measurement was taken at a comparatively early stage of the pandemic in Bangladesh (in April/May 2020) and then again in August 2020 after the intervention had been run in May 2020. Preliminary results indicate that the intervention (both the one with providing information only and the one that adds monetary incentives) increases the knowledge about the disease and appropriate measures to protect against it significantly. There seems to be a slightly positive effect on health outcomes as well, but an additional

---

1   Kiessling (2020) studies how parenting styles of a representative sample of over 2,000 parents in the United States relate to their expectations about the returns from parenting and a good neighborhood. He shows that parents hold well-formed beliefs: they expect large returns to the warmth dimension of parenting, as well as to living in a good neighborhood. Interestingly, there is no socioeconomic gradient in perceived returns.

round of data collection on health conditions needs to confirm this effect.[2]

Another ambitious project in Bangladesh is Schild-berg-Hörisch, Breitkopf, Chowdhury, Kamhöfer, and Sutter (2020). This paper analyzes the effects of a randomly assigned, classroom-based social and emotional learning (SEL) program on the formation of self-control, prosociality, and self-esteem in children aged 7 to 11. Schildberg-Hörisch et al. (2020) compare the socio-emotional skills of children in grades 2 to 5 in 68 treatment schools in rural Bangladesh, who participated in the Lions Quest Skills for Growing program for 28 weeks, with those of children in 67 control schools. Although socio-emotional skills are at least as important as cognitive skills for life outcomes, causal evidence on the formation of those skills is still rare, and this paper adds one large-scale study on it. The randomized controlled trial (RCT), comprising of about 3,500 children and their families, provides novel insights into the formation of three crucial socio-emotional skills – self-control, prosociality, and self-esteem. Moreover, by comparing the effects of the same investment (an age-adjusted, but otherwise identical, intervention) in elementary school grades 2 to 5, Schildberg-Hörisch et al. (2020) are able to identify sensitive periods in the formation of socio-emotional skills between the ages of 7 to 11. Despite its obvious importance for an efficient targeting of investments, empirical evidence on sensitive periods in the formation of children's socio-emotional skills has been lacking. This paper shows that the treatment increases self-control and proso-ciality in elementary-school children. Self-control is raised especially among second-graders, the youngest cohort under scrutiny, whereas prosociality increases for both younger and older elementary-school children. There is no effect on self-esteem. Taken together, the results suggest that the Lions Quest program improves young children's self-control and prosociality.

Several of these papers are promising for top publications. In 2021, we are going to collect the third wave of data for our panel, and will then begin writing the first large-scale paper on the intertemporal stability (or the intertemporal development) of economic preferences – investigating risk, time, and social preferences – within families. While there is some literature on the intertemporal stability of adults' preferences, we will be the first to assess such potential stability in childhood and adolescence, and to investigate also how the household environment affects the intertemporal stability.

B) Other Notable Projects on Economic Preferences and their Formation in Childhood and Adolescence

Birth-Order and Peer Effects

Related to the formation of economic preferences within families, Detlefsen, Friedl, Lima de Miranda, Schmidt, and Sutter (2018) study how birth order and siblings' sex composition affect risk, time, and social preferences. In their sample of 525 adolescents from Northern Germany, Detlefsen et al. (2018) find that second-born children are typically less patient, more risk-tolerant, and more trusting. However, siblings' sex composition interacts importantly with birth-order effects. Second-born children only take more risks with same-sex siblings. For trust and trustworthiness, birth-order effects are larger with mixed-sex siblings than in the single-sex case. Only for patience does the composition of the siblings' sex not matter.

Extending the factors influencing the economic behavior of children and adolescents beyond the core family, Kiessling has studied several aspects of peer effects. Kiessling, Radbruch, and Schaube (2019c) study the causal effect of being able to self-select peers on performance, and decompose differences into their possible causes. Kiessling et al. (2019c) report that self-selection of peers improves performance. They show that self-selection allows for autonomy over the peer assignment, which in turn has a direct effect on performance through increased motivation. In a companion paper, Kiessling, Rad-bruch, and Schaube (2019b) analyze which factors – productivity, personality, or friendship ties – drive peer-selection processes. They show that, even conditional on friendship ties, there exists a strong homophily in productivity and personality, which explains several findings in the literature on peer effects.

The Roots of Human Cooperation and Egalitarian Norms in Childhood

EEG members have several projects on the roots and determinants of human cooperation in childhood, as this is closely related to another focus of the EEG on the determinants of cooperation in adults (see subsection C below).

In a large-scale experiment with more than 1,000 kindergarten children, aged 3 to 6 years, from Tyrol (Austria), Bašić, Bindra, Glätzle-Rützler, Romano, Sutter, and Zoller (2020) study the ontogeny of cooperation in young children. Bašić et al. (2020) conducted an iterated prisoner's dilemma game and imple-

---

2   Related to COVID-19 (but outside of Bangladesh), Cappelen, Falch, Sörensen, and Tungodden (2020b) examine with a representative sample of 8,000 Americans how the COVID-19 crisis affects people's solidarity and fairness, finding that the crisis makes people more concerned with society's problems than their own, but also increasing inequality acceptance. In Christoph Engel's group, there are also COVID-19-related projects: see, e.g., O'Hara and Rahal (2020).

mented four between-subject treatments that allow them to investigate the behavioral effects of three evolutionary pillars of cooperation: direct reciprocity, indirect reciprocity, and third-party punishment (all of them pitched against a control condition with perfect-stranger matching, without any opportunities for reciprocity or third-party punishment). They find that in this young age cohort only third-party punishment is an effective means to increase cooperation in young children, while neither direct nor indirect reciprocity have any positive impact in comparison to a control condition. This is a striking finding, as it indicates that reciprocity – a means typically found in adults to increase cooperation levels – must develop only after early childhood to affect cooperation rates. Much to the contrary, third-party punishment already enhances cooperation very strongly in 3-year olds, thus shedding new light on the roots of human cooperation.

Sutter and Untertrifaller (2020) study the determinants of cooperation by letting 328 children from South Tyrol (Italy), aged 4-5, and their parents play an experimental prisoner's dilemma game. They examine whether children's cooperation depends on symmetric payoffs of mutual cooperation, and how it is related to the parental socioeconomic background and the parents' own cooperation behavior. Sutter and Untertrifaller find that asymmetric payoffs do not hinder cooperation. Children cooperate more often when parents have a higher level of education. Parents' and children's cooperation rates are positively aligned. Overall, these findings support the notion of a socioeconomic gradient of prosociality.

Bašić, Falk, and Kosse (2020) investigate the development of egalitarian norm enforcement in childhood and adolescence. Running an experiment with 635 children and adolescents from Croatia, they observe that children start enforcing the egalitarian norm (in a sharing game) at the age of 11-12, and that they become more generous at the same time as the egalitarian norm enforcement emerges.

Barron, Harmgart, Huck, Schneider, and Sutter (2020) measure the prevalence of discrimination between Jordanian host and Syrian refugee children attending school in Jordan. Using a simple sharing experiment and running incentive experiments with 456 children, Barron et al. (2020) find only little discrimination. Among the Jordanian children, however, they see that those who descended from Palestinian refugees do not discriminate at all, suggesting that a family history of refugee status can generate solidarity with new refugees. They also show that parents' narratives about the refugee crisis are correlated with the degree of discrimination, suggesting that discriminatory preferences are being transmitted through

parental attitudes. The latter adds to the literature on the intergenerational transmission of economic preferences.

Formation of Risk Preferences

It is well known that macroeconomic shocks in the past influence economic decisions in the present. However, it is unclear how small-scale events affect economic decision-making, and whether the actual outcomes of such insignificant events or the memories thereof are more important for the formation of economic preferences. Based on a model of reinforcement learning and selective memory, Angerer, Dutcher, Glätzle-Rützler, Lergetporer, and Sutter (2020) present a large-scale experiment to study how randomly determined outcomes of a lottery choice affect the formation of risk preferences by again studying risk-taking almost a year after the first lottery choice. In a randomized experiment with 743 subjects, Angerer et al. (2020) find that subjects who won the first lottery take significantly more risks in the second one, even when subjects do not remember the previous outcome. Thus, small-scale events have an influence on preference formation. Finally, memories have no effects on subsequent choices. Yet, good outcomes are more likely to be remembered correctly than bad outcomes, and memories of bad outcomes misremembered as good. This means that risk preferences are slowly built up in childhood, but that they also follow some path dependency, contingent on small-scale outcomes. In Karlsson Linnér et al. (2019), we study the genetic determinants of risk aversion, thus leaving out any kind of reinforcement learning or environmental factors that might affect risk preferences.

The importance of risk attitudes for field behavior is investigated in Schneider and Sutter (2020).[3] This paper uses a novel method to elicit and measure higher-order risk preferences (prudence and temperance) in an experiment with 658 adolescents from Germany. In line with theoretical predictions, Schneider and Sutter (2020) find that higher-order risk preferences – particularly prudence – are strongly related to adolescents' field behavior, including their financial decision-making, prevention effort, and health status. Most importantly, Schneider and Sutter (2020) show that dropping prudence and temperance from the analysis of students' field behavior would yield largely misleading conclusions about the relation of risk aversion to these domains of field behavior. Against this background, many contradicting results of previous research on the role of risk aversion for field behavior can be reconciled in light of the role of higher-order risk preferences (like prudence and temperance).

It is worth noting that the EEG's work on risk preferences has several very interesting complements in Christoph Engel's

---

3 Sebastian Schneider from EEG has also a paper on higher order risk preferences and their relation to field behavior in Colombia (see Schneider, Ibáñez, and Riener, 2020). Moreover, he also has a methods paper on the validity and generalizability of field experiments (see Riener, Schneider, and Wagner, 2020).

group, for example in the paper by Engel, Fedorets, and Gorelkina (2020) on risk tolerance of household members in the German Socio-Economic Panel (for further related papers, see the section "Risk and Uncertainty" in Christoph Engel's report on his group).

Formation of Time Preferences

Sutter, Angerer, Glätzle-Rützler, and Lergetporer (2018) study how language relates to intertemporal preferences. They examine differences in intertemporal choices across language groups in an incentivized experiment with 1,154 children in a bilingual province, i.e., in South Tyrol. The sample consists of 86% of all primary-school kids in Meran/Merano, where about half of the 38,000 inhabitants speak German, and the other half Italian, while both language groups live very close to each other. Sutter et al. (2018) find that German-speaking primary-school children are about 16 percentage points more likely than Italian-speaking children to delay gratification in an intertemporal choice experiment. The difference remains significant in several robustness checks and when controlling for a broad range of factors, including risk attitudes, IQ, family background, and area of residence. Hence, they are able to show that language-group affiliation, which is often used as a proxy for culture, already plays an important role in shaping economic preferences early in life. Related work in Christoph Engel's group is Albrecht and Schubert (2020).

A First Survey on the Economic Behavior of Children and Adolescents

In 2019, two members of the EEG, Matthias Sutter and Claudia Zoller, published (together with Daniela Glätzle-Rützler) a first survey about the rapidly growing literature on the economic behavior of children and adolescents and its development over time (Sutter, Zoller, and Glätzle-Rützler, 2019). So far, the survey has been well-cited and will serve as a good starting point for scholars around the world to push the frontier in this area of research ever more outward.

C) The Determinants of Cooperation among Adults

In a large-scale project around the globe – covering 42 nations and more than 18,000 participants, members of the EEG (in particular, the psychologist Angelo Romano) took the lead in an international project on the extent of national parochialism and the influence of political ideology on this extent. In Romano, Sutter, Liu, Yamagishi, and Balliet (2020b), they showed that national parochialism – the tendency to cooperate more with members of one's own nation, compared to strangers from abroad – is a ubiquitous phenomenon around the globe. A particularly striking finding, which is incompatible with

several claims of Joe Henrich, for instance, is the fact that the extent of national parochialism is practically independent of the level of wealth, rule of law, exposure to world religions, relational mobility, pathogen stress, and distance to common ancestry. Romano, Sutter, Liu, and Balliet (2020c) then showed that political ideology is linked to cooperation within and across national boundaries, with liberals being much more likely to cooperate even with strangers than conservatives are in the sample of 42 nations.

While Romano et al. (2020b, 2020c) studied cooperation across nations, Romano, Bortolotti, Hofmann, Praxmarer, and Sutter (2020a) examined cooperation across different generations of 359 adult people in Austria. Romano et al. (2020a) find that participants cooperate more with older generations than with younger generations. This pattern is particularly strong in the youngest generation. In addition, the data reveal that age is positively correlated with generosity and that the oldest generation shows higher levels of unconditional cooperation when they are matched with the youngest cohort. The latter can be interpreted as an attempt to "teach" cooperation to younger generations.

Bigoni, Bortolotti, Casari, and Gambetta (2019) address the notorious development gap between the North and the South of Italy by arguing that differences in cooperation rates between North and South might have contributed significantly to this gap. They ran experiments with more than 400 Italians from all over the country and find that Northerners and Southerners share the same prosocial preferences, but they differ both in their belief about cooperativeness and in the aversion to social risk, with more pessimistic views and attitudes in the South. Conditional cooperation might then explain different levels of actual cooperation, based on different expectations about the interaction partners' level of cooperation.

Fehr and Sutter (2019) investigate whether mutual cooperation in trust games can be enhanced through gossiping, i.e., an opportunity of people to share informal information about interaction partners in a trust game. In fact, Fehr and Sutter (2019) find that this form of gossip increases trust and trustworthiness compared to a situation without a third party that can gossip. However, a large part of this increase is due to the mere observation of trustees through third parties, not the content of the gossip. As far as the analysis of text (i.e., gossip) is concerned, this project is related to the work on natural language-processing methods in Christoph Engel's group (see, e.g., Hausladen, Schubert, and Ash, 2020).

D) Social Norms and Fairness Concerns

Bašić and Verrina (2020) – as an example of joint co-authorship across both main research groups – develop a utility

framework on the influence of personal and social norms on economic behavior. They then put the model to a test in a series of games (including dictator and ultimatum games and a third-party punishment game). They show that personal norms are inherently distinct from social norms across the games, and that they are highly predictive of individual behavior. In fact, they are complementary to social norms in predicting behavior, as a model with both personal and social norms outperforms a model with only one of the two norms. This is a first contribution that elicits both social and personal norms and relates them to behavior they govern, showing that the two norms are not identical, but are both drivers of behavior.

Heinz, Jeworrek, Mertins, Schumacher, und Sutter (2020) study the impact of fairness norms on productivity. They set up a call center in a German town and examine how worker productivity is affected when employers act adversely towards their co-workers. In their main treatment, Heinz et al. (2020) lay off some workers before the last shift in the call center. This layoff is communicated as an unfair (i.e., arbitrary) act. The remaining employees perceive this layoff as an infraction of fairness norms and react by reducing their productivity by 12 percent. These results suggest that the price for unfair employer behavior goes well beyond the potential tit-for-tat of directly affected workers, but even affects employers who cannot be (by design of the field experiment) be affected at all by the unfair layoffs.

Cappelen, Falch, Huang, and Tungodden (2020a) look at fairness from the perspective of how adults handle distributive conflicts between children across different societies. Using a novel experimental design with nearly 10,000 adults and children, Cappelen et al. (2020a) compare how adults in two societies characterized by very different levels of income inequality, China (Shanghai) and Norway, make real distributive choices in situations involving two children of the same age. They document a large difference in the adults' acceptance of inequality among children in the two societies: the adults in China implement more than twice as much income inequality among children compared to the adults in Norway. The authors provide survey evidence indicating that the underlying mechanism is that the adults in China, to a much greater degree than the adults in Norway, consider such inequality to be fair. These findings suggest that social learning may be a powerful mechanism behind international differences in inequality acceptance.

Falch (2020) examines fairness concerns with respect to allocating resources to quick and slow learners in school. Investing in human capital is of great importance to society, but raises major distributional concerns. Falch (2020) provides the first set of evidence on people's preferences for the distribution of educational resources in society. She examines how a general population sample of over 2,000 Americans

trades off resources between quick and slow learners. She finds that they give priority to slow learners, assigning, on average, two thirds of the educational resources to this group. Using treatment manipulations, it is found that both cost efficiency and the relative motivations of the learners causally affect the resource allocations, but that the priority is given to slow learners remains. The findings provide important insights for the present policy debate on how to distribute educational resources in society.

Concerning the importance of (social) norms and fairness for economic behavior, it is noteworthy that there are several related projects ongoing in Christoph Engel's group (see, e.g., Engel, Kube, and Kurschilgen, 2020, and Adra, Kirchkamp, Sterba, and Ungwang, 2020).

E) Gender Differences

A long-run research interest has been the examination of gender differences in competitiveness. Balafoutas and Sutter (2019) examine how uncertainty about the number of winners in a tournament affects gender differences in the willingness to compete. While it is hard to measure how this uncertainty affects work performance and willingness to compete in the field, it can be studied in a controlled lab experiment. Balafoutas and Sutter (2019) present an experiment where subjects can compete against each other, but the number of winners is either uncertain (but with known probabilities) or ambiguous (with unknown probabilities for different numbers of winners). The authors find that uncertainty and ambiguity induce a significant increase in the performance of men, while there is no effect on women. Men also increase their willingness to compete in the presence of ambiguity. Overall, both effects contribute to men winning the tournament significantly more often than women under uncertainty and ambiguity. These findings suggest that laboratory studies with known numbers of tournament winners may have measured a lower bound of the gender differences in the willingness to compete.

Balafoutas, Fornwagner, and Sutter (2018) report experimental evidence that a simple and practically costless tool – priming subjects with power – can close the gender gap in competitiveness. While in a neutral as well as in a low-power priming situation men are much more likely than women to choose competition, this gap vanishes when subjects are primed with a high-power situation. Balafoutas et al. (2018) show that priming with high power makes competition-entry decisions better calibrated to objective winning probabilities and reduces the level of risk tolerance among male participants, which can help explain why it leads to a closing down of the gender gap in competitiveness.

Kiessling, Pinger, Seegers, and Bergerhoff (2019a) look at gender differences in wage expectations. Based on a sample of over 15,000 students in Germany, they document a large gender gap in wage expectations, amounting to approximately 500,000 EUR over the life cycle and resembling actual wage differences. Most strikingly, they show that these different expectations go hand in hand with different negotiation strategies of men and women, thus contributing to enormous differences in expected lifetime earnings.

Cappelen, Falch, and Tungodden (2019) examine gender differences with regard to the performance of boys and girls in education. In highly developed countries, it is more and more the case that boys fall behind girls in achievements and performance. Cappelen et al. (2019) look at this 'boy crisis' by asking whether people interpret inequalities differently depending on whether males or females are lagging behind. They study this question in a novel large-scale distributive experiment involving more than 5,000 Americans. The results provide strong evidence of a gender bias against low-performing males, particularly among female participants. A large set of additional treatments establishes that the gender bias among female participants reflects statistical fairness discrimination. The study provides new evidence on the nature of discrimination and on how males falling behind are perceived by society.

2. Experimental Methods and Public Policy

When I was interviewed for the position of director at the MPI, I had not yet started to apply experimental methods to important questions in public policy, but promised to do so if given the job. As a consequence, over the past three years I have hired EEG members with a strong research portfolio on applied questions, but have also myself started a series of larger projects, some of which have become working papers in 2020, although none of these has yet been accepted for publication. However, I do believe that the projects in this research area are very promising scientifically and important for society, and thus I would like to devote even more resources into this area in the coming years.[4]

A) Environment and Health

The lack of access to purified water sources leads to waterborne diseases like diarrhea and typhoid fever, infant mortality, and inferior educational attainment. Affordable and dependable access to water is also a crucial input factor for industrial

and agricultural productivity. Yet, two thirds of the world's population already experience severe water scarcity for at least one month a year. Threats to sustainable water management from the consumer side are the no-payment of water utility bills and overconsumption. Rockenbach, Weiss, and Tonke (2020) and Tonke (2020) address both threats.

Rockenbach et al. (2020) cooperate with the public water utility of Namibia and implement interventions to reduce non-payments. They first report that a large fraction of customers seems to be willing to pay, but neither receives the invoice properly, nor understands its content. Rockenbach et al. (2020) address these informational frictions by using simplified text messages and applying psychological commitment techniques to narrow the gap between the customers' willingness to pay and actual payments. In fact, payments increase by 30% to 61%, making the interventions highly cost-effective.

Tonke (2020) uses the same collaboration with the public water utility in Namibia to encourage water conservation during a drought. Providing mass-targeted conservation strategies via text message decreases consumption by 5.3 percent. Additional treatments encouraging individuals to develop their own strategies are ineffective and rule out alternative explanations, such as reminders, awareness of water scarcity, or being asked to reduce consumption.

Fang, Götte, Rockenbach, Sutter, Tiefenbeck, Schoeb, and Staake (2020) examine how to reduce water consumption in a very energy-intensive activity, i.e., showering. Working with occupants of single apartments in German student dorms, they investigate the savings potential of real-time feedback of water consumption (through a shower-meter that shows instantaneous usage) and of home energy reports (which illustrate the environmental consequences of energy consumption through showering). Based on a model of barrier multiplicity as an obstacle to energy conservation, Fang et al. (2020) can show that putting both interventions on top of each other generates tremendous additional savings of about 50% of what can be achieved with real-time feedback alone. This showcases how barrier multiplicity can generate complementarities in behavioral interventions.

An ongoing project in India by Priyam, Salicath, and Sutter (in progress) addresses how the contamination of groundwater through arsenic can be reduced. As of today, arsenic-contaminated groundwater is consumed by approximately 100 million people worldwide and has severe health consequences. Using an RCT conducted in 150 Indian villages and more than 2,000 households, Priyam et al. (in progress) test the effectiveness

---

4   One indication of this is the very recent hiring of Mustafa Kaba who investigates, in his job market paper (Kaba 2020), the electoral effects of distributive spending in an interesting field setting in Turkey, where the government has opened a food-subsidy program in government-run shops. By leveraging the geographical variation in proximity of voters to these shops, the author can estimate the effects of such distributive spending on voter turnout and incumbent support, conditional on the incumbent's party affiliation in a given voter district.

of an information-based intervention, focused on spreading awareness about arsenic in the groundwater and mitigation techniques. Initial results with 1,200 households – the remaining households could not be visited after the intervention to measure the arsenic level of their water because COVID-19 broke out and made it impossible to continue data collection – are extremely promising, as they show that households in the treatment conditions have significantly lower arsenic levels than the households in the control group. The arsenic levels of the water are measured with professional test kits. A preliminary analysis based on 1,200 households also shows that members of treated households have significantly improved mental-health conditions (with mental problems being one of the main negative health externalities of arsenic-contaminated water). Our plan is to run a third wave of arsenic measuring in all 2,000 households once the COVID-19 situation allows it, so as to check carefully whether the preliminary results persist.

Related to mental health, Kiessling and Norris (2020) study how students' relative ranks in their school cohort affect their mental well-being both in the short as well as in the long run. Based on more than 18,000 subjects in the U.S., they show that having a higher rank in school improves not only the students' immediate mental health, but these effects last for at least 14 years and carry over to economic outcomes in adulthood. The findings of their study thus provide evidence how the school environment can have long-lasting consequences for the well-being (and professional success) of individuals.

Turning to physiological health, Charness, Cobo-Reyes, Eyster, Katz, Sánchez, and Sutter (2020) run an RCT in Spanish primary schools with 282 children, aged 9 to 10. This field experiment intends to study the effects of non-monetary incentives for children to make healthier food choices at school. Previous interventions have typically paid participants for their participation, but this may often not be feasible. Charness et al. (2020) introduce a system in which food items are graded based on their nutritional value, involving parents or classmates as change agents by providing them with information regarding the food choices of their children or friends. They find parental involvement in the decision process to be particularly beneficial in boosting healthy food choices, with very strong results that persist even months after the intervention.

Another health-related project on how to improve eating habits of patients diagnosed with type-2 diabetes has been delayed because of COVID-19, but it is worth mentioning nevertheless. The burden of non-communicable diseases such as diabetes is a growing global problem, not only for patients and families, but also for health-insurance providers and the wider economy. These diseases are largely lifestyle-driven, for example by what people eat and drink and how much (or little) they exercise. Health-related behavior is difficult to shift, and measuring and tracking behavior in the field is often a challenge. In a

field experiment, Monteiro, Sutter, Wiesen, Larmuth, and Kroff (in progress) test the impact of a wearable technology called Continuous Glucose Monitoring (CGM) against a control group that receives the standard of care for diabetes. Real-time information on personal glucose levels allows the wearer to fine-tune his or her diet, but may not be sufficient to overcome cognitive barriers such as present bias that might prevent behavioral changes. Therefore, in a second treatment, Monteiro et al. (in progress) add online health coaching to help patients identify their goals, what it would mean to achieve them, the obstacles in the way, and plans to overcome them. This RCT has been pre-registered, and data collection in South Africa will commence once the COVID-19 situation allows it.

B) Financial Literacy and Finance in General

Financial literacy is generally understood as an individual's capability to handle financial aspects of everyday life and to make meaningful and informed decisions regarding investments, savings, and consumption. However, the level of financial literacy is fairly limited across the globe, and this limited knowledge has been shown to lead to a series of disadvantageous financial decisions. Sutter, Weyland, Untertrifaller, and Froitzheim (2020) present the results of a randomized controlled trial in schools to study how teaching financial literacy affects the risk and time preferences of adolescents. The starting point of this RCT is the hypothesis that the beneficial effects of financial literacy work through economic preferences, a hypothesis untested to this point. Following more than 600 German adolescents, aged 16 years on average, over about half a year, Sutter et al. (2020) provide causal evidence that teaching financial literacy has significant short-term and longer-term effects on risk and time preferences. Compared to two different control treatments, they find that teaching financial literacy makes subjects more patient, less present-biased, and slightly more risk-averse. These effects on economic preferences – on top of improving financial literacy itself through the intervention – provide a better understanding of why financial literacy has been shown to correlate systematically with better financial decisions in previous studies.

In a related project, Maddix (2019) investigates, with a representative sample of U.S. households, how individuals vary with respect to their approval for public policies that make use of financial nudges, such as credit-card spending, automatic enrollments in financial programs, or financial education at the workplace. This is one of the first pieces of evidence on how people perceive nudges in financial decision-making.

A paper by Glaser, Iliewa, and Weber (2019) is also related to financial literacy. They use a series of experimental studies to document and explain the occurrence of two specific violations of the invariance assumptions of normative decision

theory. First, they show that presenting subjects past price charts induces different expectations from showing them past return charts, even though the information is identical. Second, Glaser et al. (2019) show that asking subjects to forecast prices and asking them to forecast returns results in different expectations. Asking subjects to forecast returns as opposed to prices results in more optimistic expectations, whereas showing subjects return charts as opposed to price charts results in lower expectations. Interestingly, professional experience in the finance industry is not a useful remedy to these biases, but cognitive reflection mitigates the impact of format changes.

The financial industry has been struggling with widespread misconduct and public mistrust. Gill, Heinz, Schumacher, and Sutter (2020) argue that this stems largely from the selection of subjects with little trustworthiness into the financial industry. In a long-term project, Gill et al. (2020) identify the trustworthiness of business and economics students during college days, and follow up on their job placement after graduation (seven years after their experimental choices in a trust game during their study times). Students who want to start their careers in finance are substantially less trustworthy. Most importantly, actual job placements several years later confirm this association. The financial industry does not screen out less trustworthy subjects. If anything, the opposite seems to be the case, which may create a serious challenge to rebuild trust in this industry.

3. Helping People to Make Better Decisions

The final research area described here has a much narrower meaning than what the section title may suggest. Actually, it brings to the MPI two of my major research areas over the past ten years or so, namely research on credence-goods markets and on team decision-making. With the stronger emphasis on research with children and families and a new focus on applied public-policy issues, these two former prime research areas of mine have somewhat lost prominence, but they are still part of what the EEG is involved in.

A) Boosting Consumer Knowledge and Consumer Protection in Credence-Goods Markets

Credence-goods markets are characterized by large informational asymmetries between consumers and expert sellers. These asymmetries allow experts to exploit consumers, calling for an examination of how consumers can make well-informed decisions on such markets (which, for example,

include health care service, repair services, and legal services).

Kerschbamer, Neururer, and Sutter (2019) study whether consumers benefit from accessing online information about their needs before purchasing credence goods or about previous consumers' experience with particular sellers. Based on a field experiment in the German market for computer repairs, Kerschbamer et al. (2019) find that gaining knowledge about one's needs and revealing it to sellers is a costly mistake, since seemingly better-informed customers pay higher prices, on average, rather than lower prices. By contrast, accessing online ratings of sellers helps identifying cheaper shops, in particular on rating platforms that filter out trustworthy reviews. Consumers can thus benefit from information provided in the worldwide web.[5]

Bindra, Kerschbamer, Neururer, and Sutter (2020) start from the observation that, in theory, consumers can protect themselves, in credence-goods markets, from maltreatment through sellers by asking for second opinions from other sellers. Yet, empirical evidence whether this is a successful strategy is scarce. Bindra et al. (2020) present a natural field experiment in the market for computer repairs, finding that revealing a second opinion from another expert to the seller neither increases the rate of correct repairs nor decreases the average repair price. Hence, revealing second opinions is a costly mistake, but collecting them is not as the authors show.

Balafoutas, Fornwagner, Kerschbamer, Sutter, and Tverdostup (2020) present a theoretical model and an experimental test of a credence-goods market that considers both diagnostic uncertainty of sellers and the effects of insurance on the part of consumers. Both in theory and in the experiment, diagnostic uncertainty decreases the rate of efficient service provision and leads to less trade, thus reducing efficiency. In theory, insurance also decreases the rate of efficient service provision, but at the same time it also increases the volume of trade, leading to an ambiguous net effect on welfare. In the experiment, the net effect of insurance coverage on efficiency turns out to be negative. This is partly driven by an important interaction effect: if consumers are insured, experts invest less in diagnostic precision. This constitutes a hitherto overlooked downside of insurance coverage in such markets.

B) Making Decisions in Teams

Many decisions are taken in teams, such as executive boards, search committees, or evaluation committees. Lots of previous research has shown that team decisions are often closer to standard game-theoretic predictions than individual

---

5   This paper is related to an information search paper in the groups of Christoph Engel and Fabian Winter. See Hillenbrand and Hippel (2020).

decisions (see a recent survey of the literature by Kocher, Praxmarer, and Sutter, 2020). Whether or not this leads to "better" decisions in teams does depend on the definition of "better" (for instance, with respect to individual payoffs or collective welfare) and on the type of game (whether standard game-theoretic play leads to more or less efficient outcomes than non-standard play).

Cooper and Sutter (2018) have shown that the mechanism used for assigning roles within teams affects team performance as well. They let subjects play the takeover game in buyer–seller teams. Understanding optimal play is demanding for buyers and trivial for sellers, so teams should perform better if the buyer is the abler teammate. When teammates are allowed jointly to choose their roles, abler teammates tend to become buyers, but this is more than offset by disruptions to the learning process. Cooper and Sutter (2018) examine two potential sources for the latter effect and find that endogenous role assignment has a negative psychological and emotional effect on buyers.

Buffat, Praxmarer, and Sutter (2019) examine whether teams – as individuals have been shown – assign an intrinsic value to having the right to make a decision. This intrinsic value is different from the instrumental value (because the latter determines outcomes), and can thus be considered a distortion of decision-making. While Buffat et al. (2019) find no differences between individuals and teams in the aggregate, they uncover an important heterogeneity within teams. Teams with a smooth decision-making process have much lower intrinsic values of decision rights than individuals, often not even significantly different from zero. Yet, teams with conflicts in reaching a decision have very high intrinsic values of decision rights, thus distorting decisions considerably. Hence, the team decision-making process is of significant importance for the decision-making quality in teams.[6]

Glätzle-Rützler, Lergetporer, and Sutter (2019) study whether team decision-making can alleviate impatience and present bias in intertemporal decisions. More specifically, they examine what happens to collective decisions when there is internal conflict about the tradeoff between present and future, a question that has not been thoroughly investigated so far. In their laboratory experiment, they implement exogenously heterogeneous payoffs from waiting on intertemporal choices. They find that three-person groups behave more patiently than individuals. This effect is generated from the presence of at least one group member who has a high payoff from waiting, implying that impatient team members can be convinced to take patient choices when they have at least one patient member in their team.

Research of Our Part-Time Members

The EEG currently has five part-time members (roughly on 10% contracts that request regular visits to the MPI, exchange with EEG members, participation in seminars (even if remote), and listing affiliation to the MPI in publications). We have been benefitting tremendously from the engagement of Johannes Haushofer (Princeton University), Matthias Heinz (University of Cologne), Florian Lindner (in the private sector; the MPI as the only academic affiliation), Bettina Rockenbach (University of Cologne), and Ali Seyhun Saral (full-time lab manager at the MPI, and part-time member of the EEG). All five have contributed plenty of time into giving feedback on projects of junior members, on attending and giving seminars, and also on joint projects. In this final section on research output, I would like to highlight one project of those three part-time members who have so far not been involved in the joint projects discussed above (see Fang et al., 2020, for a joint project of Bettina Rockenbach's with members of the EEG, and Gill et al., 2020, or Heinz et al., 2020, for joint projects of Matthias Heinz with EEG-members; see further papers of part-time members in the references).

Haushofer and Metcalf (2020) have provided a most timely *Science* contribution on which interventions work best in a pandemic, referring to the current COVID-19 pandemic. In their work, they explain why randomized controlled trials can be ethically justified (a position that is sometimes disputed), how data collection should be organized, and why one should not ignore potential spillover effects from one region to another. In a sense, this paper provides a guideline for politicians and scientists alike how to use and apply empirical methods to cope with one of the greatest crisis in recent human history.

Kirchler, Lindner, and Weitzel (2018) investigate the effects of rank incentives on risks taken by financial professionals. The authors find that both rank and tournament incentives increase risk-taking among underperforming financial professionals. This rank effect is robust to the experimental frame (investment frame vs. abstract frame), to payoff consequences (own return vs. family return), to social identity priming (private identity vs. professional identity), and to the professionals' gender (no gender differences among professionals). The effect can contribute to a better understanding of excessive risk-taking on the part of financial professionals in times of financial distress. This excessive risk-taking may have undermined trust in the financial industry. Yet, there might also have been endogenous selection going on, as the next project shows.

---

6 An observational study on penalty shootouts in soccer confirms the value of decision-making rights. Kassis, Schmidt, Schreyer, and Sutter (2020) show that having the right to determine the sequence of a penalty shootout (which is determined by the toss of a coin before the shootout) yields roughly a 50% higher likelihood of winning such a shootout.

Andreozzi, Ploner, and Saral (2020) investigate conditional cooperation. Cooperation based on conditional cooperation yields an unfolding of free-riding in repeated interactions. In their study, Andreozzi et al. (2020) explore the possibility that the type of reciprocally cooperative choices observed in experiments may themselves evolve over time. They examine this by observing the evolution of the subjects' choices in an anonymously repeated social dilemma. Their results show that a significant fraction of reciprocally cooperative subjects become unconditional defectors in the course of the experiment, while the reverse is rarely observed. This shift in patterns of reciprocity (or non-reciprocity) may contribute to a marked decline of cooperation in repeated interaction.

A Short Note on Media Coverage and Policy Consulting as a Conclusion

While the EEG strives to provide excellent research, we are also committed to communicating our research to the general public. We have set up a Twitter account for the EEG (see https://twitter.com/eeg_mpi), and we organize an annual workshop with the Cologne School of Journalism (see https://koelnerjournalistenschule.de/) to improve our communication skills and to disseminate our work into the public. These efforts have helped us to receive widespread media coverage, in particular in the German-speaking area, including appearances on TV (on 3sat, ARD Alpha, ORF Vorarlberg, ORF Tirol), online interviews (e.g., ZDF online, ZEIT online, Welt online, Wirtschaftswoche), interviews in print media (e.g., ZEIT, FAZ, Welt, Spiegel), and on the radio network (e.g., Deutschlandfunk, HR, Ö1, SWR).

Matthias Sutter has also acted as political adviser, both through having been a member of the scientific advisory council of Austria's Federal Ministry of Family Affairs (under federal minister Sophie Karmasin) until 2018, and in his current capacity as member of the Government of Vorarlberg's group of experts on COVID-19 (under *Landeshauptmann* Markus Wallner).

References

Publications and Working Papers by EEG Members (Full-Time and Part-Time)

Andreozzi, L., Ploner, M., Saral, A.S. (2020). The stability of conditional cooperation: Beliefs alone cannot explain the decline of cooperation in social dilemmas. *Scientific Reports*, 10, 13610.

Angerer, S., Dutcher, G., Glätzle-Rützler, D., Lergetporer, P., Sutter, M. (2020). Outcomes versus memories and the formation of risk preferences. Working Paper MPI Bonn.

Balafoutas, L., Fornwagner, H., Kerschbamer, R., Sutter, M., Tverdostup, M. (2020). Diagnostic uncertainty and insurance in credence goods markets. Working Papers in Economics and Statistics 2020-21. University of Innsbruck.

Balafoutas, L., Fornwagner, H., Sutter, M. (2018). Closing the gender gap in competitiveness through priming. *Nature Communications*, 9, 4359.

Balafoutas, L., Sutter, M. (2019). How uncertainty and ambiguity in tournaments affect gender differences in competitive behavior. *European Economic Review*, 118, 1-13.

Barron, K., Harmgart, H., Huck, S., Schneider, S. O. and Sutter, M. (2020). Discrimination, narratives and family history: An experiment with Jordanian host and Syrian refugee children. IZA Discussion Paper 13337 and MPI Discussion Paper 2020/13, *Revise and resubmit: Review of Economics and Statistics.*

Bašić, Z., Bindra, C., Glätzle-Rützler, D., Romano, A., Sutter, M., Zoller, C. (2020). The roots of human cooperation. Working Paper MPI Bonn.

Bašić, Z., Falk, A. and Kosse, F. (2020). The development of egalitarian norm enforcement in childhood and adolescence. *Journal of Economic Behavior & Organization,* 179, 667-680.

Bašić, Z., Verrina, E. (2020). Social norms, personal norms and image concerns. *MPI Discussion Paper* 2020/25.

Bigoni, M., Bortolotti, S., Casari, M., Gambetta, D. (2019). At the root of the North-South cooperation gap in Italy: Preferences or beliefs? *Economic Journal*, 129, 1139-1152.

Bindra. C., Kerschbamer, R., Neururer, D., Sutter, M. (2020). Reveal it or conceal it: On the value of second opinions in low-entry barrier credence goods markets. IZA Discussion Paper 13344.

Breitkopf, L., Chowdhury, S., Priyam, S., Schildberg-Hörisch, H., Sutter, M. (2020a). Do economic preferences of children predict behavior? Evidence from siblings comparisons. DICE Discussion Paper 342, University of Duesseldorf.

Breitkopf, L., Chowdhury, S., Priyam, S., Schildberg-Hörisch, H., Sutter, M. (2020b). Parenting styles and life outcomes of children. MPI Working Paper.

Buffat, J., Praxmarer, M., Sutter, M. (2019). The intrinsic value of decision rights: A note on team versus individual decision-making. Working Paper MPI Bonn.

Cappelen, A., Falch, R. Huang, Z., Tungodden, B. (2020a). How do adults handle distributive conflicts among children? Experimental evidence from China and Norway. Mimeo NHH Bergen.

Cappelen, A., Falch, R., Tungodden, B. (2019). The boy crisis: Experimental evidence on the acceptance of males falling behind. NHH Department of Economics Discussion Paper 06/2019.

Cappelen, A., Falch, R., Sörensen, E., Tungodden, B. (2020b). Solidarity and fairness in times of crisis. *Revise and resubmit: Journal of Economic Behavior and Organization.*

Charness, G., Cobo-Reyes, R., Eyster, E., Katz, G., Sanchez, A., Sutter, M. (2020). Improving healthy eating in children: Experimental evidence. Working Paper University of California Santa Barbara.

Chowdhury, S., Schildberg-Hörisch, H., Schneider, S. O., Sutter, M. (2020a). Are nudges effective to contain Covid-19? An RCT in rural Bangladesh. MPI Working Paper.

Chowdhury, S., Sutter, M., Zimmermann, K. (2020b). Economic preferences across generations and family clusters: A large-scale experiment. IZA Discussion Paper 13451. *Revise and resubmit: Journal of Political Economy.*

Christensen, D., Dube, O., Haushofer, J., Siddiqi, B. and Voors, M. (2020). Building resilient health systems: Experimental evidence from Sierra Leone and the 2014 Ebola outbreak. NBER Working Paper 27634. *Quarterly Journal of Economics* (forthcoming).

Cooper, D. J., Sutter, M. (2018). Endogenous role assignment and team performance. *International Economic Review* 59(3), 1547-1569.

Detlefsen, L., Friedl, A., Lima de Miranda, K., Schmidt, U., Sutter, M. (2018). Are economic preferences shaped by the family context? The impact of birth order and siblings' sex composition on economic preferences. CESifo Working Paper Series 7362.

Egger, D., Haushofer, J., Miguel, E., Niehaus, P., Walker, M. (2019). General equilibrium effects of unconditional cash transfers: Experimental evidence from Kenya. NBER Working Paper 26600. *Revise and resubmit: Econometrica.*

Falch, R. (2020). How do people trade off resources between quick and slow learners? Mimeo NHH Bergen.

Fang, X., Goette, L., Rockenbach, B., Sutter, M., Tiefenbeck, V., Schoeb, S., Staake, T. (2020). Complementarities in behavioral interventions: Evidence from a field experiment on energy conservations. CRC TR 224 Discussion Paper 149/2020. University of Bonn.

Fehr, D., Sutter, M. (2019). Gossip and the efficiency of interactions. *Games and Economic Behavior*, 113, 448-460.

Gill, A., Heinz, M., Schumacher, H., Sutter, M. (2020). Trustworthiness in the financial industry. IZA Discussion Paper 13583.

Glaser, M., Iliewa, Z., Weber, M. (2019). Thinking about prices versus thinking about returns in financial markets. *The Journal of Finance*, 74(6), 2996-3039.

Glätzle-Rützler, D., Lergetporer, P., Sutter, M. (2019). Collective intertemporal decisions and heterogeneity in groups. CESifo Working Paper Series 7716. *Revise and resubmit: Games and Economic Behavior*.

Haushofer, J., Chemin, M., Jang, C., Abraham, J. (2020). Economic and psychological effects of health insurance and cash transfers: Evidence from a randomized experiment in Kenya. *Journal of Development Economics*, 144, 102416.

Haushofer, J., Metcalf, C. J. E. (2020). Which interventions work best in a pandemic? *Science*, 368(6495), 1063-1065.

Haushofer, J., Ringdal, C., Shapiro, J., Wang, X.-Y. (2019). Income changes and domestic violence: Evidence from unconditional cash transfers in Kenya. NBER Working Paper 25627.

Haushofer, J., Ringdal, C., Shapiro, J., Wang, X.-Y. (2020). Spousal (dis)agreement in reporting of intimate partner violence in Kenya. *American Economic Review: Papers & Proceedings*, 110, 620-624.

Heinz, M., Jeworrek, S., Mertins, V., Schumacher, H., Sutter, M. (2020). Measuring indirect effects of unfair employer behavior on worker productivity – A field experiment. *Economic Journal, 23,* 2546-2568.

Holzmeister, F., Huber, J., Kirchler, M., Lindner, F., Weitzel, U, Zeisberger, S. (2020). What drives risk perception? A global survey with financial professionals and lay people. *Management Science*, 66(9), 3799-4358.

Kaba, M. (2020). The differential electoral returns to a food subsidy program. Job market paper EUI Florence.

Karlsson Linner, R. K., Biroli, P., …, Sutter, M., …, Beauchamp, J. (2019). Genome-wide association analyses of risk tolerance and risky behaviors in over 1 million individuals identify hundreds of loci and shared genetic influences. Nature Genetics, 51(2), 245-257.

Kassis, M., Schmidt, S., Schreyer, D., Sutter, M. (2019). Measuring the value of managerial decisions in dynamic team tournaments – Evidence from a natural field experiment. IZA Discussion Paper 13628. *Revise and resubmit: Games and Economic Behavior.*

Kerschbamer, R., Neururer, D., Sutter, M. (2019). Credence goods markets and the value of new media: A natural field experiment. IZA Discussion Paper 12184.

Kiessling, L. (2020). How do parents perceive the returns to parenting styles and neighborhoods? Working Paper MPI Bonn.

Kiessling, L., Chowdhury, S., Schildberg-Hörisch, H., Sutter, M. (2020c). Parental Paternalism. Working Paper MPI Bonn.

Kiessling, L., Norris, J. (2020). The long-run effects of peers on mental health. Working Paper MPI Bonn 2020/14.

Kiessling, L., Pinger, P., Seegers, P., Bergerhoff, J. (2019a). Gender differences in wage expectations: Sorting, children, and negotiation styles. CESifo Working Paper 7827.

Kiessling, L., Radbruch, J., Schaube, S. (2019b). Determinants of peer selection. Working CRC TR 224 Discussion Paper 92/2019. University of Bonn.

Kiessling, L., Radbruch, J., Schaube, S. (2019c). Self-selection of peers and performance, *Revise and Resubmit: Management Science.*

Kirchler, M., Lindner, F., Weitzel, U. (2018). Rankings and risk-taking in the finance industry. *Journal of Finance* 73(5), 2271-2302.

Kirchler, M., Lindner, F., Weitzel, U. (2020). Delegated investment decisions and rankings. *Journal of Banking and Finance*, 120, Article 105952.

Kocher, M., Praxmarer, M., Sutter, M. (2020). Team decision-making. In: Zimmermann, K. F. (Ed.): *Handbook of Labor, Human Resources and Population Economics*. Springer: Heidelberg, in press.

Maddix, N. (2019). Financial nudges for savings, bill payment, and repayment: Evidence from the United States. Working Paper MPI Bonn.

Monteiro, S., Sutter, M., Wiesen, D., Larmuth, K., Kroff, J. (work in progress). The effect of technology assisted behavioral interventions in type-2 diabetes.

Priyam, S., Salicath, D., Sutter, M. (work in progress). An RCT to reduce arsenic contamination in groundwater. Experimental evidence from Bihar, India.

Riener, G., Schneider, S. O., Wagner, V. (2020). Addressing validity and generalizability concerns in field experiments. MPI Discussion Paper 2020/16.

Rockenbach B., Sadrieh A., Schielke A. (2020). Providing personal information to the benefit of others. *PLoSONE*, 15(8), e0237183.

Rockenbach, B., Tonke, S., Weiß, A. (2020). From diagnosis to treatment: An experiment to reduce non-payments for water. Working Paper University of Cologne.

Romano, A., Bortolotti, S., Hofmann, W., Praxmarer, M., Sutter, M. (2020a). Generosity and cooperation across the life span: A lab-in-the-field study. *Psychology and Aging, in press*.

Romano, A., Sutter, M., Liu, J., Balliet, D. (2020c). Political ideology, cooperation, and national parochialism across 42 nations. *Philosophical Transactions of the Royal Society B* (forthcoming).

Romano, A., Sutter, M., Liu, J., Yamagishi, T., Balliet, D. (2020b). National parochialism is ubiquitous around the globe. *Nature Communications (conditionally accepted)*.

Schildberg-Hörisch, H., Breitkopf, L., Chowdhury, S., Kamhöfer, D., Sutter, M. (2020). Sensitive periods in the formation of socio-emotional skills: Evidence from a randomized controlled trial. Working Paper, University of Duesseldorf.

Schneider, S. O., Ibáñez, M., Riener, G. (2020). Measuring utility – An application to higher order risk and saving in Bogota. Working Paper MPI Bonn.

Schneider, S. O., Sutter, M. (2020). Higher order risk preferences: New experimental measures, determinants and field behavior. IZA Discussion Paper 13646.

Schwaiger, R., Kirchler, M., Lindner, F., Weitzel, U. (2020). Determinants of investors expectations and statisfaction. A study with financial professional. *Journal of Economic Dynamics and Control*, 110, Article 103675.

Sutter, M., Angerer, S., Glätzle-Rützler, D., Lergetporer, P. (2018). Language group differences in time preferences: Evidence from primary school children in a bilingual city. *European Economic Review*, 106, 21-34.

Sutter, M., Untertrifaller, A. (2020). Children's heterogeneity in cooperation and parental background. *Journal of Economic Behavior and Organization*, 171, 286-296.

Sutter, M., Weyland, M., Untertrifaller, A., Froitzheim, M. (2020). Financial literacy, risk and time preferences. IZA Discussion Paper 13566.

Sutter, M., Zoller, C., Glätzle-Rützler, D. (2019). Economic behavior of children and adolescents – A first survey of experimental economics results. *European Economic Review*, 111, 98-121.

Tonke, S. (2020). Imperfect procedural knowledge: Evidence from a field experiment to encourage water conservation. Working Paper MPI Bonn.

Weitzel, U., Huber, C., Huber, J., Kirchler, M., Lindner, F., Rose, J. (2020). Bubbles and financial professionals. *Review of Financial Studies*, 33(6), 2659-2696.

Publications and Working Papers by Christoph Engel's Group, Cited Above

Adra, A., Kirchkamp, O., Sterba, M.-B. and Ungwang, L. (2020). Large-scale cooperation and moral obligations.

Albrecht, F. and Schubert, M. (2020). The effect of grammatical variation on economic behavior.

Engel, C., Fedorets, A. and Gorelkina, O. (2020). Risk taking in the Household. Strategic Behavior, Social Preferences, or interdependent preferences?

Engel, C., Kube, S. and Kurschilgen, M. (2020). Managing expectations. How selective information affects cooperation.

Hausladen, C., Schubert, M. and Ash, E. (2020). Text classification of ideological direction in judicial opinions. *International Review of Law and Economics*, 62, 105903.

Hillenbrand, A. and Hippel, S. (2020). Strategic inattention in product search.

O'Hara, L. and Rahal, R.-M. (2020). Context-dependence of normative judgments? Patterns in perceptions of normative force, risk and threat, and ethical dilemmas – evidence from a longitudinal survey study during the COVID-19 epidemic and beyond.

C. Research Program

C.III Research Group "Moral Courage"

C.III Research Group "Moral Courage"

Head

Prof Dr Anna Baumert

Post-Doctoral Fellows

Dr Julia Sasse
Dr Mengyao Li

Doctoral Candidates

Aya Adra
Niklas Cypris
Fiona tho Pesch
Daniel Toribio Flórez

Current Student Research Assistants

Gabriela Küchler
Marie Brüggemann
Silja Petri
Laura Maldonado (TUM)

Supervision of Masters and Bachelor Thesis, Internships

Jude Arthur-Kingsley (M.Sc. thesis, TUM)

Valerie Benning (M.Sc., UvA, Netherlands)

Gabriela Küchler (B.Sc. thesis, University of Koblenz-Landau;
       M.Sc., University of Bonn)

Isa Garbisch (B.Sc. thesis, University of Koblenz-Landau)

Fırat Şeker (Erasmus + Internship, Dogus University, Turkey)

Introduction

Strikingly, some people take considerable personal risks in order to intervene against the wrongdoings of others. Real-life examples can be awe-inspiring: facing a group of men beating an individual who is on the ground, a woman rushes towards them, screaming at the top of her lungs; overhearing on the train how someone openly denies the Holocaust, a passenger confronts them, while everyone else turns away; when witnessing the fraudulent behavior of a colleague, an employee blows the whistle, despite that colleague's close relation with their superiors. These exemplary individuals overcome threats to their physical, social, or financial well-being to stop, prevent, or redress what they consider violations of fundamental moral principles (Baumert, Halmburger, Küchler, Sasse, and Wagner, under review). Such acts of moral courage by initially uninvolved witnesses are considered highly desirable for the functioning of societies; yet, they are rather rare. Similarly, in everyday life, individuals often encounter others' violations of morally relevant norms (Halmburger, Izydorczyck, and Baumert, in preparation) – such as online hate speech or offline unfairness –, and some intervene, while a majority remains passive. The Max Planck Research Group "Moral Courage", initiated in March 2017, is dedicated to investigating the psychological factors and processes that drive or hinder bystander intervention against norm violations.

Working Definition and Theoretical Framework

The research group developed a working definition of moral courage – in a nutshell, "acting against perceived moral transgressions despite personal risks" – that allows for behavioral operationalization and serves to integrate previously disconnected lines of research in social and personality psychology, as well as behavioral economics. A special issue of the *Journal of Experimental Social Psychology* that we guest-edited served to showcase the breadth of research on moral courage (Baumert, Li, Sasse, and Skitka, 2020). In a review of research falling under the working definition, we identified several common antecedents and barriers of moral courage that emerged across social contexts, levels of social relationships, types of violations or risks, and normative evaluations of intervention behavior. On this basis, we proposed an integrative framework of moral courage (Li, Sasse, Halmburger, and Baumert, under review), extending our prior work on process models of moral courage (Halmburger, Baumert, and Schmitt, 2017).

Understanding Psychological Factors of Moral Courage in Interpersonal Contexts

As a basic tenet, we describe how situational and personal characteristics jointly shape psychological processes that in turn determine intervention behavior. Our research expands across interpersonal and group-level contexts. At the interpersonal level, in several lines of research, we have focused on the interpretation of, and emotional reactions to, the wrongdoings of others, and how these transact with processing of costs of intervention.

Situational Ambiguity. The results of experimental studies have indicated that situational ambiguity of a norm violation diminishes third-party punishment, in particular among individuals who are dispositionally concerned about other-regarding justice (Toribio Flórez, Sasse, and Baumert, under review). When provided with the opportunity to gain information to reduce ambiguity, a substantial share of participants chose to do so despite the monetary costs involved, and turned to punishing when a norm violation became unambiguous (Toribio Flórez, Sasse, and Baumert, in preparation). This line of research suggests that ambiguity, arguably a characteristic of many everyday situations, can induce concerns about wrongful punishment as a psychological barrier to intervention. In a study sampling witnessed norm violations in everyday life across a duration of three weeks (experience sampling), we found further evidence that ambiguity of the norm violation can hinder intervention behavior. Specifically, we found that individuals tended to intervene against observed violations only when they felt certain that a severe norm violation had occurred (Halmburger, Izydorczyk, and Baumert, in preparation).

Distraction as a Chance to Avoid Costs. As a further situational factor that arguably characterizes situations from everyday life, we tested the impact of opportunities for distraction in a third-person punishment context. First evidence indicates that individuals deliberately chose to engage in a distractor task, presumably to avoid the costs of punishment (Tho Pesch, Fiedler, and Baumert, under review). A subsequent behavioral experiment and an eye-tracking study are planned in order to elucidate the motivational basis and cognitive processes of this effect. This project involves close collaboration with Susann Fiedler's group.

Anger Experience and Expression. In a third line of research, we investigated the role of anger experience and expression for costly intervention against the wrongdoings of others. We found consistent evidence in complex social situations that anger experienced in reaction to such wrongdoings predicted intervention behavior in correlational designs (Halmburger, Baumert, and Schmitt, 2015; Sasse, Halmburger, and Baumert, in press). We set off to scrutinize the causal relevance of

anger for third-party punishment. We hypothesized that experienced anger leads people to weigh down the costs of intervention and, through this mechanism, also leads to increased punishment. In five studies, however, we failed to replicate the published effects of incidentally induced anger on third-party punishment. We did find correlational evidence that the perceived severity of a norm violation transacts with the personal relevance of costs of intervention, such that the more severe a norm violation was perceived, the less costs were taken into account in the decision to punish the transgressor. At present, we are extending this line of research in two directions. On the one hand, we turn to experimentally manipulating anger within the situation involving a norm violation (e.g., by varying degree of unfairness; by anger regulation instructions) and again test its causal effect on third-party punishment. On the other hand, we want to scrutinize whether anger could be an epiphenomenon of a third variable causing intervention behavior. Candidates for such a third variable that we want to test are (a) approach motivation, and (b) intuitive processing mode; both of which can be said to be involved in anger experience and to be conducive to intervention behavior.

In our studies on the role of anger for moral courage, we distinguish between anger experience as a potential motivational force conducive to intervention, and anger expression as a potentially communicative strategy serving to signal disapproval of a norm violation, while being arguably less costly than behavioral intervention (Sasse et al., in press). In a first study, we explored the reasons for which the witnesses of unfair behavior by others choose to express anger, in addition to – or as a substitute for – behavioral intervention. All forms of intervention were associated with a heightened perception of unfairness, but with distinct goals. While anger expression was linked to stimulating behavioral change in the perpetrator, behavioral intervention was used to establish fairness. In a follow-up study, supported by an *EASP Seedcorn* grant, we further investigate the situational and dispositional predictors of the different forms of intervention (Sasse & Baumert, in preparation).

Personality Characteristics of Moral Courage. The critical relevance of interpretation of a norm violation as such, of anger reactions, and of the personal relevance of costs is also suggested by personality dispositions that we found uniquely to characterize morally courageous exemplars (Baumert et al., under review). In this project (partially funded by the Moral Beacon Project at Wake Forest University, USA), we recruited individuals who had been given public awards for their morally courageous behavior in the past, and we compared their responses on personality questionnaires with a group of individuals who self-nominated as having acted morally courageously, as well as with a reference group who indicated that they had not acted morally courageously in the past. While controlling for demographic differences or differences

in socially desirable responses, the two morally courageous groups stood apart consistently and robustly in moral attentiveness (a tendency to see everyday situations as morally relevant) and anger proneness (the dispositional tendency to react with strong anger), coupled with slightly lower levels of social anxiety (the tendency to fear negative social evaluation).

Group-Level Moral Courage

Moral judgements and behavioral decisions pertain to interpersonal relations, but also to relations within and between social groups. Here, the strength and quality of how individuals identify as group members becomes pivotal (Li, Watkins, Allard, Hirschberger, Kretchner, Leidner, and Baumert, under review). We investigate moral courage in group contexts, where standing up against a transgression requires challenging group norms and/or authorities, and can be met with harsh repression.

Collective Action under Repression. In contexts characterized by high levels of police violence, we investigated motivations for radical and non-radical forms of collective protest against social injustice. We collected survey data among protesters in Hong Kong and Chile, and consistently found that violence was endorsed, and engaged in, during the protests, to the extent that it was perceived as morally righteous and legitimate, and as an effective means for achieving political goals and for regaining power and dignity. In both contexts, experience with police violence was associated with a stronger willingness to engage in future violent protests, above and beyond past participation in movements (Li, Yuen, Adra, Vargas Salfate, Chan, and Baumert, in preparation). This suggests a "cycle of violence," and challenges the assumption that high levels of risk serve as a major deterrent to action (Adra, Harb, Li, and Baumert, 2019). Rather, risk can also fuel actions, potentially due to the perception that they reflect the immorality and illegitimacy of the agency responsible for the risk. We are currently extending this research to the Lebanon as a third context of collective action under repression; as well as to solidarity-based collective action among advantaged group members (Adra, Li, and Baumert, 2020), in the context of white protesters in Black Lives Matter marches. Furthermore, we use the existing large-scale, cross-national survey and archival data (e.g., Global Barometer Surveys, V-Dem indices) to compare psychological predictors of collective actions in national contexts with varying degrees of state repression.

Normative Change. Information about transgressions committed by one's own social group can have a substantial psychological impact on individuals and, under certain conditions, motivate action against these transgressions. Past research has focused mainly on the effects of individual

transgressions. However, accumulating news reports on transgressions committed by the ingroup can potentially shift the perceptions of the group norm over time, which might have distinct, or more powerful, effects on recipients. In collaboration with Fabian Winter's group, we examine how Americans responded to news reports describing anti-Muslim (Studies 1 and 2) and anti-Hispanic (Study 3) discrimination as having either increased or remaining largely unchanged. Through the perception of changing norms, increases in transgressions over time motivated active engagement for the rights of the victimized groups (i.e., by donating a participant bonus or providing the personal e-mail address to political organizations), to the degree that participants perceived the transgressions as challenging the morality of their group (Li, Adra, Winter, and Baumert, in preparation).

Psychological Consequences of Third-Party Intervention

Complementing the investigation on psychological determinants of moral courage, we have started to investigate the effects of interventions against norm violations by others on further uninvolved observers. We have acquired funding from the TUM *Institute for Ethics in Artificial Intelligence* for a collaborative project with the TUM IT lab on Cybertrust (Jens Grossklags). In online experimental studies, we have tested how counterspeech against hate speech impacts on other bystanders' attitudes and behavioral responses, depending on the shared group membership with the author of the counterspeech, as well as on individual dispositions and appraisals on the part of the bystanders. We have found first evidence that the perceived group norms predict positive attitudes and supportive behavior ("likes", comments) towards the author of the counterspeech. Based on algorithms for the detection of hate speech, we further aim to develop detection algorithms for counterspeech and use these to scrutinize the effects of counterspeech in field settings (i.e., on the internet and in social media).

References

Adra, A., Harb, C., Li, M. and Baumert, A. (2019). Predicting collective action tendencies among Filipina domestic workers in Lebanon: Integrating the social identity model of collective action and the role of fear. *Group Processes and Intergroup Relations*, 23, 967-978.

Adra, A., Li, M. and Baumert, A. (2020). What they think of us: Meta-beliefs and solidarity-based collective action among the advantaged. *European Journal of Social Psychology*.

Baumert, A., Halmburger, A., Sasse, J. Küchler, G. and Wagner, J. (under review). Personality characteristics of moral courage: An extreme groups approach.

Baumert, A., Li, M., Sasse, J. and Skitka, L. (2020). Standing up against moral violations: Psychological processes of moral courage. *Journal of Experimental Social Psychology*, 88, 1-3.

Halmburger, A., Baumert, A. and Schmitt, M. (2017). Everyday heroes: Determinants of moral courage. In: S. T. Allison, G. R. Goethals and R. M. Kramer (Eds.), *Handbook of heroism and heroic leadership.* Routledge/Taylor & Francis Group, 165-184.

Halmburger, A., Baumert, A. and Schmitt, M. (2015). Anger as driving factor of moral courage in comparison to guilt, and global mood: A multimethod approach. *European Journal of Social Psychology*, 45, 39-51.

Halmburger, A., Izydorczyk, D. and Baumert, A. (in preparation). Did someone intervene? An experience sampling study on daily norm violations.

Li, M., Adra, A., Winter, F. and Baumert, A. (in preparation). Harmful normative change: How people react to the ingroup's increasing moral violations.

Li, M., Sasse, J., Halmburger, A. and Baumert, A. (under review). Standing up against Moral Transgressions: An integrative perspective on the psychological processes of moral courage.

Li, M., Watkins, M. H., Allard, A., Hirschberger, G., Kretchner, M., Leidner, B. and Baumert, A. (under review). National glorification and attachment differentially predict support for intergroup conflict resolution: Scrutinizing cross-country generalizability.

Li, M., Yuen, S., Adra, A., Vargas Salfate, S., Chan, K.-M. and Baumert, A. (in preparation). Understanding violent and non-violent political resistance under repression – converging evidence from Hong Kong and Chile.

Sasse, J. and Baumert, A. (in preparation). It doesn't have to be action: Anger expression as intervention against moral transgressions.

Sasse, J., Halmburger, A. and Baumert, A. (in press). The functions of anger in moral courage – insights from a behavioral study. *Emotion*.

Tho Pesch, F., Fiedler, S. and Baumert, A. (under review). Seeing moral transgressions: Moral wiggle room in costly punishment.

Toribio Flórez, D., Sasse. J. and Baumert, A. (under review). "Proof under reasonable doubt": Ambiguity of the norm violation as boundary condition of third-party punishment.

Toribio Flórez, D., Sasse, J. and Baumert, A. (in preparation). Revealing motivational underpinnings of ambiguity effects on costly third-party punishment.

C. Research Program

C.IV Research Group "Economic Cognition"

C.IV Research Group "Economic Cognition"

Head: Dr Susann Fiedler

Post-Doctoral Fellows
Dr Jerome Olsen

Doctoral Candidates
Alina Fahrenwaldt
Minou Ghaffari
Fedor Levin
Rima-Maria Rahal

Student Research Assistants
Hosam Alqaderi
Dhananjay Bhandiwad
Lina-Sophia Falkenberg
Marie Hellmann
Yeganehsadat Hosseinisereshgi
Abdullah Kiwan
Hanna Kondratyuk
Daria Lisovoj
Anita Lyubenova
Sarah Piechowski
Marlene Rösner
Justine Strube
Lena Trost

Interns & Guests
Farid Anvari
Sylvia Beckmann
Vanessa Clemens
Eriselda Danaj
Anna Trabel

Since January 2014, the Gielen-Leyendecker junior research group has been part of the institute, complementing the scientific work on collective goods by providing a process perspective on decision-making. The group's work aims to contribute to our understanding of the interplay between the individual and situational factors affecting decision behavior and focuses on two major challenges: (1) understanding the underlying cognitive and affective processes leading up to a choice and (2) identifying the channels through which situational as well as personality factors operate. We made progress on both lines of work by combining basic psychological research on information search and processing as well as arousal with incentive-compatible research paradigms. A special focus is on interactions that arguably involve social preferences. The comprehensive model comparison and investigation of factors that influence information processing in economic decision-making is conducted jointly by the psychologists in the group and supported by collaborations with economists from the institute. A wide set of different projects have been developed and finalized since 2017. Additionally, we have shifted the attention within some of the projects lines through the inspiring input by the new PhD student Alina Fahrenwaldt, as well as the newly-hired postdoc Jerome Olsen.

Social Dilemmas

In multiple projects, the group's work focuses, in particular, on the information-weighting process while an interdependent decision is made in social-dilemma situations. We are particularly interested in the question of what variables determine the extent and depth of information search. We investigated these questions in the context of decomposed dictator games, ultimatum games, as well as prisoner's dilemmas, and we present evidence for an influence of social preferences on the extent and pattern of information search in all situations (Fiedler and Ghaffari, work in progress; Fiedler, work in progress). This relationship is robust to changes in the incentive structure by variations in payoff schemes (Fiedler, Glöckner and DeDreu, work in progress), framing (Fiedler and Hillenbrand, 2020), cognitive load and time pressure (Fiedler, Olsen and Lillig, work in progress), as well as the decision setup (Rahal, Fiedler, and DeDreu, 2020).

Moral Decision-Making

Research on ethical decision-making gained many new insights into the cognitive, social, and situational underpinnings of dishonesty. While self-concept maintenance theory assumes cheating to be a conscious, profit-maximizing type behavior that creates ethical dissonance, the bounded ethicality approach holds that it may be the result of motivated, albeit unconscious, attentional and reasoning mechanisms. In a joint project with Alina Fahrenwaldt and Andreas Glöckner, we investigate the contingency of cheating behavior on the type of the victim (abstract institution vs. fellow participant). Recording cheating behavior and eye gaze, we find the hypothesized differences in the propensity of cheating, but see very similar patterns for the variables and attention bias. These results indicate that the experience of arousal and unease with the situation seem universal and only linked to the cheating behavior itself, but not to the role of the victim. In follow-up work, we currently investigate the dynamic nature of such processes by re-analyzing and designing a study that will help understand potential (dis)honesty escalation mechanisms (Fahrenwaldt and Fiedler, work in progress).

Going beyond our earlier experimental set-ups, using simple cheating tasks (i.e., flex dot task), we are currently testing a new eye-tracking paradigm to investigate contribution decisions in a tax context. Here, Jerome Olsen, Christoph Kogler, and we plan to investigate the systematic differences in choice behavior between gamble and tax decisions, as well as their interplay with prior preferences and attitudes shown in a previous online study (N = 187). The online study presented evidence showing that individuals chose a risky option less frequently when facing a tax rather than a gamble decision, with a subset of individuals always choosing the sure option for taxes, irrespectively of the monetary attractiveness of the risky (evasion) option. Hence, we propose an eye-tracking experiment to compare the decision-making processes of tax decisions directly with monetarily equivalent gamble decisions.

Ignorance

In a world in which information exists in abundance, the question is often which information is sought and which information is ignored in the decision-making process. Stimulated through a secondary finding in our project, investigating the weighting of other people's outcomes in intergroup situations (Rahal, Fiedler, and De Dreu, 2020), and showing that a substantial proportion of participants consciously ignore the group-identifying information, we focused on personality and situational factors driving the decision to ignore information, while identifying a set of relevant personality variables, including inequality aversion. We plan to extend this initial work and am currently developing an idea how to test the link between personality and ignorance in other decision settings also, in order to isolate different motives of ignorance directly.

Methodological Developments and Debates

Over the last three years, social-science research has moved from being aware of the irreproducibility of the empirical

results (Open Science Collaboration 2012 & 2015) to understanding factors and mechanisms fostering reproducible results. The research group is strongly involved in this debate and has developed tools fostering transparency and collaboration in the scientific community. Extending the more generally oriented work calling for more transparency to specific research areas, we have developed individually tailored reporting guidelines based on the coding of approximately 200 papers and using eye-tracking in the context of judgment and decision-making research (Fiedler, Schulte-Mecklenbeck, Renkewitz, and Orquin, 2020). While our previous metascience work focused strongly on individual studies only, we have now developed concrete ideas for using theory databases to increase the reproducibility of complete research fields (Glöckner, Fiedler, and Renkewitz, 2018). In order to go beyond the pure proof of a concept, we are currently writing a DFG proposal in order to make such a database for social psychology a reality.

In the attempt systematically to integrate the empirical evidence from the field of moral decision-making, we used the data collection stop for eye-tracking due to the COVID-19 pandemic to pursue two meta-analytic projects that summarize the existing literature on the effect of moral wiggle room (Tho Pesch, Fahrenwaldt, and Fiedler, in preparation), as well as the differences between intuitive and reflective decision-making in the context of moral dilemmas (i.e., trolley dilemmas; Fahrenwaldt, Olsen, Rahal, and Fiedler, work in progress).

Working along the lines of openness and transparency, the research group additionally supports selected large-scale community projects through data collection and idea development for inter-cultural studies, in order to investigate the generalizability of results in the context of moral decision-making (Bago et al., in-principle acceptance; Eriksson et al., work in progress).

Outlook

Many of the projects described above are still in progress and have opened up new questions, which we plan to follow up on in the future. For example, we are currently planning to extend our work on cheating to counterproductive behavior within the workspace. Further, evidence on prosocial preferences being positively connected not only to prosocial behavior, but also to an increase in memory performance in social interactions opens up a number of intriguing questions. For example, in which way does this memory advantage play out in the context of recognizing familiar interaction partners, and how does it affect the likelihood of interacting with these partners (endogenous sorting)?

Within the next year, we plan to finalize our work along the introduced lines and to branch out to more applied research questions within organizations, in preparation for my new lab at the Vienna University of Economics & Business. Examples for this are targeting decisions in the context of tax evasion (joint collaborations with Jerome Olsen), counterproductive behavior (joint work with Eriselda Danaj), and expert decision-making. The group's work will further concentrate on experimental work with a strong process orientation and interdisciplinary focus, as well as on the metascience issues of transparency and theory development in social science (joint DFG proposal with Andreas Glöckner).

References

Danaj, E. and Fiedler, S. (in preparation). Moral Norms in Different Roles.

Fahrenwaldt, A., Olsen, J., Rahal, R. and Fielder, S. (in preparation). The Intuition of Deontological Decision Making: Meta-analytic Evidence.

Fiedler, S. and Hillenbrand, A. (2020). Gain-Loss Framing in Interdependent Choice. *Games and Economic Behavior*, 121, 232-251.

Fiedler, S. Fahrenwaldt, A. and Glöckner, A. (in preparation). Fooling Whom Out of His Money? Investigating Arousal Dynamics in the Context of Betraying Institutions or Strangers.

Fiedler, S., Olsen, S. and Lillig, R. (in preparation). Social Preferences Under Constraints.

Fiedler, S., Schulte-Mecklenbeck, M., Orquin, J. and Renkewitz, F. (2020). Increasing Reproducibilty of Eyetracking Studies: The EyeGuidelines. In M. Schulte-Mecklenbeck, A. Kühberger & R. Ranyard (Eds.), *A Handbook of Process Tracing Methods for Decision Research. A Critical Review and User´s Guide.* New York and Hove: Psychology Press, 65-75.

Ghaffari, M. and Fiedler, S. (2018). Social Value Orientation Predicts Information Search in Strategic Environments: An Eye-Tracking Analysis.

Glöckner, A., Fiedler, S. and Renkewitz, F. (2018). Belastbare und effiziente Wissenschaft: Strategische Ausrichtung von Forschungsprozessen als Weg aus der Replikationskrise. *Psychologische Rundschau*, 69(1) 1-15.

Olsen, J., Fiedler, S. and Kogler, C. (in preparation). The Riskiness of Tax Evasion.

Open Science Collaboration. (2012). An Open, Large-Scale, Collaborative Effort to Estimate the Reproducibility of Psychological Science. *Perspectives on Psychological Science*, 7(6), 657-660.

Open Science Collaboration. (2015). Psychology. Estimating the Reproducibility of Psychological Science. *Science*, 349(6251), aac4716.

Rahal, R. M., Fiedler, S. and De Dreu, C. K. (2020). Prosocial Preferences Condition Decision Effort and Ingroup Biased Generosity in Intergroup Decision-Making. *Scientific reports*, 10(1), 1-11.

Tho Pesch, F., Fahrenwaldt, A. and Fiedler, S. (in preparation). The Size of the Moral Wiggle Room: Meta-Analytic Evidence.

C.V Research Group "Mechanisms of Normative Change"

C.V Research Group
"Mechanisms of Normative Change"

Head: Dr Fabian Winter

Post-Doctoral Fellows
Dr Adrian Hillenbrand
Dr Nan Zhang

Doctoral Students
Amalia Álvarez Benjumea

Current Student Research Assistants
Luca Michels

The research group "Mechanisms of Normative Change" is an interdisciplinary group established at the MPI for Collective Goods in 2015. Our group brings sociologists, political scientists, economists, psychologists, and computer scientists together to further our understanding of how social norms change. In the past two years, we have made considerable progress in understanding the changing patterns of cooperation and the evolution of social norms. We have very successfully developed paradigms that help us understand normative change as a consequence of migration, as a consequence of updated beliefs and anomie, and as a consequence of population uncertainty.

Field Experiments on Ethnic Diversity

The group's first stream of research capitalizes on field-experimental methods to understand the consequences of migration for normative behavior. The starting point of this research is Putnam's (2001) popular argument that social diversity threatens social cohesion. To test this claim, we hired native and immigrant actors to stage norm violations close to train stations in Bonn and Cologne (Winter and Zhang, PNAS 2018). Confederate raters recorded the reactions of native and immigrant passers-by, respectively. Our results clearly show differential patterns of norm enforcement: Immigrants sanction immigrants at the same rate as natives sanction natives, but immigrants mostly refrain from sanctioning natives, while natives sanction immigrants more than they sanction natives. This paper concludes that a possible deterioration of social cohesion would be caused by natives not being sanctioned enough, rather than by immigrants getting away unsanctioned. Similar patterns can be observed in helping behavior, too: high-status Swiss confederates are more likely to successfully borrow a phone from a stranger compared to either those with a German or some generic foreign accent (Zhang et al., 2019a). This paper recently won the ESR Best Article Prize 2019. Zhang, Gerecke, and Baldassari (in preparation) show similar effects of racial avoidance in a field experiment in metro stations in Milan. Nan Zhang has successfully applied for an Emmy Noether Group, starting in mid-2021, to develop this line of research further, and he wants to use the following years to investigate further the interplay between ethnicity, social status, and sanctioning (Zhang et al. 2019b, Zhang in preparation, Gereke et al. 2019).

Volunteering under Population Uncertainty

The second line of research investigates the consequences of population uncertainty for norms of cooperation and sanctioning, i.e., uncertainty about the number of players in a game-theoretical sense. I am the PI on this project and gratefully acknowledge financial support from the DFG (German Research Foundation, project number 395336584). Our findings thus far show that the willingness to sanction violations of fairness norms decreases with the number of potential sanctioners (Winter and Franzen 2017). We later tested this diffusion of responsibility more directly, using the Volunteer's Dilemma (Hillenbrand and Winter 2018), which confirmed this result. A series of follow-up experiments, including field experiments in online labor markets (Hillenbrand, Werner, and Winter 2019) and repeated games with heterogeneous actors (Hillenbrand and Winter 2019), tests the robustness of this effect under varying conditions.

The Emergence and Containment of Hate Speech

In the past years, we started to study the breakdown of norms against hate speech, i.e., speech promoting racist, sexist, or classist discrimination. In our new paradigm, participants were invited to experimental online forums and were asked to comment on pictures and related discussions. In our first publication in this field (Álvarez Benjumea and Winter, ESR 2018), we show that censoring previous instances of hate speech reduces the level of hate speech, while publicly counter-commenting hate speech does not. Our second contribution studies the effects of terrorist attacks on the breakdown of anti-racist norms in a unique combination of a lab-in-the-field and a natural experiment Álvarez Benjumea and Winter, PNAS 2020). Not surprisingly, hate speech against refugees increases after the attacks. However, we can show that people experience normative uncertainty and are therefore looking for normative cues in their environment. If they observe mostly positive comments towards refugees, the level of hate speech after the attacks does not differ from the level before the attacks. In an ongoing project, we investigate how observing hate speech leads to donations to pro- and anti-refugee lobby groups (Álvarez Benjumea 2019). Quite surprisingly for us, we find a strong gender effect. While men are mostly unaffected by comments made by others, women tend to donate less if they observe racist comments.

Over the next years, we plan to use this paradigm to study the long-term effects of normative change and its underlying mechanisms. In collaboration with the Moral Courage Group, headed by Anna Baumert, we are designing a study on the psychological underpinnings of the acceptability of anti-Muslim statements (Li et al., ongoing). More importantly, however, we plan to capitalize on the paradigm developed in Álvarez Benjumea, and Winter (2018) and apply it in a series of elections and referenda. These referenda will serve as external shocks and will help us better to understand the causes of the changes in anti-racist norms. For instance, we are currently collecting data on the acceptability of hate speech in the year leading up to the 2020 U.S. election, and half a year after the

election (i.e., until spring 2021, Álvarez Benjumea, Winter, and Zhang, ongoing). Finally, we plan to collect data in the months around an upcoming referendum on banning burqas in Switzerland.

Incentivized Survey Measures of Social Norms

The group has been heavily engaged in developing monetarily incentivized measures of social norms that can be applied in surveys. We tested several existing measures, such as the Social Value Orientation measure by Murphy et al. (2014), and implemented the latter in a computerized form that can be used in lab experiments and online surveys (Crosetto, Weisel, and Winter (2020)). This measure has been implemented in a representative study in Austria (Böhm et al. 2017) and a multi-national, multi-lab study (Van Doesum et al. 2020). In an extension of this approach, we developed a new measure, the NS-5 measure, which measures actions and beliefs in surveys in an incentive-compatible way (Winter et al. ongoing). The development of the NS-5 measure has led to a collaboration with the PASS Panel, administered by the Institute for Employment Research (*Institut für Arbeitsmarkt und Berufsforschung*, IAB). A version of the measure was included in the 2020 wave and will hopefully also be included in the 2021 wave of the PASS; it aims to provide a better understanding of changing norms as a result of experiencing long periods of unemployment (Gereke, Winter, and Rauhut, ongoing). We have also continued our work on measuring fairness norms. For instance, we have developed and tested a rather comprehensive set of tasks to induce the feeling of entitlement and use these tasks to study said norms (Winter 2017), based on a theoretical approach spelled out in Rauhut and Winter (2017b). Hillenbrand and Verrina (2018) show that narratives about the appropriateness of certain actions play a decisive role in which fairness norms are implemented.

Replication Studies and Methodological Work

In addition to the core projects mentioned above, the group has engaged in several other projects in their direct periphery. Fabian Winter, Nan Zhang, and Amalia Álvarez Benjumea have contributed to the Crowdsourced Replication Initiative on the effect of migration on welfare-state attitudes (Breznau et al., ongoing, a, b), and Fabian Winter as well as Nan Zhang are part of the SCORE Replication Initiative (Nosek and the SCORE Project, ongoing). The latter project has led to an extended replication study on differential friendship patterns among natives and immigrants, which we are currently writing up as a comment (Kretschmer et al., ongoing). In more psychological paradigms, we investigated framing effects in interdependent decisions, in collaboration with the Process-Tracing Group at

our institute, headed by Susann Fiedler (Fiedler and Hillenbrand 2020), and the relation between pro-sociality, empathy, and contagious yawning (Franzen et al. 2018). Moreover, we are extending our research in the field of sociology of science on citation patterns, and we have published first results (Rauhut, Winter, and Johann 2018, Rauhut and Winter, 2017a, 2018). A promising, but challenging, extension of this work is invited for resubmission to *PNAS* (Winter, Rathmann, and Rauhut, 2020).

Institutions and Social Behavior

Finally, our group has also engaged in research aiming to understand the interplay of social behavior and institutions. Hillenbrand and Hippel (2019) show that technological developments in online markets fundamentally change the relationship between consumers and sellers. While sellers may capitalize on search patterns in online markets to price-discriminate based on the consumer's preferences revealed by their search patterns, consumers in turn restrict their search for the optimal product to reach a better price. Nan Zhang, on the other hand, focuses on the interplay between state actors and individuals. He uses an instrumental-variables approach to show how literacy in pre-revolutionary France has important consequences for marriage patterns (Zhang and Lee, 2020). In another project focusing on the interplay between social norms and state institutions, he shows that social norms on reporting tax evasion lead to differential effects of sanctioning institutions in northern and southern Italy (Zhang, 2018). The paradoxical effects of combating corruption are also confirmed in two natural experiments in Argentina (Poertner and Zhang, 2020).

In parallel to the above work, I have ventured into a new field together with Svenja Hippel. Rapid technological developments in online markets fundamentally change the relationship between consumers and sellers. The rise of online platforms increases the transparency for consumers in many markets, because a multitude of products can now easily be accessed and browsed through on a single web page. At first sight, this is beneficial for consumers, since they can find more relevant and better-fitting product offers. However, online platforms can also more easily gather data about consumers, in particular about those with more intense search behavior on the particular site. In *Strategic Inattention in Product Search*, we study the resulting trade-off for consumers theoretically, as well as in a laboratory experiment. Consumers can search intensively, receiving a well-fitting product, but at a very high price; or else they can search less, being strategically inattentive – and receive a worse fit, but potentially at a better price overall. While consumers do restrict their search in the experiment, we find that it is the sellers, and not the buyers, who profit from higher filter choices. We will extend this

project in the future by analyzing the impact of competition as well as the reaction of consumers to different forms of price discrimination, e.g., personalized discounts.

Organization of Workshops and Panels

In the past years, we have organized a series of workshops and panels at international conferences. Most notably, David Hugh-Jones of the University of East-Anglia and I are co-organizing the *Cultural Transmission and Social Norms* workshop. In 2017 (CTSN 2), the event was hosted at the UEA and funded, among others, by the Thyssen Foundation, the Royal Economic Society, and the research group. In 2018, CTSN 3 was hosted by the MIT Sloan School of Business. The event attracts experts of the highest caliber in the field of normative change and will hopefully be hosted at the MPI in Bonn in 2020.

References

Álvarez Benjumea, A. (2020). Exposition to Xenophobic Content and Support for Right-wing Populism: The Asymmetric Role of Gender. Under review in *Social Science Research*, 92, Vol. 92, 102480.

Álvarez Benjumea, A., Freund, L., Luckner, K. and Winter, F. (2018). Public Signals as Coordination Devices: The Moderating Effect of Group Identity. *Submitted.*

Álvarez Benjumea, A. and Winter, F. (2018). Normative Change and Culture of Hate: An Experiment in Online Environments. *European Sociological Review*, 34(3), 223–237.

Álvarez Benjumea, A. and Winter, F. (2020). The Breakdown of Anti-Racist Norms: A Natural Experiment on Normative Uncertainty after Terrorist Attacks. *PNAS – Proceedings of the National Academy of Sciences*, 117(37), 22800–22804.

Böhm, R., Fleiß, J., Rauhut, H., Rybnicek, R. and Winter, F. (2017). Representative Evidence on Social Value Orientation in Austria. *Submitted.*

Breznau et al. (ongoing a). Midnight in the Garden of Forking Paths: The Realities of Researcher Variability.

Breznau et al. (ongoing b). Does Immigration Undermine Public Support for Social Policy? A Crowdsourced Re-Investigation.

Crosetto, P., Weisel, O. and Winter, F. (2019). A Flexible z-Tree and oTree Implementation of the Social Value Orientation Slider Measure. *Journal of Behavioral and Experimental Finance*, 23, 46–53.

Van Doesum, N., Ryan, J., Murphy, O., Aharonov-Majar, E., … , Winter, F., … (2020). Social Mindfulness Across the Globe. Revise & Resubmit *PNAS – Proceedings of the National Academy of Sciences.*

Franzen, A., Mader, S. and Winter, F. (2018). Contagious Yawning, Empathy and Their Relation to Pro-social Behavior. *Journal of Experimental Psychology: General,* 147(12), 1950–1958.

Gereke, J., Schaeffer, M. and Zhang, N. (ongoing). Immigration, Ethnic Diversity, and the Future of the Scandinavian Welfare State: A Field Experiment in Greater Copenhagen.

Hillenbrand, A. and Hippel, S. (2019). Strategic Inattention in Product Search. *MPI Discussion Paper* 2017/21.

Hillenbrand, A. and Verrina, E. (2018). The Differential Effect of Narratives. *MPI Discussion Papers* 2018/16.

Hillenbrand, A., Werner, T. and Winter, F. (2019). Volunteering at the Workplace Under Incomplete Information: Teamsize Does Not Matter. *Submitted.*

Hillenbrand, A. and Winter, F. (2018). Volunteering under Population Uncertainty. *Games and Economic Behavior*, 109, 65–81.

Kretschmer, D., Gereke, J., Winter, F. and Zhang, N. (ongoing). Ethnic Composition and Friendship Segregation: No Differential Effects for Adolescent Natives and Immigrants.

Lee, M. and Zhang, N. (2017). Legibility and the Informational Foundations of State Capacity. *Journal of Politics*, 79(1), 118–132.

Lee, M. and Zhang, N. (in preparation). From Pluribus to Unum: Statebuilding in 19th Century America.

Li, M., Adra, A., Winter, F. and Baumert, A. (ongoing). The Evolution of Anti-Muslim Sentiment: An Experimental Study in the U.S.

Nosek, B. and the SCORE-Project (ongoing). Assessing and Predicting Replicability of Social-Behavioral Science Findings.

Poertner, M. and Zhang, N. (2020). The Paradoxical Effects of Combating Corruption on Political Engagement: Evidence from Two Natural Experiments. *Submitted.*

Rauhut, H. and Winter, F. (2017). Vernetzung und Positionierung der Kölner Zeitschrift für Soziologie und Sozialpsychologie (KZfSS) in der länder-, disziplinen- und sprachübergreifenden Diskussion. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, (Suppl 1) 69, 61–74.

Rauhut, H. and Winter , F. (2017). Types of Normative Conflicts and the Effectiveness of Punishment. In: Prezpjorka, W. and Jann, B. (eds.). *Social dilemmas, institutions and the evolution of cooperation*. Oldenbourg: De Gruyter, 239–258.

Rauhut, H. and Winter, F. (2018). Der Markt der Aufmerksamkeit in der Soziologie: Trends im Publizieren, Zitieren und Netzwerken. *SSRN 3264134.*

Rauhut, H., Winter, F. and Johann, D. (2018). Does the Winner Take It All? Increasing Inequality in Scientific Authorship. In: Scott, R. A., Kosslyn, S. M. and Buchmann, M. (eds.). *Emerging Trends in the Social and Behavioral Sciences*, 1-14.

Winter, F. (2017). Real Effort Tasks in Economic Experiments: An Empirical Comparison of Tasks and their Behavioral Effects. *mimeo, MPI Collective Goods.*

Winter, F. and Diekmann, A. (2020). The Psychological Consequences of Money: Two Replications and Four Extensions. In: Buskens, V., Corten, R. and Snijders, C. (eds.). *Advances in the Sociology of Trust and Cooperation: Theory, Experiments, and Applications.* Oldenbourg: De Gruyter, 309-318.

Winter, F. and Franzen, A. (2017). Diffusion of Responsibility in Norm Enforcement: Evidence from an N-Person Ultimatum Bargaining Experiment. In: Prezpjorka, W. and Jann, B. (eds.). *Social dilemmas, institutions and the evolution of cooperation.* Oldenbourg: De Gruyter, 303–326.

Winter, F. and Kataria, M. (2020). You Are Who Your Friends Are?: An Experiment on Homophily in Trustworthiness Among Friends. *Rationality and Society*, 32(2), 223–251.

Winter, F., Rathmann, J. and Rauhut, H. (2020). The Increasing Dominance of Networking in the Production of Knowledge. Revise & Resubmit: *PNAS – Proceedings of the National Academy of Sciences.*

Winter, F., Rauhut, H. and Miller, L. (2018). Dynamic Bargaining and Normative Conflict. *Journal of Behavioral and Experimental Economics*, 74, 112–126.

Winter, F., Rauhut, H., Fleiss, J. and Hoeglinger, M. (ongoing). A Behavioral Validation of Prosociality Measures.

Winter, F. and Zhang, N. (2018). Social Norm Enforcement in Ethnically-Diverse Communities. *PNAS – Proceedings of the National Academy of Sciences,* 115(11) 2722–2727.

Zhang, N. (2018). Institutions, Norms, and Accountability: A Corruption Experiment with Northern and Southern Italians. *Journal of Experimental Political Science*, 5(1), 11–25.

Zhang, N., Aidenberger, A., Rauhut, H. and Winter, F. (2019). Prosocial Behavior in Interethnic Encounters: Evidence from a Field Experiment with High- and Low-Status Immigrants. *European Sociological Review*, 35(4), 582–597.

Zhang, N., Gereke, J. and Baldassarri, D. (2019b). Racial Avoidance in Everyday Encounters: A Field Experiment in the Milan Metro. *Mimeo.*

Zhang, N. and Lee, M. (forthcoming). Literacy and State-Society Interactions in 19th Century France. *American Journal of Political Science.*

C.VI International Max Planck Research Schools

C.VI.1 International Max Planck Research School on Behaviorally Smart Institutions (IMPRS BeSmart)

Partners:

Christoph Engel, MPI Bonn, Behavioral Law and Economics

Matthias Sutter, MPI Bonn, Experimental Economics

Felix Bierbrauer, University of Cologne, Faculty of Management, Economics and Social Sciences

Daniel Zimmer, University of Bonn, Faculty of Law

Uri Gneezy, UC San Diego, Rady School of Management

Bertil Tungodden, Norwegian School of Economics

Stefan Bechtold, ETH Zurich, Center for Law and Economics

Eyal Zamir, Hebrew University, Law School

Chair:

Christoph Engel

Interactions between Institutions and Humans in the (Neoclassical) Law and Economics Perspective

Institutions are ubiquitous. All human behavior is embedded in and guided by formal and informal institutions. The discipline of economics models individuals as having well-defined preferences, and as maximizing their personal well-being. In this perspective, institutions are constraints. The economic model predicts that different institutions give rise to differences in human behavior. This prediction resonates with observation: if one is by default an organ donor, many more organs are donated; if a reputation system reliably tracks the trustworthiness of sellers on an online platform, there is less fraudulent behavior; if the usage of roads is priced contingent on traffic conditions, there is less congestion; if free-riders can be sanctioned, all group members cooperate more. All of these examples illustrate how human behavioral dispositions and institutions interact.

Most formal institutions are legal, and many non-legal institutions are regulated by law. The disciplines of both law and economics are therefore complementary for analyzing the interplay of human behavior and institutions, and to develop institutions that promise outcomes that are individually or socially more desirable. Yet, (neoclassical) law and economics starts from a very narrow definition of human behavior. This is worrisome both from an analytic and from a normative perspective. While a particular institution might be optimal in case of a rational, well-informed, and forward-looking individual, this may not at all be the case when human behavior deviates from these assumptions. Addressing the key limitations of human behavior and deriving implications for institutional design from these limitations is the task of the proposed graduate school. In the following, we sketch some of the most troublesome, but also intellectually most interesting, limitations. Informing institutional analysis and design about these limitations will be the focus of the school.

Introducing Behavioral Law and Economics to the Analysis of Interactions between Humans and Institutions

Real institutions do not address the agents of economic textbooks; they address real people. Real people care more about goods than money. This can be captured by shifting from profit to utility space. But a richer utility function is still exclusively motivational. Arguably, the reason why real people behave in normatively undesirable ways is also cognitive. They may not understand what would be in their individual best interest. They may misinterpret the situation. They may overestimate a risk and underestimate an opportunity, or they may be overly optimistic. The way how they read the available incomplete

evidence may be tilted towards their personal interest. Even if an individual has the best of all intentions, she may lack the ability to act upon them. Socially undesirable behavior may be a habit that she cannot overcome at short notice. She may lack the necessary self-control, or the ability to plan her life on a sufficiently long time horizon. For these and many related reasons, it is paramount for institutional designers to understand the mental mechanisms and motivations that determine choices.

It is by no means the case, however, that all humans are the same. For the analyst and designer, heterogeneity in human behavior is a challenge. First-generation behavioral analysis tends to bracket heterogeneity. It implicitly assumes that variation in behavioral determinants is distributed in some well-behaved way around some central tendency. Technically, the variance is put into a noise term. Analysis focuses on the average population effect. Now, again, reality can be quite different. A huge literature has, for instance, shown that most populations consist of a sizeable minority of selfish individuals, a small minority of unconditional altruists, and a majority of conditional cooperators. This majority is good-natured only if it knows or expects a sufficient fraction of their interaction partners to be good-natured as well. Such patterned heterogeneity is not only much harder to identify and measure; it also exposes institutional designers to a much harder problem, because institutions should provide a useful framework not just for one particular type of human behavior, but for a possibly large set of different types. Ideally, institutions should engender desirable behavior even when humans are characterized by a series of behavioral limitations introduced above.

Building Behaviorally Smart Institutions

Sometimes institutional designers can adopt a two-step approach. In the first step, they reduce behavioral complexity to a degree that makes it possible to ignore occasional deviations. Markets often have this effect, as suppliers who ignore market pressure are forced to leave the market. If behavior is embedded in formal or informal institutional structures, it becomes much more predictable what agents are likely to do. Quite often, however, institutional designers have to take their addressees with the behavioral patterns and limitations they happen to have. Therefore, in a second step, it is necessary to study these patterns empirically. Running experiments will be the prime method to do so in this graduate school, since by random assignment of subjects to different treatment conditions it is possible causally to identify which institutional features generate which type of behavior, conditional on behavioral patterns and limitations. As such, experiments in the laboratory or randomized control trials in the field allow for testing how institutional design affects human behavior. However, behaviorally informed institutional design need not

be more challenging than designing institutions for agents one expects to maximize profit. In many contexts, many individuals are good-natured. Or, to use the language introduced by Aristotle: Man is a social being. When taking action, humans tend to reflect the effects on others. Many care about being good members of the social groups to which they belong. This opens up an avenue for less intrusive intervention. It may suffice to overcome temptation, or the unsubstantiated fear of being harmed. It may even be enough to make the individual see the situation in the appropriate light. This approach has been prominently labeled "nudging". Compared with the inhabitants of the animal kingdom, the behavior of humans is extraordinarily plastic. One might even say that the human species specializes in reinventing itself with every new generation. It is not pigeonholed in evolutionary niches and has the ability to conquer whatever new environment it faces. Humans are the more plastic the younger they are. This makes it important to understand the ways in which the behavior of the next generation is shaped in their youth, and the degree to which this process is open to purposeful institutional intervention. An institutional designer is a social engineer. She wants to change the behavior of some discernible fraction of the population. If unconstrained, she goes for the intervention that promises to be most effective, or the monetary or political cost of which she deems affordable. Yet, humans do not want to be treated like pawns on a chessboard. They have dignity and care about being respected by the state and others under whose sway they are. Not everything that can be done should be done. A normative discourse is required. But for this discourse to be meaningful, one must understand the object of intervention, i.e., human behavior. Handing the issue over to the inhabitants of the philosophical ivory tower is not enough. The normative discussion must go hand in hand with a growing understanding of mental and social mechanisms.

In our research program, the following questions guide us: How can one help institutional analysts and designers make more adequate definitions of the problems that call for intervention? And how can one help them design interventions that are more effective, and ideally also less intrusive? How can this program of making institutional design smarter come to life? The answers will not be found in the silo of one discipline. One needs behavioral research to understand the determinants of human behavior more deeply. One needs comparative research to assess the variability of human behavior, as well as its plasticity. One needs the analysis of existing institutions: in which contexts have the interventions delivered on their promises? In which contexts have they been counter-productive? And when have they been robust to which changes in the environment, or the political landscape? Also, one needs input from those who understand the existing arsenal of interventions: what has been used where, and for which purposes? Which are the framework conditions that must be respected?

C.VI.2 International Max Planck Research School on on Adapting Behavior in a Fundamentally Uncertain World (IMPRS Uncertainty)

During the period covered by this report, the International Max Planck Research School Adapting Behavior to a Fundamentally Uncertain World, or IMPRS Uncertainty, as it has been customarily called, has reached the end of its second six-year period. In line with the recommendations of the Max Planck Society, this school has been terminated (but the new IMPRS Be Smart was opened back-to-back). The scientific program of the school has been extensively covered in earlier reports of the institute, as well as in the regular reports of the school itself. We refer to these reports for more details. At this point, we would merely like to remind readers of the focus of the school. Combining paradigms and methods from behavioral economics, psychology, law, and other social sciences, the school has been interested in pervasive uncertainty as a condition for a very large part of social life, and as a challenge for the design and implementation of institutions meant to provide guidance.

The school was a joint venture of three Max Planck institutes: our institute, the Institute for Human Development in Berlin, and the former Institute for Economics in Jena, as well as the Universities of Jena (Departments of Economics and of Psychology), Bonn (Law School) and Cologne (Economics Department). International partners were the Hebrew University in Jerusalem, Indiana University in Bloomington, and the University of Trento. Over the years, more than 50 PhD students have successfully defended their thesis. Many of them now hold positions in academia.

Each year, the school organized three bigger events: a month-long summer school, a week-long workshop, at which each PhD project was stress-tested by faculty and students, and a topical workshop, usually partnering with a foreign research institution interested in related topics and methods.

C. Research Program

D. Research Portraits

List of Researchers in Alphabetical Order

For researchers currently working at the institute, all publications are reported. For researchers who have left the institute before or during the period covered by this report, only publications are listed that have resulted from research undertaken at the institute.

Aya Adra

Summary report

I joined Anna Baumert's Moral Courage Research Group at the Max Planck Institute for Research on Collective Goods in February 2018 as a doctoral candidate. Since then, I have published the work I carried out during my Master's studies, initiated three new central projects for my PhD, and engaged in multiple collaborations with researchers within and outside the group.

My research is broadly centred around the dynamics of social justice and change. Specifically, I have been investigating various social psychological mechanisms relevant for intergroup relations and collective action, with an eye out to mobilization by disadvantaged groups in understudied contexts, and solidarity by advantaged groups. Both of these streams of research resonate with the concept of moral courage, albeit at the collective level.

My Master's thesis investigated social psychological predictors of collective action tendencies among migrant domestic workers in Beirut, Lebanon. The findings of this work, now out in Adra, Harb, Li, and Baumert (2019), highlight the shortcomings of social psychological research on collective action, most of which has been undertaken in democratic Western countries, where protesters are relatively immune to state repression. The results demonstrate that some consistently supported pathways to collective action in the literature seem to break down in highly repressive contexts. Based on this initial evidence, I have started a project exploring the ways in which predictors of participation in collective action diverge in differentially repressive contexts. By bringing together insights from social psychology, sociology, and political science, in Adra, Li, and Baumert (work in progress (a)), I am developing and subsequently testing a theoretical framework to provide a

systematic account of how country-level repression indices modulate the relationships between different clusters of collective action predictors, and actual engagement in such actions. I will investigate this question by employing survey data from the second wave of the Global Barometer, which includes nationally representative samples collected from 93 countries between 2010 and 2013.

In parallel, I have initiated a project aiming to investigate unexplored predictors of solidarity-based collective action, undertaken by advantaged group members in support of the disadvantaged. Based on a survey of the literature on intergroup meta-beliefs (i.e., beliefs about the outgroup's beliefs) and their substantial role in shaping intergroup relations, I reason that meta-beliefs are a crucial missing piece in social psychological accounts of solidarity-based collective action, since solidarity inherently involves protesting for the outgroup. In the context of racial inequality in the U.S., we focused on three meta-beliefs that White Americans could hold: responsibility, inactivity, and allyship. In two studies, now published in Adra, Li, and Baumert (2020), in a special issue of the *European Journal of Social Psychology* entitled "Solidarity in the Spotlight: Understanding Allies' Participation in Social Change", we found that the endorsement of inactive and responsible meta-beliefs predicted higher collective action tendencies among low White identifiers, mediated by feelings of guilt and an obligation to act. Conversely, we found that both predicted lower collective action tendencies among high White identifiers, mediated by a perceived unfairness. Finally, we found that ally meta-belief was positively associated with collective action tendencies, regardless of identification. These findings highlight the importance of the meta-perspective in understanding solidarity-based collective action, and inform practical recommenda-

Contact

adra@coll.mpg.de

https://www.coll.mpg.de/aya-adra
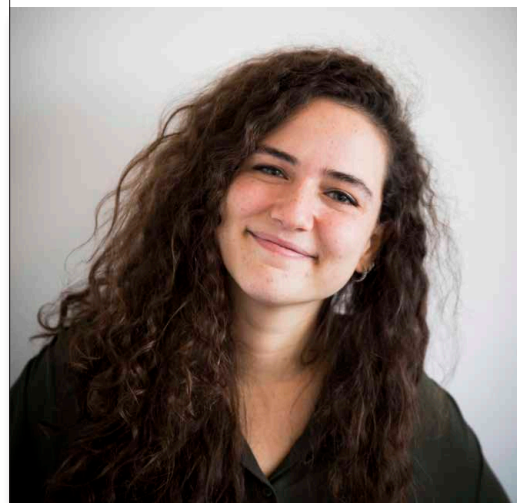
tions for activists looking to increase support against intergroup inequality among the ranks of the advantaged.

My third main project lies at the intersection of the first two, as it explores the ways in which advantaged group members react to the experience or witnessing of negative consequences against their ingroup, in response to their participation in solidarity-based collective action in support of the disadvantaged. In Adra, Li, and Baumert (work in progress (b)), I am investigating this question in the context of the Black Lives Matter movement which, in the wake of the killing of George Floyd, an unarmed black man, by a police officer in Minneapolis, Minnesota, on 25 May 2020, has sparked protests across the United States. The resulting collective actions were largely met with brutality against movement participants by a militarized police force, resulting in multiple images and videos of the police using disproportionate force against protesters, including white targets of police violence. The broad idea is to understand how different groups of white Americans react to such experiences or witnessing, and how these reactions relate to their willingness to engage (or continue engaging) in solidarity. This is an important question, seeing as how minority-led social movements often garner support from majority allies, and these allies are subsequently likely to face different forms of costs for their participation. We are currently planning the first study of this project, in which we will collect data from a politically representative sample of white Americans, to tap into the psychological correlates of experiencing or witnessing solidarity costs imposed on the advantaged ingroup, by members lying on different sides of the ideological spectrum.

Alongside these three main cornerstones of my PhD, I am collaborating with Anna Baumert, Mengyao Li, and several other local and international researchers on two broad projects. In one of these, we are investigating reactions to normative change, by exploring how Americans respond to news reports describing anti-Muslim and anti-Hispanic discrimination as having either increased or remained largely unchanged. In the second project, we are studying the psychological underpinnings of engagement in political resistance in the context of three social movements facing state repression, in Hong Kong, Chile, and Lebanon. I also had the pleasure of visiting Colin Leach, Professor of Social Psychology and Africana Studies at the University of Columbia in the City of New York, for a few months at the end of 2019. During that time, we initiated a project together. In Adra and Leach (work in progress), we are investigating black and white Americans' reactions to images of Black Lives Matter protests, which diverge in terms of their racial and social composition.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Adra, A., Li, M. and Baumert, A. (2020). What they think of us: Meta-beliefs and solidarity-based collective action among the advantaged. *European Journal of Social Psychology*.

Adra, A., Harb, C., Li, M. and Baumert, A. (2019). Predicting collective action tendencies among Filipina domestic workers in Lebanon: Integrating the Social Identity Model of Collective Action and the role of fear. *Group Processes and Intergroup Relations*, 23, 967-978.

Lectures and Presentations (since 2017)

2018

Victims to Rebels: Testing the Social Identity Model of Collective Action among Migrant Domestic Workers in Lebanon (with Harb, C., Li, M. and Baumert, A.
Political Psychology pre-conference, Society for Personality and Social Psychology's Annual Convention, Portland, OR
February 2018

From Moral Judgement to Moral Courage (with Halmburger, A., Li, M., Sasse, J. and Baumert, A.)
Justice and Morality pre-conference, Society for Personality and Social Psychology's Annual Convention, Portland, OR
February 2018

From Moral Judgement (through Harm) to Moral Courage (with Halmburger, A., Li, M., Sasse, J. and Baumert, A.)
Moral Psychology: From Neurons to Norms, Beirut, Lebanon
April 2018

Victims to Rebels: Testing the Social Identity Model of Collective Action among Migrant Domestic Workers in Lebanon (invited) (with Harb, C., Li, M. and Baumert, A.)
51st Congress of the German Psychological Society (DGPs), Frankfurt, Germany
September 2018

2019

Collective Action Tendencies among Disadvantaged and Advantaged Group Members (invited)
Social Psychology colloquium, Clark University
November 2019

2020

What they think of us: Meta-beliefs and solidarity-based collective action among the advantaged (invited) (with Li, M. and Baumert, A.)
19th General Meeting of the European Association of Social Psychology
July 2020 (postponed)

Fellowships and Grants

Open Society Foundation OSIRG Alumni Community Grant (in collaboration with Ghina Abi Ghannam), awarded to support the research project "Understanding the Social Psychological Dynamics Shaping the Lebanese Uprising" (March 2020 – now).

EASP Postgraduate travel grant, awarded to support a research visit to work with Prof. Colin Leach at Columbia University in the City of New York (September 2019 – December 2019).

Professional Activities

Ad-hoc reviewer for

Group Processes and Intergroup Relations, Journal of Experimental and Social Psychology, Social Psychology, Cyberpsychology: Journal of Psychosocial Research on Cyberspace.

Amalia Álvarez Benjumea

Summary Report

My general research interests focus on conditions under which social norms change and emerge, particularly the effects of social feedback and contextual information on perception and conformity to social norms. Most of my work has been concerned with social norms stigmatizing the overt expression of prejudice, such as racism, xenophobia, or sexism. Social norms against the public expression of views considered politically incorrect have developed over the last decades and constitute a powerful deterrent of the expression of prejudice in modern societies. However, these norms have been under threat in recent years with the rise of hate speech online and the proliferation of populist rhetoric in politics.

In one line of research, we investigate the relationship between social norms and hate speech in online settings. In Álvarez Benjumea and Winter (2018), we set up an original experimental online forum in which we implement different social-norm interventions aimed at reducing online hate speech, such as censoring hateful content or letting other users counter hate speech. We find that moderate censoring decreases the likelihood of other users voicing overtly hateful comments, while extreme censoring might have the opposite effect. We find no evidence of counter-speaking affecting online hate speech. Overall, the study shows that hate speech is context-dependent, and descriptive norms, i.e., what others do, matter.

Using the same online platform, Álvarez Benjumea and Winter (under review), look at the role of social norms in containing surges of prejudice after Islamist terrorist attacks. We exploit data collected about the occurrence of two consecutive Islamist terrorist attacks in Germany, the Würzburg and Ansbach attacks, in July 2016. The natural experiment compares the effect of the terrorist attacks in online hate speech towards refugees in contexts where a descriptive norm against the use of hate speech is strong to contexts in which the norm is ambiguous because participants observe anti-minority comments. We find that prejudice is more likely to be voiced after Islamist terrorist attacks only if the perceived social acceptability of expressing prejudice is also affected.

Furthermore, in two separate studies, I look at the dynamics of normative erosion using the same experimental paradigm. Álvarez Benjumea (in preparation) investigates how observing xenophobic content in an online platform prompts individuals also to leave racist messages. Participants exposed to norm violations were more prone to express anti-immigrant views and use hateful language. However, the effect was more pronounced for those more likely to hold anti-immigrant attitudes privately. In a second study, Álvarez Benjumea (2020), looks at whether exposure to anti-immigrant sentiment in the online context affects the willingness to support an openly anti-immigration party. Overall, the study finds no evidence that exposure to xenophobic content affects the willingness to support anti-immigrant policies. I also find that women are particularly reluctant to donate after the anti-immigrant comments raised normative concerns. My PhD thesis, "The Spreading of Hostility: Unravelling of Social Norms in Communication", builds on this line of research and presents an up-to-date portrait of the determinants of how social norms affect online hate speech. I successfully defended my thesis in August 2019 at the University of Cologne.

In a second line of research, Álvarez Benjumea, Winter, and Zhang (in preparation) look at the effect of Donald Trump's 2020 presidential campaign in social norms governing hate speech against minorities. It has been argued that the election of Donald Trump as a president known for his use of inflam-
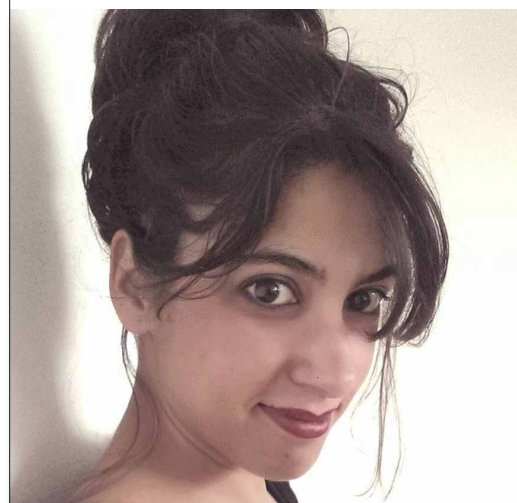
Contact

alvarezbenjumea@coll.mpg.de

https://www.coll.mpg.de/amalia-alvarez-benjumea

matory rhetoric, has emboldened those prejudiced views and caused a rise in hate speech. Beginning in the summer of 2020, we will recruit a nationally representative sample of participants who will be asked to rate the normativity of a set of statements about different minority groups. Using this design, we intend to investigate the long-term dynamics of normative change and to compare the changes in ratings on comments about (likely) targeted vs. non-targeted groups.

Finally, in a different line of research, Álvarez Benjumea, Hillenbrand, Winter, and Zhang (in preparation) study the impact of a sudden drop in media attention towards the COVID-19 outbreak in the USA on personal attitudes towards health-promoting norms. The Black Lives Matter protests after the killing of George Floyd on 25 May 2020 caused a sudden shift in media attention, while the condition of the outbreak remained unaffected. We argue that this shift in focus caused people to relax their attitudes towards health-promoting norms immediately after the killing of George Floyd, and that those attitudes continue to weaken in the period thereafter.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Álvarez Benjumea, A. (2020). Exposition to Xenophobic Content and Support for Right-wing Populism: The Asymmetric Role of Gender, *Social Science Research, 92, no. 102480*.

Álvarez Benjumea, A. and Winter, F. (2020). The Breakdown of Anti-Racist Norms: A Natural Experiment on Normative Uncertainty after Terrorist Attacks. *PNAS*, 117(37), 22800–22804.

Álvarez Benjumea, A. and Winter, F. (2018). Normative Change and Culture of Hate: An Experiment in Online Environments. *European Sociological Review*, 34(3), 223-237.

Work in Progress

Álvarez Benjumea, A. Uncovering Hidden Opinions: The Contagion of Anti-immigrant Views.

Álvarez Benjumea, A., Freund, L., Luckner, K. and Winter, F. (2018) Public Signals as

Coordination Devices: The Moderating Effect of Group Identity.

Álvarez Benjumea, A., Winter, F. and Zhang, N. Tracking the Trump Effect: A Long Term Study of How Political Campaigns Change the Unsayable.

Álvarez Benjumea, A., Hillenbrand, A., Winter, F. and Zhang, N. Risk Perception and Normative Change During the COVID-19 Outbreak.

Lectures and Presentations (since 2017)

2017

Normative Change and Culture of Hate: A Randomized Experiment in Online Communities
10th JDM Meeting, Bonn
1 June 2017

Normative Change and Culture of Hate: A Randomized Experiment in Online Communities
10th Conference of the International Network of Analytical Sociologists (INAS), Oslo
8 June 2017

Normative Change and Culture of Hate: A Randomized Experiment in Online Communities
Swiss Sociological Association (SSA), Zurich
23 June 2017

2018

When Do Terrorist Attacks Increase Hate? Evidence from a Natural Experiment
XIX ISA World Congress of Sociology, Toronto
19 July 2018

When Do Terrorist Attacks Increase Hate? Evidence from a Natural Experiment
Seminar at the Department of Political Science of the Autonomous University of Barcelona, Barcelona
29 November 2018

2019
The Breakdown of Anti-Racist Norms: A Natural Experiment on Hate Speech after Terrorist Attacks
I Jornadas Experimentos en Sociología y política, Sevilla
29 January 2019

Asymmetric Contagion of Anti-immigrant Views: The Role of Gender in the Effect of Normative Concerns
6th International Meeting on Experimental and Behavioral Social Sciences (IMEBESS), Utrecht
3 May 2019

Uncovering Hidden Opinions: The Contagion of Anti-immigrant Views
Mittelbaukolloquium, Mannheim Centre for European Social Research (MZES), Mannheim
9 May 2019

Uncovering Hidden Opinions: The Contagion of Anti-immigrant Views
12th Conference of the International Network of Analytical Sociologists (INAS), St. Petersburg
1 June 2019

Uncovering Hidden Opinions: The Contagion of Anti-immigrant Views
Centro de Ciencias Humanas y Sociales (CCHS) del CSIC, Madrid
5 June 2019

Uncovering Hidden Opinions: The Contagion of Anti-immigrant Views
2nd Conference of the The Academy of Sociology (AS), Konstanz
26 September 2019

2020

A Randomized Experiment in Online Communities
Summer Institute in Computational Social Science Maastricht (SICSS-Maastricht), Online
22 June 2020

Scholarships and Awards

European Sociological Association (ESA) PhD Summer School Scholarship 2017

Professional Activities

Reviewer for

Journal of Economic Psychology, American Sociological Review, American Political Science Review, PLOS One

Large-scale Replication Initiatives

The Crowdsourced Replication Initiative: Investigating Immigration and Social Policy Preferences, organized by N. Breznau, E. M. Rinke, A. Wuttke

Zvonimir Bašić

General Overview

I am a Senior Research Fellow at the Max Planck Institute for Research on Collective Goods. I joined the institute in October 2017 as a PhD student, and have since become a Senior Fellow after obtaining my doctoral degree from the Bonn Graduate School of Economics in December 2018. My research over the last couple of years can best be organized into three fields: i) development of economic preferences and behavior in childhood and adolescence; ii) the effects of image concerns and norms on economic behavior; and iii) the heterogeneous effects of incentives on performance.

Development of Economic Preferences and Behavior in Childhood and Adolescence

I have three projects focusing on the given topic, where I investigate the development of prosocial behavior and the underpinning mechanisms which support it. In Bašić et al. (2020), we investigated the development of egalitarian norm enforcement in childhood and adolescence. More specifically, we adapted the most commonly used third-party punishment game and ran an experiment with 635 children and adolescents. Among several findings, we observe that children start enforcing the egalitarian norm at the age of 11-12, and that children become more generous at the same time as the egalitarian norm enforcement emerges. In Bašić, Falk, and Quercia (work in progress), we have examined the influence of self-image and social-image concerns in childhood and adolescence. In particular, we manipulate the observability and self-awareness as the mediators of a person's focus on their own public and private selves, respectively, with children and adolescents between 7 and 14 years of age. We find markedly different results across genders. Both self-im-

age and social-image concerns are important drivers of behavior as early as seven to eight years of age; however, this is valid only for boys. Finally, in my largest and most recent project on this topic (Bašić, Bindra, Glätzle-Rützler, Romano, Sutter, and Zoller; work in progress), we have studied the ontogeny of cooperation in young children (3-6 years of age). Specifically, we conducted an iterated prisoner's dilemma game with almost 1000 children and have implemented four between-subject treatments that allow us to investigate the behavioral effects of three evolutionary pillars of cooperation: direct reciprocity, indirect reciprocity, and third-party punishment. The study offers a multitude of findings and key insights for practice on how to increase cooperative behavior in future generations.

The Effects of Image Concerns and Norms on Economic Behavior

I have several projects in this field. Together with my co-authors, I investigated the influence of self-image and social-image concerns on prosocial behavior in one project (Bašić, Falk, and Quercia; work in progress), and on lying in another (Bašić and Quercia; 2020). We show that both self-image and social-image concerns are relevant drivers of prosocial behavior. In contrast, while social-image concerns work as a valid driver in the lying domain, self-image concerns seem to be a much weaker motive, which challenges popular opinion in the lying literature. In Bašić and Verrina (2020), we investigated the predictive value of personal and social norms in economic contexts. In line with our simple utility framework, we show that personal norms – together with social norms and monetary payoff – are strong predictors of economic behavior across a variety of economic settings. Moreover, we find that social-image concerns heighten the relevance of social norms, but do not diminish the relevance

Contact

basic@coll.mpg.de

https://www.coll.mpg.de/zvonimir-basic

of personal norms, and that personal and social norms are complements in predicting behavior.

The Heterogeneous Effects of Incentives on Performance

Together with my co-authors, I am currently gathering data for a large-scale lab-in-the-field study conducted in high schools, where we investigate how different incentive schemes provoke different performances for various individuals (Bašić, Bortolotti, Cappelen, Gneezy, Salicath, Schmidt, Schneider, Sutter, and Tungodden; work in progress). In particular, we investigate which types of people – with regard to their relevant demographics, preferences, and traits – best respond to which types of incentive scheme.

Research Agenda

My research agenda for the future focuses on the aforementioned topics, as I plan to work further on the heterogeneous effects of incentives on performance, as well as the development of economic preferences, where a lot of questions – especially in the development of prosocial behavior – still remain unanswered. Importantly, in the area of image concerns and norms on economic behavior, I plan to study the functioning and interplay of self-image and social-image concerns and personal and social norms in light of recent signaling models. One important question in this area is the correctness and potential biases in the updating of others' types based on their actions. While the updating function is the very core of usual signaling models, little is known about how people actually update about others based on their behavior, and which potential biases might emerge in this process.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Bašić, Z., Falk, A. and Kosse, F. (2020). The Development of Egalitarian Norm Enforcement in Childhood and Adolescence. *Journal of Economic Behavior & Organization*, 179, 667-680.

Working Papers

Bašić, Z. and Verrina, E. (2020). Personal norms — and not only social norms — shape economic behavior. *MPI Discussion Paper* 2020/25.

Bašić, Z. and Quercia, S. (2020). The Influence of Self and Social Image Concerns on Lying, *MPI Discussion Paper* 2020/18.

Work in Progress

Bašić, Z., Bindra, C. P., Glätzle-Rützler, D., Romano, A., Sutter M. and Zoller, C. (work in progress). The Roots of Cooperation.

Bašić, Z., Bortolotti, S., Cappelen, A., Gneezy, U., Salicath, D., Schmidt, S., Schneider, S. O., Sutter, M. and Tungodden, B. (work in progress). Heterogeneity in Effort Provision: Evidence from a Lab-in-the-Field Experiment.

Bašić, Z., Falk, A. and Quercia, S. (work in progress). The Influence of Self and Social Image Concerns in Childhood and Adolescence.

Bašić, Z., Falk, A. and Quercia, S. (work in progress). Self-image, Social image and Prosocial Behavior.

Lectures and Presentations

2017

The Influence of Self and Social Image Concerns on Lying
10th Maastricht Behavioral Experimental Economics Symposium, Maastricht University
June 2017

The Influence of Self and Social Image Concerns on Lying
Economic Science Association (ESA) European Meeting, Vienna University of Economics and Business
September 2017

The Influence of Self and Social Image Concerns on Lying
Cultural Transmission and Social Norms 2, East Anglia University
December 2017

2018

Self-image, Social Image and Prosocial Behavior
The Fifth International Meeting on Experimental and Behavioral Social Sciences (IMEBESS), European University Institute, Florence
May 2018

The Influence of Self and Social Image Concerns on Lying
Inaugural Conference of the Experimental Economics Group at MPI, Bonn
May 2018

Self-image, Social Image and Prosocial Behavior
11th Maastricht Behavioral Experimental Economics Symposium, Maastricht University
June 2018

The Influence of Self and Social Image Concerns on Lying
Economic Science Association (ESA) World Meeting, Berlin
June–July 2018

2019

Self-image, Social Image and Prosocial Behavior
MPI Bonn, MPI Munich and Innsbruck University workshop, University of Innsbruck
February 2019

Self-image, Social Image and Prosocial Behavior
Workshop on Experimental and Behavioral Economics, MPI Bonn
May 2019

Croatia that We Need – View from Abroad
Presentation and panel discussion, University of Split, Croatia
May 2019

The Influence of Self and Social Image Concerns on Lying
13th International Conference „Challenges of Europe", University of Split, Croatia
May 2019

Self-image, Social Image and Prosocial Behavior
Economic Science Association (ESA) European Meeting, Dijon
September 2019

2020

The Roots of Human Cooperation
Seminar talk, The University of Mainz
January 2020

Personal norms — and not only social norms — shape economic behavior
Online-Around-the-Clock Conference
September 2020

Professional Activities

Reviewer for

Management Science, The Scandinavian Journal of Economics, Journal of Economic Psychology, Journal of Behavioral and Experimental Economics

Anna Baumert

Summary Report

Throughout my research, I strive to integrate personality and social psychological perspectives on the understanding of subjective experience and behavior. The guiding question is which psychological processes explain systematic individual differences in social behavior. Together with an international group of personality psychologists, I have laid out a process-oriented understanding of personality traits, proposing that traits can be best understood as relatively stable interindividual differences in how psychological processes unfold in relevant situations (Baumert et al., 2017a, b; Baumert, Schmitt, and Perugini, 2019). Accordingly, my research is generally focused on systematic interactions and transactions between situational factors and dispositional difference variables. In terms of content, my main research interest lies in the area of morality and social justice. I have investigated processes of social and affective information processing and their role in shaping emotional and behavioral reactions to morality- and justice-related situations, from the different perspectives of perpetrator, victim, and bystander.

In the last three years, I have extended my research on dispositional sensitivity to injustice with a cross-cultural as well as developmental perspective. Across samples from Germany, Australia, and the Philippines, we found that dispositional sensitivity to injustice from a victim's perspective was correlated with less cooperative behavioral decisions in a trust game, resonating with the theoretical notion that victim sensitivity involves a motivation to avoid being exploited. Conversely, sensitivity to injustice from the observer, beneficiary, or perpetrator perspective was associated with less self-oriented decisions, even under conditions of temptation (Baumert et al., 2020). In longitudinal datasets, I have tested hypotheses on processes of intraindividual change in sensitivity to injustice in young adulthood. Results from intensive assessments of daily experiences indicated that repeatedly perceiving and thinking about unjust victimization predicted intraindividual increases in victim sensitivity, but not in perpetrator sensitivity (Baumert, Maltese, and Lischetzke, work in progress; Maltese and Baumert, 2019).

In my Max Planck research group, which started in May 2017, our focus is on the topic of moral courage. Moral courage manifests itself when initially uninvolved witnesses stand up against moral violations of others, despite the risk of personal costs. One major goal is to establish moral courage as a "mainstream" research topic in personality and social psychology. We have already taken a major step in this direction by editing a special issue "Standing Up Against Moral Violations" in the *Journal of Experimental Social Psychology* (Baumert, Li, Sasse, and Skitka, 2020). As another milestone, we have developed an integrative framework of moral courage, which spans previously disconnected lines of research, highlighting the common antecedents and barriers, and their interrelation (Li, Sasse, Halmburger, and Baumert, under review). In our empirical work, we study the psychological processes that explain whether individuals intervene against the moral transgressions of others or remain inactive. In the projects that I supervise, we have focused on attentional, interpretational, as well as emotional processes (Sasse, Halmburger and Baumert, forthcoming; tho Pesch, Fiedler and Baumert, work in progress; Toribio Flórez, Sasse and Baumert, work in progress). Moreover, we have included the roles of personality dispositions, on the one hand, and societal contexts, on the other, in our research about antecedents and barriers of moral courage.

Besides conceptual integration, I strongly advocate multi-method approaches

Contact

baumert@coll.mpg.de

https://www.coll.mpg.de/anna-baumert

in the study of psychological processes that explain whether individuals intervene against moral transgressions of others or remain inactive. We combine experimental designs with quasi-experimental and correlational designs, including longitudinal designs with intensive assessments. As assessment methods, we employ behavioral observations in reduced settings of economic games, but also in more complex everyday situations in lab and field. We also rely on retrospective self-reports in qualitative interviews, as well as on self-reported behavior and experiences in so-called ambulatory assessment. For example, in Halmburger, Izydorczyk, and Baumert (work in progress), in daily assessments across three weeks, we collected reports of observed everyday norm violations, their cognitive and emotional appraisals, and reactions. In open-ended descriptions of the incidents, participants reported a great variety of the kinds of violation, with a substantial range of severity and moral relevance, as rated by independent samples. Participants differed markedly in the frequency with which they reported observing norm violations. Only in 24% of cases was someone reported to have intervened. Within individuals across incidents, anger reactions, as well as appraisals of efficacy, responsibility, and risk most strongly predicted intervention. As another example (Baumert, Halmburger, Küchler, Sasse, and Wagner, work in progress), we collected data on personality dispositions from award-winners of moral courage prizes in Germany and Austria and compared them with demographically matched reference groups. Most pronouncedly, morally courageous individuals stood apart from individuals who reported not having acted in a morally courageous way in the past, the former exhibiting heightened levels of moral attentiveness and a disposition towards anger.

Extending the focus on moral courage to its social consequences, together with Dr. Sasse as Co-PI, and collaboration partners from computer science at the TU Munich, I have received external

funding for a project on the effectiveness of human vs. AI-based intervention against hate speech on the internet.

Since 2017, my research has been recognized internationally as evidenced by three awards that I received in personality and social psychology (2020 Early Career Award of the International Society for Justice Research; 2020 Award for Outstanding Contribution to European Personality and Social Psychology, by the European Association for Personality Psychology and the European Association for Social Psychology; 2017 William Stern Prize for Innovative Research in Personality Psychology, by the Personality and Psychological Assessment Section of the German Psychological Association). Also, since October 2017, I am a tenure-track professor for Personality and Social Psychology at TU Munich. Recently, I received a job offer for a W3 professorship for Social and Personality Psychology at the University of Wuppertal.

Publications (since 2017)

Articles in Peer-Reviewed Journals
(* shared first authorship)

Mõttus, R., ... Baumert, A., et al. (forthcoming). A Pragmatic and Pluralistic Personality Research: Different Goals Beget Different Methods. *European Journal of Personality*.

Sasse, J., Halmburger, A. and Baumert, A. (forthcoming). The Functions of Anger in Moral Courage – Insights from a Behavioral Study. *Emotion*.

Adra. A., Li, M. and Baumert, A. (2020). What They Think of Us: Meta-Beliefs and Solidarity-Based Collective Action Among the Advantaged. *European Journal of Social Psychology.*

Baumert, A., Buchholz, N., Zinkernagel, A., Clarke, P., MacLeod, C., Osinsky, R. and Schmitt, M. (2020). Causal Underpinnings of Working Memory and Stroop Interference Control: Testing the Effects of Anodal and Cathodal tDCS Over the Left DLPFC. *Cognitive, Affective, and Behavioral Neuroscience,* 20(1), 34-48.

Baumert*, A., Maltese*, S., Reis, D., MacLeod, C., Tan-Mansukhani, R., Galang, A. J. R., Galang, M. G. C. and Schmitt, M. (2020). A Cross-Cultural Study of Sensitivity to Injustice and Its Consequences for Cooperation. *Social

Psychology and Personality Science,* 7, 899-907.

Baumert*, A., Li*, M., Sasse*, J. and Skitka, L. (2020). Standing up against Moral Violations: Psychological Processes of Moral Courage. *Journal of Experimental Social Psychology,* 88, 1-3.

Dang, J., Barker, P., Baumert, A., et al. (2020). A Multi-Lab Replication of the Ego Depletion Effect. *Social Psychology and Personality Science*.

Adra, A., Harb, C., Li, M. and Baumert, A. (2019). Predicting Collective Action Tendencies Among Filipina Domestic Workers in Lebanon: Integrating the Social Identity Model of Collective Action and the Role of Fear. *Group Processes and Intergroup Relations*, 23, 967-978.

Baumert, A., Schmitt, M. and Perugini, M. (2019). Towards an Explanatory Personality Psychology: Integrating Personality Structure, Personality Process, and Personality Development. *Personality and Individual Differences*, 147, 18-27.

Geissner, E., Knechtl, L., Baumert, A., Rothmund, T. and Schmitt, M. (2019). Schulderleben bei Zwangspatienten. [Guilt Experience in Patients with Obsessive-Compulsive Disorder]. *Verhaltenstherapie.*

Halmburger, A., Baumert, A. and Rothmund, T. (2019). Seen One, Seen 'Em All? Do Reports About Law Violations of a Single Politician Impair the Perceived Trustworthiness of Politicians in General and of the Political System? *Journal of Social and Political Psychology*, 7, 448-477.

Maltese, S. and Baumert, A. (2019). Linking Longitudinal Dynamics of Justice Sensitivity and Moral Disengagement. *Personality and Individual Differences*, 136, 173-177.

Baumert, A., Schmitt, M., Perugini, M., Johnson, W., Blum, G., … and Wrzus, C. (2017) Integrating Personality Structure, Personality Process, and Personality Development. *European Journal of Personality*, 31, 503-528.

Baumert, A., Schmitt, M., Perugini, M., Johnson, W., Blum, G., … and Wrzus, C. (2017) Working Towards Integrating Personality Processes, Personality Structure, and Personality Development (Rejoinder). *European Journal of Personality*, 31, 577-595.

Book Chapters, Invited Comments, and Research Reports

Bablok, I., Baumert, A. and Maier, M. (2020). Implizite politische Einstellungsmessung. In: T. Faas, O. W. Gabriel and J. Maier (Eds.), *Politikwissenschaftlichen Einstellungs- und Verhaltensforschung. Handbuch für Wissenschaft und Studium.* Baden-Baden: Nomos, 615-635.

Blum, G. S., Baumert, A. and Schmitt, M. (2020). Personality Processes– From Description to Explanation. In: J. F. Rauthmann (Ed.). *The Handbook of Personality Dynamics and Processes.* Elsevier.

Baumert, A. and Sasse, J. (2018). Personality as Interpersonal Dynamics: Understanding Within-Situation Processes and Their Recurrence Across Situations and Time. Invited Commentary. *European Journal of Personality,* 32(5), 525-624.

Halmburger, A., Rotmund, T., Baumert, A. and Maier, J. (2018). Trust in Politicians – Understanding and Measuring the Perceived Trustworthiness of Specific Politicians and Politicians in General as Multidimensional Constructs. In: E. Bytzek, U. Rosar and M. Steinbrecher (Eds.), *Wahrnehmung – Persönlichkeit – Einstellungen. Psychologische Theorien und Methoden in der Wahl- und Einstellungsforschung.* Wiesbaden: Springer VS, 235-302.

Wrzus, C., Quintus, M. and Baumert, A. (2018). Measuring Personality Processes in the Lab and in the Field. In: V. Zeigler-Hill and T. Shackelford (Eds.), *SAGE Handbook of Personality and Individual Differences.* Sage. 231-256.

Baumert, A. and Blum, G. (2017) Employing Situational Simulations to Understand Processes of Person-Situation Transactions. Invited Commentary. *European Journal of Personality*, 31(5), 441-502.

Pätzel, J., Baumert, A., Beierlein, C. and Dahle, K.-P. (2017). Die Ungerechtigkeitssensibili-tät-Skalen-8 (USS-8). In: U. Kobbé (Eds.), *Forensische Prognosen. Ein transdisziplinäres Praxismanual.* Lengerich: Pabst, 233-238.

Work in Progress

Baumert, A., Maltese, S. and Lischetzke, T. A Social-Cognitive Mechanism of Change and Development in Dispositional Victim Sensitivity.

Baumert, A., Halmburger, A., Küchler, G., Sasse, J. and Wagner, J. Personality Characteristics of Moral Courage: An Extreme Groups Approach.

Halmburger, A., Izydorczyk, D. and Baumert, A. Did Someone Intervene? an Experience Sampling Study on Daily Norm Violations.

Jayawickreme, E., Adler, J., Baumert, A., Beck, E. and Fleeson, W. Dynamic Personality Science.

Revise & Resubmit

Tho Pesch, F., Fiedler, S. and Baumert, A. Seeing Moral Transgressions: Moral Wiggle Room in Costly Punishment. R & R: *Journal of Economic Psychology.*

Under Review

Li, M., Watkins, M. H., Allard, A., Hirschberger, G., Kretchner, M., Leidner, B. and Baumert, A. (under review). National Glorification and Attachment Differentially Predict Support for Intergroup Conflict Resolution: Scrutinizing Cross-Country Generalizability.

Sasse, J., Baumert, A., Nazlic, T., Alrich, K. and Frey, D. (under review). Mitigation of Justice Conflicts: Effectiveness of Qualifying Subjective Justice Views as an Intervention Technique in Comparison to Empathy Induction.

Toribio-Florez, D., Sasse, J. and Baumert, A. (under review). Third-party Punishment under Situational Uncertainty: The moderating role of Justice Sensitivity.

Awards and Funding (since 2017)

2020 – 2023
„Personalized AI-based Interventions Against Online Norm Violations: Behavioral Effects and Ethical Implications", funded by the Institute for Ethics in Artificial Intelligence at Technical University Munich (500,000 €, in collaboration with Prof. Grossklags)

2020
Early Career Award from the International Society for Justice Research ISJR (500 €)

Award for Outstanding Contribution to European Personality and Social Psychology, by the European Association for Personality Psychology and the European Association for Social Psychology

2017
William Stern Award for innovative research in personality psychology; awarded by the Personality and Individual Difference section of the German Psychological Association (DGPs)

2016 – 2018
"Moral Courage", funded by "The Beacon Project on the Morally Excellent" (115,000 USD)

Lectures and Presentations (since 2017)

2017

Experiences of Injustice at the Beginning of University Life. Development of Dispositional Sensitivity to Injustice (invited) (with Maltese, S.)
University of Milan, Italy
15 May 2017

NOSI – Netzwerk der Open Science Initiativen an psychologischen Instituten im deutschsprachigen Raum (invited)
DGPs – ZPID – Workshop, "Datenmanagement in der Psychologie: Anforderungen, Werkzeuge und Praxis", Trier
30 June 2017

Moral Courage. Psychological Processes of Bystander Intervention against Norm Violations (invited)
University of Bonn, Social and Legal Psychology lab (Prof. R. Banse). Bonn, Germany
3 July 2017

Vorhersagen und erklären? Prozessorientierte Persönlichkeitspsychologie am Beispiel Sensibilität für Ungerechtigkeit
Award presentation, Wilhelm Stern Award of the German Psychological Association's Section Personality and Assessment, Munich, Germany
4 September 2017

2018

"Sensitive Periods" in Adult Personality Development? (invited) (with Maltese, S. and Lischetzke, T.)
Preconference Personality Dynamics, Processes, and Functioning, Society for Personality and Social Psychology, Atlanta, USA
1-3 March 2018

Moral Courage (invited) (with Li, M.)
University of Illinois at Chicago, lab meeting Prof. Linda Skitka, Chicago, USA
7 March 2018

Justice Sensitivity – Processes Underlying Pro- and Antisocial Behavior (invited)
University of Ulm, Personality and Assessment lab (Prof. O. Wilhelm), Ulm, Germany
16 May 2018

Moral Courage (invited) (with Halmburger, A.)
Beacon Project Final Meeting, Winston-Salem, NC, USA
28 June – 1 July 2018

How to Test Congruency of Personality Factors? Experimental Approaches (invited)
Expert meeting, "Conceptualizing and Assessing Personality: New Approaches to Fundamental Questions", sponsored by the European Association for Personality Psychology, Edinburgh, UK
6-8 September 2018

Social Justice Research (with Schmitt, M.)
Symposium, 51st congress of the Deutsche Gesellschaft für Psychologie, Frankfurt am Main
15-20 September 2018

Zivilcourage – Moral Courage: Psychological Determinants of Bystander Intervention Against Norm Violations (with Sasse, J.)
Symposium, 51st congress of the Deutsche Gesellschaft für Psychologie, Frankfurt am Main
15-20 September 2018

Discussant for Hot Topic Session Open Science
51st congress of the Deutsche Gesellschaft für Psychologie, Frankfurt am Main
15-20 September 2018

Frauen in der Differentiellen Psychologie und Psychologischen Diagnostik (invited) (with Junghänel, M. and Renner, K.-H.)
German Psychological Association's Section Personality and Assessment General Assembly, Frankfurt am Main, Germany
20 September 2018

Psychologie der Zivilcourage (invited)
Max Planck Day of Science, Schloss Ringberg, Germany
19 October 2018

2019

State-of-the-art Session on Moral Courage. Invited symposium (with Li, M., dal Cason, D. and Skitka, L.
Fachgruppentagung Differentielle Psychologie, Persönlichkeitspsychologie und psychologische Diagnostik, Dresden
16 September 2019

Teaching (since 2017)

TUM School of Education

Winter term 2017/18
Lecture, Pädagogische und Sozialpsychologie, Master Berufliche Bildung Integriert (Master level; 2 SWS)

Summer term 2018
Lecture and Practice, Test theory and advanced methods, International Master Research in Teaching and Learning Science (Master level; 4 SWS)

Winter term 2018/19 and winter term 2019/20
Lecture, Diagnostik und Evaluation, Studiengänge des gymnasialen Lehramts (Master level; 2 SWS; 100 % share)

Teaching outside of TUM

PhD level

03/2018 and 10/2018; 3 days per workshop
Teacher at PhD workshops of the German Association for Psychology's section Personality and Assessment

1 week, 08/2018
International Max Planck Research School "Uncertainty". Lecture and practice. Personality and assessment related to fairness and altruism

2017, May 15th
Introduction to Ambulatory Assessment. PhD Workshop. University of Milan, Italy

Master level

20 November 2017
NYU Berlin. Lecture invitation, "Social Psychology of Moral Courage". Berlin.

Public Service

2016-2022

Elected Member of the Executive Committee and Secretary of the European Association of Personality Psychology

Since 2020

Head of Task Force Diversity and Inclusion (Fachgruppe Differentielle, Persönlichkeitspsychologie und Psychologische Diagnostik der Deutsche Gesellschaft für Psychologie)

Professional Activities

Editorial Boards

European Journal of Personality (Consultant Editor, Guest Editor)

Journal of Experimental Social Psychology (Guest Editor, Special Issue on Moral Courage, 2019)

Personality Science (Associate Editor)

Social Psychology (Associate Editor)

Zeitschrift für Politische Psychologie (Member of the Scientific Council)

Memberships

Association for Research in Personality (ARP)

International Society for Justice Research (ISJR)

German Psychology Association (DGPs)

European Association for Personality (EAPP)

Ad-hoc Reviews

British Journal of Social Psychology; Diagnostica; European Journal of Psychological Assessment; European Journal of Social Psychology; Games; Human Performance;
In-Mind; Journal of Cross-Cultural Psychology; Journal of Experimental Social Psychology; Journal of Individual Differences; Journal of Media Psychology; Journal of Personality; Journal of Personality and Social Psychology; Journal of Research in Personality; Journal of Social and Personal Relationships; Journal of Social Psychology; Nature Human Behavior; Organizational Psychology Review; Personality and Individual Differences; Personality and Social Psychology Bulletin; Personality and Social Psychology Review; Philosophical Psychology; PlosOne; Political Psychology; Psychological Science; Psychology of Violence; Social Justice Research; Social Psychology and Personality Science; Trends in Cognitive Sciences

Alexander von Humboldt Foundation

German Research Foundation DFG

John Templeton Foundation

German National Academic Foundation

Stefania Bortolotti

Overview

Since December 2019, I am an Assistant Professor at the University of Bologna. I was a Senior Research Fellow at the institute from October 2017 till December 2019. Prior to joining the EEG group, I held positions at the universities of Cologne and Bologna. My research in the past years has focused on four main topics: (i) inequality, fairness ideals, and dishonest behavior; (ii) the roots of economic preferences; (iii) incentives and personal characteristics; (iv) the gender gap in science.

Inequality, Fairness Ideals, and Dishonest Behavior

The steady increase in within-country inequality is often acknowledged as one of the most pressing problems of our society. The experimental toolbox can help us to understand better how inequality is perceived and to what extent it is justified and tolerated. Since 2018, I have worked on several projects in this field – either by collecting new data for existing projects or by pursuing new ideas.
In a study, I have tested fairness ideals in a context in which the rich have potentially acquired their fortunes by means of cheating (Bortolotti et al., 2017). We found that the shadow of cheating strongly affects what is deemed fair, which is why societies characterized by substantial numbers of cheating incidents might tend to display polarized views about redistribution. Together with Soraperra, Kölle, and Sutter (in preparation), we have extended the above paradigm to situations in which the poor might lose their wealth because of the opportunistic behavior of another person (betrayal). We found that redistribution levels are significantly higher when the misfortunes of the poor can be attributed to the opportunistic behavior of another person rather than to sheer luck.

In another project (Bigoni et al., 2019b), I have investigated to what extent economic inequality may fuel frustration, possibly leading to antisocial behavior. We observe that the poor engage in forms of antisocial behavior more often when reducing inequality would be safe for the rich. These results cannot be rationalized by inequality aversion alone, while they are in line with recent models that focus on anger as the result of the frustration of expectations. Another paper studies the interplay between income and trust (Bigoni et al., 2018). An online experiment with Koelle and Wenner (in preparation) studies the role of time preferences of honesty behavior.

The Roots of Economic Preferences

Understanding persistence and changes of basic economic preferences and prosociality across the life span and key personal characteristics is fundamental to informing theory and practice. In a representative sample of the Austrian population, Romano et al. (forthcoming) find that individuals used age as key information to conditioning behavior. All age groups expect less cooperation from young partners than from older and middle-aged partners. However, relative to young adults, older adults are more cooperative with young partners. In Bortolotti et al. (2020, submitted), we shed new light on the relationship between cognition and patience, by documenting that the correlation between cognitive abilities and delay discounting is weaker for the same group of individuals if choices are incentivized.

Incentives and Personal Characteristics

Understanding how to motivate people to provide effort is of key importance for success in many domains of life, ranging from the educational sector to the labor market. Some people thrive and express their best potential in competitive environments, while others

Contact
bortolotti@coll.mpg.de

https://www.coll.mpg.de/stefania-bortolotti

instead choke under such pressure. Some people are diligent and work hard regardless of the environment; others need monetary rewards to be motivated. In an ongoing large-scale lab-in-the-field experiment (with Bašić et al.), we strive to understand how sociodemographic characteristics, personality traits, IQ, and preferences shape one's performance under different incentive schemes. The experiment involves thousands of high-school children and tests performance under exogenously assigned incentives. These data will then be coupled with a rich dataset on individual characteristics.

Gender Gap in Science

Females remain largely underrepresented in STEM majors, and this difference in the choice of major subject can explain a sizable portion of the gender wage gap. Only a small portion of the gender gap in science can be explained by differences in grades or ability in math, while expectations about pecuniary and non-pecuniary motives have been shown to play a crucial role in explaining the gap. Yet, little is known about possible gender biases in the belief formation process and how to alleviate this potential problem. In a project with Bigoni and Kießling, we aim to contribute to this debate empirically in three ways: (i) implement a large-scale randomized intervention to inform students' and parents' beliefs better about STEM majors; (ii) test the effect of the intervention on beliefs – pecuniary and non-pecuniary returns – and how this translates into university choices; and (iii) assess the long-term effects (grades, drop-out, and life satisfaction) of the intervention.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Romano, A., Bortolotti, S., Hofmann, W., Praxmarer, M., Sutter, M. (forthcoming). Generosity and Cooperation Across the Life Span: A Lab-in-the-Field Study. *Psychology and Aging.*

Bigoni, M., Bortolotti, S., Casari, M., Gambetta, D. (2019a). At the Root of the North-South Cooperation Gap in Italy: Preferences or Beliefs? *Economic Journal*, 129(619), 1139-1152.

Bigoni, M., Bortolotti, S., Parisi, F., Porat, A. (2017). Unbundling Efficient Breach: An Experiment, *Journal of Empirical Legal Studies*, 14(3), 527-547.

Revise & Resubmit

Bigoni, M., Bortolotti, S., Nas Ozen, E. (2019b). Economic Polarization and Antisocial Behavior: An Experiment. *IZA Discussion Paper* no. 12553. R & R at *GEB*.

Working Papers

Bigoni, M., Bortolotti, S. and Rattini, V. (2018). A Tale of Two Cities: An Experiment on Inequality and Preferences. *IZA Discussion Paper* no. 11758.

Bortolotti, S., Soraperra, I., Sutter M., and Zoller, C. (2017). Too Lucky to be True: Fairness Views under the Shadow of Cheating. *CESifo Working Paper* no. 6563.

Bortolotti, S., Dohmen, T., Lehmann, H., Meyer, F., Pignatti, N. and Torosyan, K. (2020, submitted). Patience, Cognitive Abilities, and Cognitive Effort: Survey and Experimental Evidence from a Developing Country.

Work in Progress

Bortolotti, S., Kölle, F., Soraperra, I. and Sutter, M. (in preparation) Betrayal, Risk Taking, and Redistribution.

Bortolotti, S., Kölle, F. and Wenner, L. (in preparation). Delayed Honesty.

Bašić, Z., Bortolotti, S., Cappelen, A., Gneezy, U., Salicath, D., Schneider, S. O., Sutter, M. and Tungodden, B. (ongoing) Heterogeneity in Effort Provision: Evidence from a Lab-in-the-Field Experiment.

Bigoni, M., Bortolotti, S. and Kiessling, L. (ongoing) Gender Gap in Science: The Effect of Role Models on Expected Pecuniary and Non-Pecuniary Returns.

Grants

2019
Diligentia Foundation Research Grant: "Gender Gap in Science", Diligentia Foundation, PI (Euros 36,000).

Lectures and Presentations (since 2017)

2018

Economic Polarization and Antisocial Behavior: An Experiment
SEET, Lecce
February 2018

Too Lucky to be True: Fairness Views under the Shadow of Cheating
Invited seminar at WHU – Otto Beisheim School of Management, Vallendar
March 2018

Betrayal, Risk Taking, and Redistribution
IMEBESS, Florence
May 2018

Economic Polarization and Antisocial Behavior: An Experiment
ESA, Berlin
June 2018

Too Lucky to be True: Fairness Views under the Shadow of Cheating
MBEES, Maastricht
June 2018

Economic Polarization and Antisocial Behavior: An Experiment
Lisbon Meeting on Economics and Political Institutions
November 2018

Too Lucky to be True: Fairness Views under the Shadow of Cheating
Invited seminar at University of Turin
December 2018

2019

Betrayal, Risk Taking, and Redistribution
ESA Abu Dhabi
February 2019

Too Lucky to be True: Fairness Views under the Shadow of Cheating
Workshop on behavioral and experimental economics – MPI Bonn
May 2019

Betrayal, Risk Taking, and Redistribution
Invited seminar at University of Munich
June 2019

Economic Polarization and Antisocial Behavior: An Experiment
Invited seminar at Wageningen University
June 2019

Cognition and Risk Preferences
ESA Vancouver
July 2019

Teaching

Summer term 2018
Experimental Economics: Methods
University of Hamburg (graduate and post-graduate level)

D. Research Portraits

Philip Brookins

Summary Report

My primary research interest is on the optimal design of contests and tournaments within the context of organizational, personnel, and innovation economics. A contest is a strategic situation in which several agents expend costly and irreversible effort, time, resources, etc., with the goal of winning a valuable prize or reward. The applications of contest theory do not end with organizational settings. Indeed, contests are everywhere: animals compete for scarce resources, countries engage in warfare, lawyers litigate opposing sides of a case, firms engage in advertising "wars" to increase market shares, and so on.

During my time as a PhD student at the Florida State University, my research was largely focused on the optimal design of group contests with heterogeneous players and contests with incomplete information. During my three-year Senior Research Fellow position at the Max Planck Institute (2016-2019), I continued my research on incomplete information in contests and contests between groups, and additionally began exploring population uncertainty in a variety of competitive situations. I am interested in such topics due to the reasonableness of the assumptions. That is, certainty about the population, and complete information about those within it, are too strong of assumptions. Economic modeling with "weak" assumptions is a consistent theme of my research, one I hope to continue indefinitely.

During my stay at the MPI, I worked on and published several papers in top journals for my fields of research – experimental economics and economic theory. In fact, one of my largest projects that I worked on while at the MPI is currently forthcoming in Management Science (Boosey et al., 2020), one of the highest-quality outlets for research on experimental and behavioral economics, management science, and operations research. In my final year at the MPI, I accepted a job offer from the University of South Carolina, a flagship university in the Southeastern United States, where I have just finished my first year as a tenure-track Assistant Professor of Economics.

Finally, as part of the research abroad program of the MPI, I visited Harvard University on three separate occasions and became a visiting fellow at the Institute for Quantitative Social Sciences at Harvard University, as well as a visiting fellow at the Laboratory for Innovation Science at Harvard. During my three-year affiliation (and currently), I worked on several projects regarding the optimal design of innovation contests. One notable project was my consulting work for the National Academies of Sciences, Engineering, and Medicine (NASEM), where I wrote a survey on the current landscape and future directions of inducement prizes. I advised the NASEM council members to continue to explore the optimal design of contests, and suggested that researchers especially focus on collecting empirical data to further our understanding of optimal contest design. The principal investigators of this NASEM project on inducement prizes is currently under preparation.

Below, I describe in detail my most active research areas and list all publications, working papers, and works in progress.

Population Uncertainty

In many contests, the total number of competitors is not known at the time of making individual investment decisions. For example, an architectural design student planning to submit blueprints for an upcoming contest to build a new university library, whereby the student with the best submission wins a monetary prize, may know the

Contact
Philip.Brookins@Moore.SC.Edu

https://www.coll.mpg.de/phil-brookins

maximum total number of competitors, i.e., the number of architectural students enrolled, but the precise number of students actively investing time and planning to make a submission is unlikely to be known ex-ante. Compared to knowing the total number of students planning to submit a design, will she invest more or less time in he r project?

Motivated by the example above, Boosey et al. (2017) conducted a series of experiments to explore how individuals behave in competitive situations under population uncertainty. When the number of competitors is known, theory predicts that individuals decrease their effort when the number of competitors increases. Under population uncertainty, however, this comparative static only holds when the individual entry probability is high. When entry probabilities are sufficiently low, the probability of being the only participant in the contest is much larger than zero, and therefore, this possibility leads to a reduction in effort. The results of our experiment confirm most of the theoretical predictions.

Boosey et al. (2019) theoretically explore population uncertainty in contests between groups, which has yet to be explored in the literature. In a group contest, population uncertainty can occur within the group, i.e., the number of group members is unknown, as well as across groups, i.e., the number of competing groups is unknown. We explore the former situation. Consider the decision faced by bipartisan supporters in the U.S. political race for presidency. From the viewpoint of a Democratic party supporter, the decision to invest time and resources with the hopes of increasing their party's chance of success (i.e., winning the presidency) is likely a function of (i) the number of other Democratic supporters and (ii) the number of supporters in the opposing Republican party. Our main result is showing that individual investment is always lower when group sizes are stochastic (i.e., population uncertainty) compared to deterministic group size. This high-

lights the importance of informational assumptions in economic modeling.

Incomplete Information

In many everyday situations, if not all, information available to economic agents is incomplete. For example, a college graduate may be competing for a job with other recent graduates. Considering the amount of geographical dispersion, it is unlikely that any given graduate will know the precise skill level of the others. In the case of complete information, a low-skilled individual may not even bother applying for the job, or significantly reduce effort, if he knows the others are all highly skilled. However, when the skill levels of others are not publicly known, low-skilled graduates may exert effort preparing for the interview, but adjust this per their beliefs about the distribution of skill levels amongst all competitors.

Boosey et al. (2020) recently explored incomplete information in regard to the disclosure of the number of contestants actively participating in a cost: Active contestants either know how many people they are competing against, or they do not. This research complements my research on population uncertainty, as when the number of participants is not disclosed there is uncertainty about the population an individual is competing with. In contests between individuals, I ran an experiment to test how such disclosure rules affect effort provision in contests with small and large entry fees. We do not find a difference in entry behavior across disclosure rules, but do find significantly higher investments when the opportunity cost of entry is high and contest size is disclosed. This difference is driven by over-investment in contests with a small, publicly known number of players, compared to more restrained investment in contests where the number of players is uncertain and may be small.

In Boosey, Brookins, and Ryvkin (work in progress), I have also explored various disclosure rules in contests between

groups theoretically. Group members first decide whether or not they wish to participate and actively exert effort to help their group win a valuable prize. Under full disclosure, individuals know how many people are in their group and all other groups. Under within-group disclosure, individuals only know how many people chose to enter in their own group, but this information is not available in competing groups. Finally, under no disclosure, individuals only know that they chose to participate, but are otherwise unaware of participation decisions of all other individuals, and hence, they simultaneously face within and between-group population uncertainty. For the benchmark case of contests between individuals, we show that information disclosure always leads to a reduction in aggregate investment. However, this is no longer true in group contests: Within-group disclosure unambiguously raises aggregate investment, while the effect of full disclosure is ambiguous.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Boosey, L., Brookins, P. and Ryvkin, D. (2020). Information Disclosure in Contests with Endogenous Entry. An Experiment. *Management Science*, 66(11), 5128-5150.

Boosey, L., Brookins, P. and Ryvkin, D. (2019). Contests Between Groups of Unknown Size. *Games and Economic Behavior*, 113, 756–769.

Brookins, P., Lightle, J. and Ryvkin, D. (2018). Sorting and Communication in Weak-Link Group Contests. *Journal of Economic Behavior and Organization*, 152, 64–80.

Boosey, L., Brookins, P. and Ryvkin, D. (2017). Contests With Group Size Uncertainty: Experimental Evidence. *Games and Economic Behavior*, 105, 212-229.

Revise & Resubmit

Brookins, P., Ryvkin, D. and Smyth, A. Indefinitely Repeated Contests: An Experimental Study. R&R at *Experimental Economics*.

Brookins, P., Brown, J. and Ryvkin, D., Peer Information and Risk-taking under Competitive and Non-competitive Pay Schemes. R&R at *Theory & Decision*.

Brookins, P. and Jindapon, P. Risk Preference Heterogeneity in Group Contests, R&R at the *Journal of Mathematical Economics.*

Working Papers

Boosey, L., Brookins, P. and Ryvkin, D. Entry in Group Contests. (submitted)

Brookins, P., Goerg, S. J. and Kube, S. Self-chosen Goals, Incentives, and Effort (in preparation for journal submission)

Work in Progress

Brookins, P., Cerrone, C. and Ryvkin, D., *k*-pay Auctions. [additional data collection needed]

Brookins, P., Lightle, J. and Ryvkin, D., Group All-Pay Auctions: An Experimental Study [additional data collection needed]

Brookins, P., Matros, A. and Tzachrista, F., Sequential Contests: Theory and Experimental Evidence [currently writing the manuscript]

Brookins, P., Cerrone, C., De Chiara, A. and Manna, E., Delegation vs. Communication in Organisations. [design ready, but no data have been collected]

Honors

Accepted to attend the 2017 Lindau Nobel Laureate Meetings in Economics – Lindau, Germany – 21-26 August 2017

Lectures and Presentations (since 2017)

2017

Inde nitely Repeated Contests: An Experimental Study
Workshop on Behavioral and Experimental Economics at LUISS, Rome
March 2017

Inde nitely Repeated Contests: An Experimental Study
Contests: Theory and Empirical Evidence at UEA, Norwich
June 2017

Sorting and information disclosure in contests with heterogeneous players
Laboratory for Innovation Science at Harvard, Cambridge, MA
Oct 2017

Group all-pay auctions: An experimental study
Southern Economic Association, Tampa
Nov 2017

Group all-pay auctions: An experimental study
GATE-Lab Seminar, Lyon
Nov 2017

2018

Information disclosure in contests with endogenous entry: An experiment
Contests: Theory and Evidence, Norwich
June 2018

Information disclosure in contests with endogenous entry: An experiment
DICE Brown Bag Seminar, Düsseldorf
Oct 2018

2019

Information disclosure in contests with endogenous entry: An experiment
Technical University of Munich
May 2019

Contests: What's the use?
National Academies of Sciences, Engineering, and Medicine, Washington D.C.
May 2019

Information disclosure in contests with endogenous entry: An experiment
Behavioural Decision Sciences Workshop, Loughborough
May 2019

D. Research Portraits

Claudia Cerrone

1. Behavioral Games

My first area of interest is to explore, theoretically and experimentally, games between players with non-standard preferences. In Cerrone, Feri, and Neary (Revise & Resubmit at the *American Economic Review*), titled *Ignorance is Bliss: A Game of Regret*, I show how regret-averse people are affected by the information generated by the decisions of others. The paper is motivated by a simple observation: An individual can only experience regret if she learns about an unchosen alternative. In many situations, ranging from technology adoption to ordering food in a restaurant, learning about unchosen alternatives is possible only if someone else chose them. We develop and experimentally test a model of regret aversion where the probability of learning about unchosen alternatives depends on the decisions of others.

In Cerrone (2020, forthcoming at *Economic Inquiry*), titled *Doing It When Others Do: A Strategic Model of Procrastination*, I observe that several onerous activities that we tend to procrastinate are less onerous in the company of others. I develop a strategic model of procrastination, the "procrastination game", where present-biased agents prefer to perform an onerous task when others do, as they enjoy company. I use my procrastination game to establish when the company of a peer mitigates overall procrastination, and thus how principals can match individuals to each other to reduce inefficient delay. An interesting result is the "avoidance of bad company". The company of a worse procrastinator can push one to act earlier, to avoid the additional temptation to procrastinate that "bad company" would generate. Thus, severe procrastinators can be used as a commitment device to mitigate own procrastination.

2. Applications of Behavioral Economics

I am broadly interested in applications of behavioral economics to topics that are relevant to the real world.

Ongoing Projects

First, I am currently interested in how matching mechanisms can be improved by accounting for people's biases. Cerrone, Hermstrüwer, and Kesten (work in progress) will provide the first experimental test of Kesten's efficiency-adjusted mechanism to assign students to schools, and use behavioral economics to improve the mechanism's performance.

Second, I am currently interested in how people's biases affect decision-making in organizations. Cerrone, Hillenbrand, Klümper, and Schaube (work in progress) will explore whether overconfidence leads one to delegate too little of a joint task to a team member and, if so, whether under-delegation persists or exacerbates over repeated interactions. Brookins, Cerrone, De Chiara, and Manna (work in progress) will explore whether organizations should rely on delegation or communication when agents are lying averse.

Finally, Brookins, Cerrone, and Ryvkin (work in progress) will explore a new auction mechanism (*k-pay auction*) that may help R&D firms to maximize participation and competition.

Working Papers and Published Papers

Cerrone, Hermstrüwer, and Robalo (Revise & Resubmit at *Games and Economic Behavior*) provides the first experiment exploring the impact of debarments

Contact

cerrone@coll.mpg.de

https://www.coll.mpg.de/claudia-cerrone

on collusion in procurement auctions. We find that debarment decreases collusion and bids, and its deterrent effect increases with the length of the exclusion. However, shorter debarments reduce efficiency and increase the bids of non-debarred bidders. This suggests that debarment can be used as an effective deterrent, but may have undesirable effects if the exclusion is too short.

In Cerrone and Engel (2019), we explore whether deciding on behalf of others makes participants less selfish in a subsequent decision on behalf of themselves, and thus can be used as a nudge. We find that, when deciding on behalf of others, participants make very equitable decisions, but this does not mitigate selfishness in later decisions on behalf of themselves.

In Cerrone and Manna (2018), we study the optimal employment contracts offered to "motivated" employees working in teams.

In Anderberg and Cerrone (2017), we explore how disappointment aversion affects students' investments in education, depending on their academic ability.

In Anderberg, Cerrone, and Chevalier (2018), we study the demand of university students for soft, self-imposed commitment – in the form of early deadlines – and subsequent compliance behavior.

3. Experimental Work on Time Preferences and Procrastination

I am currently working on two experimental projects on time preferences and procrastination. In Cerrone, Chakraborty, Kim, and Lades (work in progress, a) we propose a new method to estimate present bias and sophistication, using both monetary payments and effort tasks, through a simple four-day experiment. Ours will be the first project to provide a measure of sophistication in the effort domain, thus allowing for a full compari-

son of time preference measures across the monetary and effort domains. In Cerrone, Chakraborty, Kim, and Lades (work in progress, b), we will provide the first direct test of a seminal model on procrastination (Doing It Now or Later, O'Donoghue and Rabin, 1999), a yet untested pillar of behavioral economics.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Cerrone, C. (forthcoming). Doing It When Others Do: A Strategic Model of Procrastination, *Economic Inquiry*.

Cerrone, C. and Engel, C. (2019). Deciding on Behalf of Others Does Not Mitigate Selfishness: An Experiment, *Economics Letters*, 183, 108616.

Cerrone, C. and Manna, E. (2018). Pay for Performance With Motivated Employees, *The B.E. Journal of Economic Analysis and Policy*, 18(1), 1935-1982.

Anderberg, D., Cerrone, C. and Chevalier, A. (2018). Soft Commitment: A Study on Demand and Compliance, *Applied Economics Letters*, 25(16), 1140-1146.

Anderberg, D. and Cerrone, C. (2017). Investment in Education Under Disappointment Aversion, *Economics Bulletin*, 37(3), 1533-1540.

Revise & Resubmit

Cerrone, C., Feri, F. and Neary, P., Ignorance is Bliss: A Game of Regret. R & R: *American Economic Review*.

Cerrone, C., Hermstrüwer, Y. and Robalo, P. Debarment and Collusion in Procurement Auctions. R & R: *Games and Economic Behavior*.

Working Papers

Cerrone, C. and Lades, L. K., Sophisticated and Naïve Procrastination. (superseded by a new project with Chakraborty, A., Kim, H. J., and Lades, L. K. See below).

Work in Progress

Cerrone, C., Hillenbrand, A., Klümper, A. and Schaube, S., Delegation Under Overconfidence.

Cerrone, C., Hermstrüwer, Y., Kesten, O., School Choice with Consent: An Experimental Study.

Brookins, P., Cerrone, C., De Chiara, A. and Manna, E., Delegation vs. Communication in Organisations.

Brookins, P., Cerrone, C. and Ryvkin, D., *k*-pay Auctions.

Cerrone, C., Chakraborty, A., Kim, H. J., and Lades, L. K., Estimating Present Bias and Sophistication.

Cerrone, C., Chakraborty, A., Kim, H. J., and Lades, L. K., Doing it Now or Later: An Experiment.

Lectures and Seminar Presentations (since 2017)

2017

Discussant of the paper "Welfare Stigma in the Lab: Evidence of Social Signalling" by J. Friedrichsen, T. König, and R. Schmacker. Workshop on "Concern for status and social image", Berlin
June 2017

Sophisticated and Naïve Procrastination: An Experimental Study
ESA World Meeting
San Diego, California
June 2017

Ignorance is Bliss: A Game of Regret
ESA World Meeting
San Diego, California
June 2017

Doing It When Others Do: A Strategic Model of Procrastination (invited)
ESRC Workshop on self-control and public policy, University of Stirling
September 2017

2019

Ignorance is Bliss: A Game of Regret (invited)
TIBER 2019 Symposium on Psychology and Economics
Tilburg University
August 2019

2020

Ignorance is Bliss: A Game of Regret
Southwest Economic Theory conference, UCSD, California
March 2020

Ignorance is Bliss: A Game of Regret
Internal seminar at UCSB, California
March 2020

Teaching (since 2017)

July–August 2019
Max Planck International Research School,
Summer School 2019, Lecturer in Behavioral
Economic Theory.

2020–2021
Financial Markets, Institutions and Banking,
Middlesex University.

Professional Activities

Referee for

Journal of Economic Theory; European Economic Review (x2); Economic Bulletin; Applied Economics Letters; The Manchester School.

Memberships

Game Theory Society; Economic Science
Association; Royal Economic Society.

Fellowships

Higher Education Academy (UK), Associate
Fellow

D. Research Portraits

Konstantin Chatziathanasiou

Summary Report

My time as a member of Christoph Engel's group ended in May 2018. After four months as a trainee in the ECB's legal department, I joined Niels Petersen's chair at the University of Münster as a Postdoc. The time at the MPI was wonderful and I am very happy to stay connected as a visiting researcher. My work is mainly in the areas of constitutional law and experimental law and economics. This report covers my work since 2017.

Book on Constitutional Stability

My book "*Verfassungsstabilität*" ("Constitutional Stability") (Chatziathanasiou 2019) asks under which conditions a constitution is more likely to be accepted by its addressees and, thus, stable. The question is developed through a case study on the last provision of the *Grundgesetz*, which allows for its replacement with a new constitution. The controversies around this provision lead to basic topics of constitutional theory, which I address through the lens of experimental law and economics: I reconstruct the problem of a constitution's stability in a game-theoretic framework, discuss the limitations of quantitative studies in comparative constitutional law, and then offer an experimental contribution to constitutional theory (based on joint work with Svenja Hippel and Michael Kurschilgen). My main result is that mere flexibility of an institution does not benefit its acceptance, which rather hinges critically on criteria of fairness and equity. The book was reviewed in *Juristenzeitung* and covered in the *Frankfurter Allgemeine Zeitung* (*FAZ*).

Experiments on Social Order

In Chatziathanasiou, Hippel, and Kurschilgen (2020a), we model an economy in which wealth is produced if players voluntarily comply with the – efficient, but inequitable – prevailing social order. We vary exogenously whether redistribution is feasible, and how it is organized. We find experimental evidence showing a *positive* effect of redistribution on economic efficiency via the self-enforcement of property rights, and identify which status groups benefit more and which less. We find that redistribution benefits all status groups as property disputes recede. It is most effective when transfers are not discretionary, but instead imposed by some exogenous administration. In the absence of coercive means to enforce property rights, it is the higher-status groups, not the lower-status groups, who benefit from redistribution being compulsory rather than voluntary.

Chatziathanasiou, Hippel, and Kurschilgen (2020b) builds on the same model. We study experimentally whether the threat of an overthrow stabilizes an institution. This is the main hypothesis behind rights to resistance in constitutional documents. We test the effect of the threat of overthrow by introducing the possibility to reset the status-ranking that constitutes social order through an onerous mechanism. We find that the mere option of overthrow does not have a pacifying effect on low-status players. We also find that most high-status players do not adapt their redistributive behavior sufficiently to prevent overthrows. Where they do, however, groups prosper. The paper is currently prepared for submission.

Comparative Constitutional Law

The international discussion on comparative constitutional law has witnessed a proliferation of empirical studies. In a set of papers with Niels Petersen, we seek to evaluate the current state of affairs in different areas of research: the consequences of and the reasons for constitutional design choices, the diffusion and effectiveness of constitutional rights, and the literature examining judicial decision-making at apex courts.

Contact

chatziathanasiou@coll.mpg.de

https://www.coll.mpg.de/konstantin-chatziathanasiou

Petersen and Chatziathanasiou (2019) introduces the German-speaking audience to the field and to the methodological challenges. Petersen and Chatziathanasiou (forthcoming) specifically targets the shortcomings of certain studies and makes proposals for improvement.

Socioeconomic Inequality

Legal science, especially in Germany, has yet to connect to the ongoing debate on socioeconomic inequality. In Chatziathanasiou (forthcoming), I discuss the relationship between socioeconomic inequality and constitutional law. Theoretically, socioeconomic inequality can be a challenge to a constitution's legitimacy and for democratic representation. Doctrinally, I focus on the (potential) limitation of poverty and wealth under the *Grundgesetz*. A short version of the paper was published in the proceedings of the 59th Young Scholar Conference in Public Law (Chatziathanasiou 2019a)

Constitutional History

Surprisingly, in the early *Bundesrepublik*, the Federal Constitutional Court was not considered a constitutional body on the same level as President or Parliament. The Court had to claim that role for itself. It did so with a famous memorandum. In Chatziathanasiou (2020), I examine the memorandum's contribution to the creation of the constitutional order, and discuss it from a historical, legal, and political perspective. The article demonstrates the importance of informal actions by courts, and more generally the contingency of constitutional order.

Review of "Hungry Judge" Research

Reportedly, judges are more likely not to grant parole when their lunch break is close. The study to this point is heavily cited, often in the context of machine-based tools for judicial decision-making. But the validity of the study is strongly disputed. In Chatziathanasiou (2019b), I introduce the study and discuss its shortcomings. The article was covered in the *FAZ*.

Whistleblowing

A new line of my research is concerned with whistleblowing in the public sector. Due to fear of retaliation, many illegal practices within organizations remain undisclosed by potential whistleblowers. Resolving such individual dilemmas for the public good is a core task of regulation. A new EU directive aims at establishing safe channels for the reporting of breaches of EU law in the private as well as in the public sector. So far, however, whistleblowing has mainly been discussed from the perspectives of labor, corporate, and criminal law. While the paradigms developed in private law are instructive, a public-law perspective must ask whether the suggested solutions fit the specific circumstances of administrative and governmental tasks. Chatziathanasiou (work in progress) discusses the challenges of introducing whistleblower protection in the public sector and civil service, and lays the ground for future work. It was selected for the *IACL Junior Forum*.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Petersen, N. and Chatziathanasiou, K. (forthcoming). Empirical Research in Comparative Constitutional Law – the Cool Kid on the Block or all Smoke and Mirrors? *International Journal of Constitutional Law.*

Chatziathanasiou, K. (2020). Die Status-Denkschrift des Bundesverfassungsgerichts als informaler Beitrag zur Entstehung der Verfassungsordnung [The Status-Memorandum of the Federal Constitutional Court], *Rechtswissenschaft (RW),* 11, 145–169.

Chatziathanasiou, K., Hippel, S. and Kurschilgen, M. (2020a). Property, Redistribution, and the Status Quo: A Laboratory Study. *Experimental Economics.*

Chatziathanasiou, K. and Leszczynska, M. (2017). Experimentelle Ökonomik im Recht. *Rechtswissenschaft (RW)*, 8(3), 314–338.

Chatziathanasiou, K. (2017). Constitutions as Chains? – On the Intergenerational Challenges of Constitution-Making. *Intergenerational Justice Review*, 10(1), 32–41.

Journal Articles (not peer-reviewed)

Chatziathanasiou, K. (forthcoming). Sozio-ökonomische Ungleichheit: Verfassungstheoretische Bedeutung, verfassungsrechtliche Reaktionen. *Der Staat.*

Chatziathanasiou, K. (2020). Anfängerhausarbeit – Öffentliches Recht: Verfassungsrecht und Europarecht – Der grenzüberschreitende Bücherwurm. *Juristische Schulung*, 60, 843–848.

Chatziathanasiou, K. (2019b). Der hungrige, ein härterer Richter? Zur heiklen Rezeption einer vielzitierten Studie. *JuristenZeitung*, 74, 455–458.

Petersen, N., Chatziathanasiou K. (2019) Empirische Verfassungsrechtswissenschaft. Zu Möglichkeiten und Grenzen quantitativer Verfassungsvergleichung und Richterforschung [Empirical Constitutional Law], *Archiv des öffentlichen Rechts (AöR),* (144), 501–535.

Book

Chatziathanasiou, K. (2019). Verfassungsstabilität. Eine von Artikel 146 Grundgesetz ausgehende juristische und (experimental-)ökonomische Untersuchung [Constitutional Stability], Mohr Siebeck: Tübingen.

Book Chapter

Chatziathanasiou (2019a), Soziale Ungleichheit als Verfassungsherausforderung – Das Sozialstaatsprinzip und die Begrenzung von Armut und Reichtum [Social Inequality as Constitutional Challenge], in: P. B. Donath et al. (Ed.), Verfassungen – ihre Rolle im Wandel der Zeit. 59. Assistententagung Öffentliches Recht Frankfurt am Main, Nomos: Baden-Baden, 225–241.

Towfigh, E. V. and Chatziathanasiou, K. (2017). Ökonomische Aspekte der Durchsetzung des Verbraucherschutzrechts. In H. Schulte-Nölke and Bundesministerium der Justiz und für Verbraucherschutz (Eds.), *Neue Wege zur Durchsetzung des Verbraucherrechts*, Springer, 97–126.

Reviews

Chatziathanasiou, K. (forthcoming). Hadfield, Gillian K.: Rules for a Flat World. Why Humans Invented Law and How to Reinvent It for a Complex Global Economy. *Der Staat*, 59.

Chatziathanasiou, K. (2018). Walter Scheidel: The Great Leveler. Violence and the History of Inequality from the Stone Age to the Twenty-First Century, *International Journal of Constitutional Law*, 16, 1376–1380.

Working Papers

Chatziathanasiou, K., Hippel S., and Kurschilgen, M. (2020b). Do Rights to Resistance Discipline the Elites? An Experiment on the Threat of Overthrow. *MPI Discussion Paper* 2020/27.

Work in Progress

Chatziathanasiou, K. (work in progress). Whistleblowing as a Challenge for Public Law, *in preparation*.

Awards

Fellow of the "Young ZiF" at the Center for Interdisciplinary Research, Bielefeld (2019–2023).

Lectures and Presentations (since 2017)

2018

Experimentelle Ökonomik als rechtswissenschaftliches Forschungsinstrument [Experimental Economics as a Research Tool for Legal Science]
Law & Society Institute, Humboldt University Berlin
22 May 2018

Verfassungsstabilität [Constitutional Stability], Conference "Was einen Staat zusammenhält" [What holds a state together]
Cusanuswerk, Weimar
2 November 2018

2019

Soziale Ungleichheit als Verfassungsherausforderung [Social Inequality as a Constitutional Challenge]
59th Young Scholar Conference in Public Law, Frankfurt am Main
22 February 2019

Die Status-Denkschrift des Bundesverfassungsgerichts als Beitrag zur Entstehung einer Rechtsordnung [The Status Memorandum of the Federal Constitutional Court as a Contribution to the Formation of a Legal Order]
Conference "Eine Rechtsordnung entsteht" [A Legal Order Emerges]
University of Münster
27 September 2019

How Law Should Cooperate with Other Disciplines
Humboldt Kolleg, Alexander von Humboldt Foundation, Chulalongkorn University Bangkok, Thailand
21 December 2019

2020

Whistleblowing as a Challenge for Public Law, IACL Junior Forum
National University of Singapore
3 July 2020 – postponed

Events Organized

Summer School "Crisis of the Rule of Law" in Tirana, Skopje, and Thessaloniki
Universities of Münster and Paris-Ouest-Nanterre (funded by the German-French University)
September 2020 – postponed

61st Young Scholar Conference in Public Law on "Zugang zu Recht" [Access to Justice/Just Access]
University of Münster
23–26 February 2021

Teaching

Winter term 2018/19
Integrationsmodul Politik und Recht I [Introduction to Politics and Law I], Lecture, University of Münster

Summer term 2019
Integrationsmodul Politik und Recht II [Introduction to Politics and Law II], Supervision, University of Münster

Deutsches und Europäisches Verfassungsrecht II [German and European Constitutional Law II – Basic Rights], Tutorial
University of Münster

Winter term 2019/20
Verwaltungsrecht und Verwaltungsprozessrecht [Administrative and Administrative Procedural Law], Tutorial
University of Münster

Integrationsmodul Politik und Recht I [Introduction to Politics and Law I], Lecture, University of Münster

Summer term 2020
Integrationsmodul Politik und Recht II [Introduction to Politics and Law II], Supervision, University of Münster

Winter term 2020/21
Ökonomische Analyse des Rechts [Economic Analysis of Law], Lecture
University of Münster

Public Service

Selection committees, Studienstiftung des deutschen Volkes [German Academic Scholarship Foundation] (2017, 2019, 2020).

Judge in Moot Court and Essay Competition, University of Münster (2019, 2020).

D. Research Portraits

Stefanie Egidy

Summary Report

I returned from parental leave in March 2018 and have been focusing on my *habilitation* on "strategic litigation". Beyond this subject matter, my research is concerned with the question of how democratic states and their institutions react to pressure and change. It investigates how to safeguard the resilience of the constitutional and administrative order. Beyond a doctrinal and theoretical approach, I often take an empirical as well as a comparative legal perspective. A special focus lies on the concrete behavior of public actors before the requirements set by the principle of democracy. This theme joins the different core areas of my research.

Strategic Litigation

First and foremost, my *habilitation* project (work in progress) engages with the phenomenon of "strategic litigation". In Germany, non-governmental organizations have recently taken on the goal of using courts to enforce civil rights, emulating the landmark judgments in the United States, such as *Brown v. Board of Education* and *Lawrence v. Texas*, respectively ending racial segregation in public schools and decriminalizing sodomy. One prominent example is the lawsuit of Peruvian farmer Saúl Luciano Lliuya, prompted and supported by environmental NGOs, against the energy conglomerate RWE before the German Regional Court in Essen, which has made international headlines. Even though these strategic efforts are not new, their activist use poses new challenges to the traditional understanding of the role of the judicial system, which still largely emphasizes the courts' duty to find the right and truthful legal answer to each case.

Yet, strategic litigation has a very long, well-known, and intensely-researched tradition in the United States. Strate-

gic societal actors follow the regular judicial process set out in the applicable procedural rules governing the access to court and admissibility of claims. Selecting the right case, recruiting a sympathetic plaintiff, developing a media strategy, choosing the right litigation tactic, and communicating appropriately throughout the proceedings are core tasks of strategic litigants. This phenomenon has also been at the center of legal, sociological, and political research conceptualizing the efforts and contributions of strategic litigants as well as the corresponding social movements. The other side of the equation consists of the legal system, which determines the framework in which strategic litigants act, and of the judges who decide how cases move through the judicial system. My project aims to interconnect both sides and offer an empirically founded theoretical perspective on our concept of judicial review and independence within the democratic separation of powers system and its response to strategic litigation. This research lies in the intersection of scholarship on constitutional law, social movements, judicial decision-making, and comparative procedural law. Building on these results, it undertakes a normative evaluation that emphasizes the constitutional limits of this judicial practice, namely the principles of equal treatment, democracy, and judicial independence.

Financial Markets, Central Banks, and Constitutional Actors

Building on the insights of my dissertation on the democratic management of financial crises, Egidy (2019a), I have widened the scope of inquiry to present a wider understanding of the interactions between financial markets, central banks, and constitutional rules. One highly debated area is the level of scrutiny that courts choose in order to review central bank actions. When courts are asked to balance the conflict-

Contact

egidy@coll.mpg.de

https://www.coll.mpg.de/stefanie-egidy

ing interests and needs, the question of which standard of review to apply becomes the crucial issue. Taking a comparative approach, I have undertaken a longitudinal study of different legal regimes regarding the reviewability of central banks' decisions and of the development of case law over time. To analyze the reasons and determinants underlying each justiciability regime, I have linked the comparative analysis of judicial review to the design and structure of central banks. Two current papers focus on the U.S. Federal Reserve (Egidy, 2019b) and the European Central Bank (Egidy, work in progress) respectively. A third one will add a normative perspective. Considering the upheaval of the balance of powers between the European Central Bank, the Court of Justice of the European Union, and the German Federal Constitutional Court due to the GFCC's most recent judgment on the ECB's PSPP program, I will apply and expand my research to analyze and explore solutions to the current conflict (Egidy, work in progress).

Democratic Decline and Administrative Resilience

The functioning of democracies is crucial to addressing the crisis of global constitutionalism. Healthy institutions are the essential pillars of a democracy. They form an intricate support structure for safeguarding the provision of collective goods, such as social peace, physical well-being, the protection of human rights, but also financial stability. Despite their organizational structure, the responsibility to lead these institutions falls to human decision-makers who need to govern their citizens. My contributions use insights from behavioral sciences with regard to both state actors and citizens to explain the reasons behind the crisis of global constitutionalism. This will form the starting point to develop tools to solve these problems. Central lines of inquiry are the formation of trust in institutions, the role of information, and mechanisms to induce both self-restraint and resilience. This larger project combines the findings of my dis-

sertation, Egidy (2019a), dealing with the challenge of a democratic management of the financial crisis of 2007-2009, with the research conducted together with Susan Rose-Ackerman and James Fowkes on procedural mechanisms in the domain of lawmaking, Rose-Ackerman, Egidy and Fowkes (2015). It will have three parts, which are currently work in progress. Two papers were supposed to be presented in two academic conferences in May and August 2020, respectively, both unfortunately postponed until 2021 due to the COVID-19 crisis. They deal with the institutional perspective of functioning democracies (Egidy, work in progress) and administrative resilience (Egidy, work in progress). The third project with Laurence O'Hara undertakes an original empirical study trying to develop and test mechanisms to improve the balancing of interests (Egidy & O'Hara, work in progress). In many ways, democratic governance needs to solve conflicts between competing interests. A proportionality assessment is a commonly used tactic – whether explicitly or implicitly – by all branches of government. We take a procedural approach and investigate how we can structure proportionality assessments in a way that reduces bias.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Egidy, S. (forthcoming), Proportionality and Procedure of Monetary Policy-Making, *International Journal of Constitutional Law*, 2021.

Conference Proceeding

Egidy, S. (2019b). Judicial Review of Central Bank Action: Should Europe Learn From the US?, in: European Central Bank (ed.), *ECB Legal Conference 2019 – Building bridges: central banking law in an interconnected world*, 53–76.

Reviews

Egidy, S. (forthcoming). Book Review, Ginsburg, Tom/Rosen, Mark D./Vanberg, Georg (eds.), Constitutions in Times of Financial Crisis, Cambridge University Press, 2019, *International Journal of Constitutional Law* 2020.

Egidy, S. (forthcoming). Book Review, Horst, Johan, Transnationale Rechtserzeugung. Elemente einer normativen Theorie der Lex Financiaria. *Jus Internationale et Europaeum*, vol. 152. Tübingen: Mohr Siebeck 2019, *Der Staat,* 59, (2020).

Books

Bretthauer, S., Collin, P., Egidy, S., Spiecker gen. Döhmann, I. (forthcoming). 40 Klausuren aus dem Verwaltungsrecht, 12th edition 2020.

Lewandowsky, S., Smilllie, L., Garcia, D., Hertwig, R., Weatherall, J., Egidy, S., Robertson, R. E., O'Connor, C., Kzyreva, A., Lorenz-Spreen, P., Blaschke, Y., Leiser, L., (2020). Technology and democracy: Understanding the influence of online technologies on political behavior and decision-making, Publications Office of the European Union, Luxembourg, 174 p.

Egidy, S. (2019a). Finanzkrise und Verfassung – Demokratisches Krisenmanagement in Deutschland und den USA, Mohr Siebeck, 2019.

Rose-Ackerman, S., Egidy, S., Fowkes, J. (2015, 2018). Due Process of Lawmaking – The United States, South Africa, Germany and the European Union (with Susan Rose-Ackerman and James Fowkes), Cambridge University Press 2015, paperback 2018.

Book Chapters

Egidy, S. (forthcoming). Meinungsmanipulation und Informationszugang in der digitalen Demokratie – Counterspeech 2.0 als empirisch fundiertes Instrument gegen Fake News, in: Lüdemann, J. and Hermstrüwer, Y. (eds.), *Meinungsbildung im digitalen Zeitalter,* Mohr Siebeck, 2020, 91–148.

Teichman, D., Talley, E., Egidy, S., Engel, C., Gummadi, K. P., Hagel, K., Lewandowsky, S., MacCoun R. J., Utz S., Zamir, E. (2020). Institutions Promoting or Countering Deliberate Ignorance: Engel, C. and Hertwig, R. (eds.), *Ernst-Strüngmann Forum on: Deliberate Ignorance, Choosing Not to Know*, MIT University Press, 275–298.

Working Paper

Egidy, S., Sunset Clauses – Ablaufdaten als strategische Instrumente des Gesetzgebers.

Work in Progress

Egidy, S., Strategische Prozessführung (*habilitation* project).

Egidy, S., The European System of Central Banks under Judicial Review.

Egidy, S., Central Banking Under the Aegis of the Judiciary: The Proper Level of Review.

Egidy, S., Administrative Resilience.

Egidy, S., Institutions, in: Bezemek, Christoph (ed.), Constitutionalism 2030, Hart publishing, originally 2020 – postponed due to COVID-19.

Egidy, S. & O'Hara, L., Structured Balancing of Interests – How Structured Decision-Frameworks Affect the Rationality of Balancing Decisions in Constitutional Law.

Engel, C., Egidy, S., Hermstrüwer, Y., Hoeft, L., Langenbach, P., O'Hara, L. (Eds.), Verhaltenswissenschaftliche Analyse des öffentlichen Rechts.

Scholarships, Prizes, and Honors

2017

"Deutscher Studienpreis" Award, Körber Foundation (Second Prize, Section Humanities)

"Dissertation Prize 2017" awarded by the Law Faculty of the University of Würzburg

Dissertation Award of the Bavarian America Academy

Joint Dissertation Award of the Lower Franconian Memorial Year Foundation for Science and the University of Würzburg

Honorary Ceremony on 3 April 2017 by the Minister of Justice of North Rhine-Westphalia for the 20 best graduates of the second state exam between Oct. 2015 and Dec. 2016

2020

Scholarship for Post-Doctoral Research in the United States, German Academic Exchange Service (DAAD)

New York University School of Law, Emile Noël Postdoctoral Fellowship

Research Grants and Academy Membership

2017

Research Grant, European Central Bank: Legal Research Programme 2017

2019–2023

Appointment to the Young Academy, North Rhine-Westphalian Academy of Sciences, Humanities, and the Arts (including a financial reward of 40,000 EUR)

Lectures and Presentations (since 2017)

2017

The Potential for Strategic Litigation Before the German Federal Constitutional Court
Workshop with Bruno S. Frey, Margit Osterloh, and Siegwart Lindenberg
Max Planck Institute for Research on Collective Goods, Bonn
April 2017

Judicial Review of Central Bank Policies and Decisions in a Comparative Perspective
ECB Legal Research Programme 2017
Seminar, Frankfurt a. M.
May 2017

Decision-Making in Civil Disputes and Litigation
Workshop Judgment and Decision-Making, Max Planck Institute for Research on Collective Goods, Bonn
June 2017

2018

Strategische Prozessführung – Mobilisierung von Recht vor dem Bundesverfassungsgericht
Symposium of the Hohbühl-Stiftung, Köditz bei Hof a. d. Saale
June 2018

Sunset Clauses – Sind Ablaufdaten strategische Instrumente des Gesetzgebers?
Colloquium Law and Economics, University of Bonn
July 2018

Meinungsfreiheit und Informationszugang in der digitalen Demokratie
Arbeitskreis Medien- und Kommunikationsrecht, Meinungsbildung im digitalen Zeitalter: Instrumente und Instrumentenvergleich, 2. Workshop, Humboldt-University Berlin
October 2018

2019

Finanzmärkte im Konflikt von Transparenz und Geheimhaltung
Forum Junge Rechtswissenschaft, University of Tübingen
January 2019

A Comparative Perspective: Central Bank Judicial Review in the EU and the United States
ECB Legal Conference 2019 – Building bridges: Central banking law in an interconnected world
European Central Bank, Frankfurt a. M.
September 2019

Von Daten zur (richtigen) Entscheidung
Poster-Presentation, Research Group "Data
Conference on Artificial Intelligence, North Rhine-Westphalian Academy of Sciences, Humanities and the Arts, Düsseldorf (with Susanne Gössl, Kerstin Ludwig, Alexander Scheuch, Raphael Wittkowski)
October 2019

Handlungsoptionen für die Bundesrepublik Deutschland und die USA in den Finanzkrisen des 21. Jahrhunderts
Forum für Zeitgeschehen: Boom und Spekulationsblasen – Die Weltwirtschaftskrisen 1929/30 und 2007/08,
Volkswagen-Stiftung, Hannover
November 2019

Kontrollaufgabe des Staates
KONTROLL|VER|LUST – Herausforderungen und Chancen für Individuum, Technologie und Gesellschaft
Research Conference of the Young Members, North Rhine-Westphalian Academy of Sciences, Humanities and the Arts, Düsseldorf
November 2019

The Exercise of Procedural Discretion by the German Federal Constitutional Court
Workshop on "Methods of Quantitative Text Analysis", Wissenschaftskolleg Berlin
November 2019

Meinungsfreiheit und Informationszugang in der digitalen Demokratie
University of Bochum
December 2019

2020

Relationale Verträge – Eine rechtliche Perspektive (Comment to Hendrik Hakenes)
Colloquium Law and Economics
University of Bonn
June 2020

Rechtliche Organisation von Rechtsfindung (Comment to Ruth Weber, Die „Rechtsfindungswerkstatt der Integration")
ICON-S Germany Works-in-Progress Conference (virtual format)
October 2020

Panelist, Tech + Democracy Seminar Series
Centre for Cognition, Computation, & Modelling
Birkbeck, University of London (virtual format)
October 2020

Strategic Litigation Before Courts – A Theoretical, Doctrinal, and Empirical Study on Judicial Process
Global/Emile Noël Fellows Forum
New York University School of Law (virtual format)
November 2020

Teaching

Winter term 2018/2019
Colloquium Advanced Urban Law
Goethe University Frankfurt

Winter term 2019/2020
Colloquium Advanced Urban Law
Goethe University Frankfurt

Summer term 2020
Colloquium Advanced Administrative
Procedure
Goethe University Frankfurt

Professional Service and Other Academic Activities

2019 – present
Advisory Board, ICON.S German Chapter

2019 – present
Young Academy, North Rhine-Westphalian
Academy of Sciences, Humanities, and the
Arts

Vice spokesperson, working group "science
communication"
Member of the selection committees for the
Young Academy 2020 and 2021

Co-Organizer of the Young Academy
Research Conferences 2019 and 2020

2015 – present
Co-Organizer of the ECONTribute Law & Eco-
nomics Workshop Series, bi-weekly research
seminar with external guests, University of
Bonn (Graduate School of Economics, Law
Faculty), Max Planck Institute for Research
on Collective Goods, Bonn

Christoph Engel

My own work is intimately tied to the work of my group. The papers that have been published in recent years, or have been made available as working papers, or are work in progress and sufficiently advanced to be mentioned, are all covered by the group report. I do not want to repeat that. Instead I am using this *ad personam* report to put my current work into the perspective of my intellectual journey.

It all started more than 20 years ago, when I received the enormous gift of setting up what would later become the Max Planck Institute for Research on Collective Goods. The enterprise had always been meant to be interdisciplinary, initially coupling law with political science. The interdisciplinary make-up made it natural to adopt an external perspective on the law, and to interpret it as a tool for governing society. We applied this approach to a classic collective good that had been (and still is) rarely studied from an interdisciplinary perspective: waste management. I had spent nine years at the Hamburg Max Planck Institute, and contributed to Ernst-Joachim Mestmäcker's project on the law and economics of telecommunications. This experience gave us a very helpful template. Yet, we quickly found out that the seemingly obvious parallel between the two subfields of law only led us so far. Telecommunications policy can largely deal with good regulatory targets. If it succeeds in shaping the market behavior of the major players, most of its legitimate normative goals are reached. The equivalent approach is only partly sufficient in the area of waste management. The intended protection of the environment from harm done on the waste path, and recycling rather than destroying precious natural resources, can only be achieved if citizens contribute their fair share. To mention only one prominent instance, they must separate waste into fractions that lend themselves to recycling.

Governing citizens is very different from governing industry. In one way, it is much harder. It is not too difficult for the law to supervise a small number of firms. Yet, it is very costly, and often simply impractical, to supervise citizens on a broad scale. No policeman can notice whether a household truly singles out waste that can be recycled, rather than putting it into the dustbin. On the other hand, governing citizens can be easier. Firms are under competitive pressure. This makes it difficult for them to ignore the effects of choices on profit. By contrast, it resonates with experience that ordinary citizens are not permanently comparing cost with benefit. Using once more the example of separating waste in the household: at least in Germany this normative goal is reached rather well, although most people do not even know that the authorities could sanction them for not separating.

The five-year project on waste management was policy-oriented. We have offered explanations for the observed achievements, and have suggested further improvements (Engel 2002). Yet, for me, this project has also been an eye-opener. If one analyses the law from a governance perspective, much has to be gained by adopting a behavioral perspective. This is what has become the focus of our work ever since. We originally did not have the intention to generate our own evidence. Engel (2005) surveys the rich evidence (from experimental economics and social psychology) from our governance perspective. The glaring problem is richness. There are so many behavioral effects! One has every reason to believe that they do not live in isolation, so that their interaction has to be understood. How shall legal policy ever understand, let alone affect, the addressees of their interventions? A major challenge is predictability. I have written the book to explain the challenge, and to introduce the idea of two-step interven-
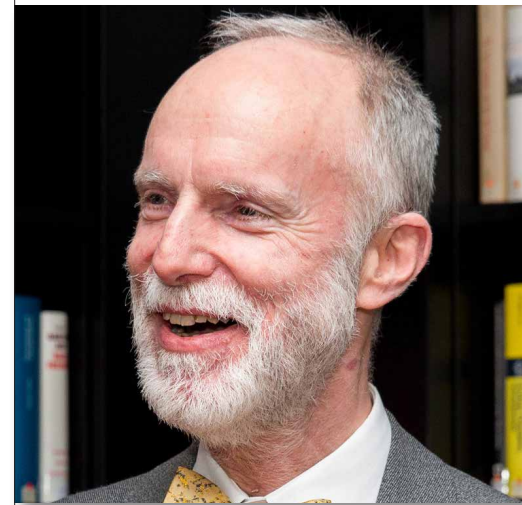
Contact

engel@coll.mpg.de

https://www.coll.mpg.de/engel

tion. In the first step, in the respective domain, the law makes behavior more predictable, and then reacts to it with the normatively desired intervention.

During this period of my work, I also adopted a technique that used to be more prevalent in psychology than in economics, and have written a number of meta-studies to summarize the evidence quantitatively (Engel 2007, Engel 2011, Engel 2012, Engel 2015b). This exercise has convinced me that, all the richness notwithstanding, our knowledge about behavioral effects in many respects is still too incomplete to be useful for legal policy-making. Not least since, very understandably, the behavioral disciplines do not necessarily focus on the effects that are most important for the law. If behaviorally informed institutional design was to succeed, we would have to generate our own evidence. This meant a partial restructuring of the group. To be serious, we needed to collaborate with experimental economists and psychologists on a daily basis. The lawyers would have to tool themselves up so that they could be functional in interdisciplinary experimental teams. This would only work if, first and foremost, I was to become an experimentalist myself.

Such a transition does not happen overnight. It took a few years before the first experiments inspired by legal research questions made it into good journals (see, for instance, Engel and Kurschilgen 2011, Engel and Kurschilgen 2013). We had the good fortune that the empirical legal movement was independently gaining momentum in the U.S. This gave us the best audience we could have had for our specific behavioral/governance angle. It is therefore no surprise that so many of my papers have been published in the flagship journal of the movement, the *Journal of Empirical Legal Studies* (Engel and Kurschilgen 2011, Glöckner and Engel 2013, Eisenberg and Engel 2014, Engel 2015b, Engel, Hennig-Schmidt et al. 2015, Eisenberg and Engel 2016, Buijze, Engel et al. 2017, Engel, Klement et al.

2018, Engel 2019, Engel and Weinshall Margel, 2020). To my great satisfaction, however, my work has also found recognition in other first-rate peer-reviewed law journals such as the *Journal of Legal Studies* (Engel and Zhurakhovska 2017), the *Journal of Law and Economics* (Bar-Gill and Engel 2016, Bar-Gill and Engel 2018), and *Psychology, Public Policy, and Law* (Engel, Timme et al. 2020), as well as in economics journals such as the *European Economic Review* (Engel and Goerg 2018), *Experimental Economics* (Engel 2011), and the *Journal of Economic Behavior and Organization* (Engel 2014, Engel and Zhurakhovska 2014, Engel and Kirchkamp 2019, Engel 2020), as well as in psychology journals such as *Perspectives on Psychological Science* (Engel 2015a, Hertwig and Engel 2016), the *Journal of Economic Policy* (Engel and Kurschilgen 2020), and the *Journal of Behavioral Decision-Making* (Betsch, Lindow et al. 2014).

For the years to come, there is plenty of work to do in this vein. But we are now at a point where we can also come back to the challenge that disturbed me at the start of the enterprise. Actually, behavioral effects are not only rich and interactive. Very often they are also heterogeneous. Over the last years, I have increasingly embraced the techniques provided by computer science to tackle this heterogeneity. At our graduate school, I have taught a course in machine learning. I have developed an estimator that overcomes the practical impossibility simultaneously to estimate the type space and choices conditional on type that had often prevented me from analyzing the heterogeneity (Engel 2020). In some experiments, I have induced heterogeneity (Engel, Mittone et al. 2020). In others, I could infer the heterogeneity from the data and show that it is the source of the normative problem (Bar-Gill and Engel 2018). In one of the latest manuscripts, organizing the type space helped us see that behavioral programs in a classic dilemma setting (a linear public good) are considerably more complicated than extant theory suggests (Engel, Hausladen et al. 2020).

Two further developments are worth mentioning. It has turned out that our work on behaviorally informed institutional design has an interesting correlate in computer science. Together with Nina Grgić-Hlača, I have started exploiting this opportunity, for the moment focusing on algorithmic decision aids (Grgić-Hlača, Engel et al. 2019). A second big challenge for the behaviorally informed analysis and design of institutions is (perceived or actual) ambiguity. Together with Rima Rahal, I have started to embrace eye-tracking as a technique for tracing mental processes, in particular in judicial decision-making (Engel and Rahal 2019).

Being the director of a Max Planck institute is one of the greatest privileges one can have in academia. I am most grateful that I will still have the chance to exploit these exceptional opportunities for another five years (and will, of course, not stop with my own research thereafter).

References

Bar-Gill, O. and Engel, C. (2016). Bargaining in the Absence of Property Rights. An Experiment. *Journal of Law and Economics*, 59(2), 477–495.

Bar-Gill, O. and Engel, C. (2018). How to Protect Entitlements. An Experiment. *Journal of Law and Economics*, 61(3), 525–553.

Betsch, T., Lindow, S., Engel, C., Ulshöfer, C. and Kleber, J. (2014). Has the World Changed? My Neighbor Might Know. Effects of Social Context on Routine Deviation. *Journal of Behavioral Decision Making*, 28(1), 50–66.

Buijze, R., Engel, C. and Hemels, S. (2017). Insuring Your Donation. An Experiment. *Journal of Empirical Legal Studies*, 14(4), 858–885.

Eisenberg, T. and Engel, C. (2014). Assuring Civil Damages Adequately Deter. A Public Good Experiment. *Journal of Empirical Legal Studies*, 11(2), 301–349.

Eisenberg, T. and Engel, C. (2016). Unpacking Negligence Liability. Experimentally Testing the Governance Effect. *Journal of Empirical Legal Studies*, 13(1), 116–152.

Engel, Christoph (2002). Abfallrecht und Abfallpolitik. Baden-Baden, Nomos.

Engel, C. (2005). *Generating Predictability. Institutional Analysis and Institutional Design*. Cambrige, Cambridge University Press.

Engel, C. (2007). How Much Collusion? A Meta-Analysis on Oligopoly Experiments. *Journal of Competition Law and Economics*, 3(4), 491-549.

Engel, C. (2011). Dictator Games. A Meta-Study. *Experimental Economics*, 14(4), 583-610.

Engel, C. (2012). Low Self-Control as a Source of Crime. A Meta-Study. *MPI Collective Goods*, Discussion Paper 2012/4.

Engel, C. (2014). Social Preferences Can Make Imperfect Sanctions Work. Evidence from a Public Good Experiment. *Journal of Economic Behavior & Organization*, 108, 343-353.

Engel, C. (2015a). Scientific Disintegrity as a Public Bad. *Perspectives on Psychological Science*, 10(3), 361-379.

Engel, C. (2015b). Tacit Collusion. The Neglected Experimental Evidence. *Journal of Empirical Legal Studies*, 12(3), 537-577.

Engel, C. (2019). When Does Transparency Backfire? Putting Jeremy Bentham's Theory of General Prevention to the Experimental Test. *Journal of Empirical Legal Studies*, 16(4), 881-908.

Engel, C. (2020). Estimating Heterogeneous Reactions to Experimental Treatments. *Journal of Economic Behavior & Organization*, 178, 124-147.

Engel, C. and Goerg, S. J. (2018). If the Worst Comes to the Worst. Dictator Giving when Recipient's Endowments are Risky. *European Economic Review*, 105, 51-70.

Engel, C., Carina Hausladen and Marcel Schubert (2020). *Charting the Type Space. The Case of Linear Public Good Games.*

Engel, C., Hennig-Schmidt, H., Irlenbusch, B. and Kube, S. (2015). On Probation. An Experimental Analysis. *Journal of Empirical Legal Studies*, 12(2), 252-288.

Engel, C. and Kirchkamp, O. (2019). How to Deal with Inconsistent Choices on Multiple Price Lists. *Journal of Economic Behavior & Organization*, 160, 138-157.

Engel, C., Alon Klement and Weinshall Margel, K. (2018). Diffusion of Legal Innovations, The Case of Israeli Class Actions. *Journal of Empirical Legal Studies*, 15(4), 708-731.

Engel, C. and Kurschilgen, M. (2011). Fairness Ex Ante and Ex Post. Experimentally Testing Ex Post Judicial Intervention into Blockbuster Deals. *Journal of Empirical Legal Studies*, 8(4), 682-708.

Engel, C. and Kurschilgen, M. (2013). The Coevolution of Behavior and Normative Expectations. An Experiment. *American Law & Economics Review*, 15(2), 578-609.

Engel, C. and Kurschilgen, M. (2020). The Fragility of a Nudge. The Power of Self-set Norms to Contain a Social Dilemma. *Journal of Economic Psychology*, 81, no. 102293.

Engel, C., Mittone, L. and Morreale, A. (2020). Tax Morale and Fairness in Conflict. An Experiment, *Journal of Economic Psychology,* 81, 102314.

Engel, C. and Rahal, R.-M. (2019). Justice is in the Eyes of the Beholder. Eye Tracking Evidence on Balancing Normative Concerns in Torts Cases. *MPI Collective Goods*, Discussion Paper 2020/3.

Engel, C., Timme, S. and Glöckner, A. (2020). Coherence-Based Reasoning and Order Effects in Legal Judgments. *Psychology*, *Public Policy*, *and Law*, 26(3), 333–352.

Engel, C. and Weinshall Margel, K. (2020). Manna from Heaven for Judges. Judges' Reaction to a Quasi-Random Reduction in Caseload. *Journal of Empirical Legal Studies,* 17(4), 722-751.

Engel, C. and Zhurakhovska, L. (2014). Conditional Cooperation with Negative Externalities – An Experiment. *Journal of Economic Behavior and Organization*, 108, 252-260.

Engel, C. and Zhurakhovska, L. (2017). You Are In Charge. Experimentally Testing the Motivating Power of Holding a Judicial Office. *Journal of Legal Studies*, 46(1), 1-50.

Glöckner, A. and Engel, C. (2013). Can We Trust Intuitive Jurors? Standards of Proof and the Probative Value of Evidence in Coherence Based Reasoning. *Journal of Empirical Legal Studies*, 10(2), 230-252.

Grgić-Hlača, N., Engel, C. and Gummadi, K. P. (2019). Human Decision Making with Machine Assistance. An experiment on Bailing and Jailing. *Proceedings of the ACM on Human-Computer Interaction*.

Hertwig, R. and Engel, C. (2016). Homo Ignorans. Deliberately Choosing Not to Know. *Perspectives on Psychological Science*, 11(3), 359-372.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Engel, C. and Weinshall Margel, K. (2020). Manna from Heaven for Judges. Judges' Reaction to a Quasi-Random Reduction in Caseload. *Journal of Empirical Legal Studies*, 17(4), 722-751.

Engel, C. (2020). Estimating Heterogeneous Reactions to Experimental Treatments. *Journal of Economic Behavior & Organization*, 178, 124-147.

Engel, C. and Kurschilgen, M. (2020). The Fragility of a Nudge. The Power of Self-set Norms to Contain a Social Dilemma. *Journal of Economic Psychology*, 81, 102293.

Engel, C., Mittone, L. and Morreale, A. (2020). Tax Morale and Fairness in Conflict. An Experiment, *Journal of Economic Psychology,* 81, 102314.

Engel, C., Timme, S. and Glöckner, A. (2020). Coherence-Based Reasoning and Order Effects in Legal Judgments. *Psychology*, *Public Policy*, *and Law*, 26(3), 333–352.

Cerrone, C. and Engel, C. (2019). Deciding on Behalf of Others Does Not Mitigate Selfishness: An Experiment. *Economics Letters*, 183, 108616.

Engel, C. (2019). When Does Transparency Backfire? Putting Jeremy Bentham's Theory of General Prevention to the Experimental Test. *Journal of Empirical Legal Studies*, 16(4), 881-908.

Engel, C. and Kirchkamp, O. (2019). How to Deal with Inconsistent Choices on Multiple Price Lists. *Journal of Economic Behavior & Organization*, 160, 138-157.

Bar-Gill, O. and Engel, C. (2018). How to Protect Entitlements. An Experiment. *Journal of Law and Economics* 61(3), 525-553.

Engel, C. (2018). Empirical Methods for the Law. *Journal of Institutional and Theoretical Economics*, 174, 5-23.

Engel, C. and Goerg, S. J. (2018). If the Worst Comes to the Worst. Dictator Giving when Recipient's Endowments are Risky. *European Economic Review*, 105, 51-70.

Engel, C. and Güth, W. (2018). Modeling a Satisficing Judge. *Rationality and Society*, 30(2), 220-246.

Engel, C., Klement, A. and Weinshall Margel, K. (2018). Diffusion of Legal Innovations: The Case of Israeli Class Actions. *Journal of Empirical Legal Studies*, 15, 708-731.

Buijze, R., Engel, C. and Hemels, S. (2017). Insuring Your Donation. An Experiment. *Journal of Empirical Legal Studies*, 14(4), 858-885.

Engel, C. and Heine, K. (2017). The Dark Side of Price Cap Regulation: A Lab Experiment. *Public Choice*, 173(1-2), 217-240.

Engel, C. and Zhurakhovska, L. (2017). You Are In Charge. Experimentally Testing the Motivating Power of Holding a Judicial Office. *Journal of Legal Studies*, 46(1), 1-50.

Peer-reviewed Conferences

Grgić-Hlača, N., Engel, C. and Gummadi, K. P. (2019). Human Decision Making with Machine Assistance. An experiment on Bailing and Jailing. *Proceedings of the ACM on Human-Computer Interaction*.

Book Chapters

Engel, C. (2020). Does Efficiency Trump Legality? The Case of the German Constitutional Court. *Selection and Decision in Judicial Process Around the World. Empirical Inquiries*. Chang, Y.-C. Cambridge, Cambridge University Press, 261-286.

Engel, C. (2019). Organisationen als Akteure, *Festschrift für Martin Morlok zum 70. Geburtstag.* Krüper, J., Tübingen, Mohr Siebeck, 295-302.

Engel, C. (2018). Experimental Criminal Law. A Survey of Contributions from Law, Economics and Criminology. *Empirical Legal Research in Action*. Boom, W. v., Desmet, P. T. and Mascini, P., Elgar, Cheltenham, 57-108.

Engel, C. (2017). The Solidarity Motive. *Inclusive Solidarity and Integration of Marginalized People*. Zamagni, S. and Sanchez Sorondo, M., Libreria Editrice Vaticana, Vatican City, 214-232.

Working Papers

Bar-Gill, O. and Engel, C. (2020). Property is Dummy Proof. *An Experiment. MPI Discussion Paper* 2020/2.

Engel, C., Fedorets, A. and Gorelkina, O. (2020). Risk Taking in the Household. Strategic Behavior, Social Preferences, or Interdependent Preferences? *MPI Discussion Paper* 2018/14.

Engel, C., Goerg, S. J. and Traxler, C. (2020). *Evaluating Intensive Probation for Juvenile Offenders. Evidence from Germany.*

Engel, C. and Grgić-Hlača, N. (2020). *Machine Advice with a Warning about Machine Limitations. Experimentally Testing the Solution Mandated by the Wisconsin Supreme Court.*

Engel, C., Hausladen, C. and Schubert, M. (2020). *Charting the Type Space. The Case of Linear Public Good Games.*

Engel, C. and Helland, E. (2020). *Does the Fundamental Transformation Deter Trade? An Experiment. MPI Discussion Paper* 2020/23.

Engel, C. and Kramer, X. (2020). *How Do Laypeople Navigate the Maze of the Law? A Vignette Study.*

Engel, C. and Rockenbach, B. (2020). *What Makes Cooperation Precarious?*

Engel, C. and Rahal, R.-M. (2020). *Justice is in the Eyes of the Beholder. Eye Tracking Evidence on Balancing Normative Concerns in Torts Cases*, *MPI Discussion Paper* 2020/3.

Desmet, P. and Engel, C. (2017). *People Are Conditional Rule Followers. MPI Discussion Paper* 2017/19.

For work in progress, please see the group report.

Honors

The Pope has appointed me as a member of the Pontifical Academy for the Social Sciences.

Lectures and Seminar Presentations (since 2017)

2017

A Random Shock is not Random Assignment to Treatment
Rotterdam Statistics Day
3 March 2017

How to Protect Entitlements: An Experiment
(joint with Oren Bar-Gill)
Libera Università Internazionale degli Studi Sociali Guido Carli, Rome
22 March 2017

Rechtswissenschaft als empirische Wissenschaft
[Law as an Empirical Discipline]
Distinguished Lecture, University of Vienna
4 May 2017

Empirical Methods for the Law
35th International Seminar on the New Institutional Economics – Empirical Methods for the Law
Syracuse, Italy
7-10 June 2017

Property Rule vs. Liability Rule: An Experiment
(joint with Oren Bar-Gill)
Workshop Hebrew University, Jerusalem, Israel
12 June 2017

Law as an Empirical Discipline
Faculty Lecture, Hebrew University, Jerusalem, Israel
13 June 2017

Property Rule vs. Liability Rule: An Experiment
(joint with Oren Bar-Gill)
Hamburg Lectures in Law and Economics, University of Hamburg, Germany
05 July 2017

The Proper Scope of Behavioral Law and Economics
Theories of Choice Conference, European University Institute, Florence, Italy
13-14 July 2017

Committing the English and the Continental Way: An Experiment
(joint with André Schmelzer)
Université de Paris II, Law and Economics Workshop
3 October 2017

Diffusion of Legal Innovations: The Case of Israeli Class Actions
(joint with Alon Klement and Keren Weinshall)
Behaviorally Efficient Remedies: An Experiment
(joint with Lars Freund)
12th Conference on Empirical Legal Studies, Cornell University
13-14 October 2017

Modelling European Integration. Comment on Joe Rieff
Erasmus University Rotterdam
7 November 2017

A Machine-Made (Aided, Legal) Commentary
Match-Making Workshop: Humanities and Computer Science
MPI of History in the Sciences
6 December 2017

2018

Never Be Too Sure
Comment on Broome, Faire Handlungen vs. faire Konsequenzen, 1984
Working group session, Zurechnung. Geschichte und Gegenwart eines bedrohten Begriffs", Cologne, Germany
14-15 February 2018

How to Protect Entitlements: An Experiment
(joint with Oren Bar-Gill)
University of Liverpool Management School, United Kingdom
16 February 2018

Helping When Need Cannot Be Proven
Johns Hopkins School of Advanced International Studies, Bologna, Italy
26 February 2018

The Lawyer as a Supernanny: The Behaviorally Informed Design of Legal Institutions
Conference "Nudging and Information 2018", University of Graz, Austria
01-02 March 2018

Workshop Behavioral/Experimental Research in Law and Economics
PhD Course "Workshop and Lecture Series in Experimental Research", University of St. Gallen, Switzerland
21 March 2018

Warum verstehen Ökonomen und Juristen einander nicht?
Working group, Zurechnung, Thyssen Foundation, Cologne, Germany
2-3 April 2018

Experimental Comparative Law
Doctoral School of Social Sciences, University of Trento, Italy
23 April 2018

Behaviorally Efficient Remedies: An Experiment
(joint with Lars Freund)
American Law and Economics Association, Twenty-Eighth Annual Meeting
Boston University School of Law, USA
11-12 May 2018

Experimental Comparative Law
Second Conference on Empirical Legal Studies in Europe, University of Leuven, Belgium
31 May-01 June 2018

The Accuracy – Discrimination Tradeoff
Comment on Kristen Altenburger & Dan Ho
36th International Seminar on the New Institutional Economics – Without Money
Florence, Italy
6-9 June 2018

Identity as a Resource and as an Impediment for Governing Society
"Being More Than One, Workshop on Multiple Identities", Weimar, Germany
4-6 July 2018

Law as an Empirical Discipline
Experimental Law and Economics
Heterogeneous Treatment Effects: Machine Learning and Experimental Design
Diffusion of Legal Innovations: The Case of Israeli Class Actions
Academia Sinica, Taiwan
16-19 October 2018

Turning the Lab into Jeremy Bentham's Panopticon: A Lab Experiment on the Transparency of Punishment
Doctrinal Ambiguity in the Lab: Comment on Daniel M. Klerman and Holger Spamann
13th Conference on Empirical Legal Studies, Ann Arbor, Michigan, USA
9-10 November 2018

Turning the Lab into Jeremy Bentham's Panopticon: A Lab Experiment on the Transparency of Punishment
Georgetown University Law School, Washington, USA
12-13 November 2018

Ein Angebot, das zu schlecht ist, um Nein zu sagen
Leopoldina, Halle, Germany, Symposium on Governance and Compliance
4 December 2018

Würde abwägen?
Working group, Zurechnung, Thyssen Foundation, Cologne, Germany
7 December 2018

2019

Diffusion of Legal Innovations: The Case of Israeli Class Actions
(joint with Alon Klement and Keren Weinshall)
Oxford Business Law Workshop, University of Oxford, United Kingdom
23 January 2019

Franz Böhm ist tot. Es lebe Franz Böhm – Chancen für eine Integration von Ökonomie und Juristerei in einem veränderten Umfeld
2nd Franz Böhm Lecture, Freiburg, Germany
30 January 2019

Five Unique Windfalls and Even More Pitfalls
Utrecht Leiden Winter School on Interdisciplinary Behavioural & Social Sciences, The Netherlands
7-8 February 2019

Justice is in the Eyes of the Beholder
(joint with Rima-Maria Rahal)
ETH Zurich, Switzerland
15-16 March 2019

How Do Laypeople Navigate the Maze of the Law? A Vignette Study
(joint with Xandra Kramer)
Workshop on Experiments at the Crossroads of Law and Economics
Erasmus School of Economics, Rotterdam, The Netherlands
27 March 2019

Warum verstehen Ökonomen und Juristen einander nicht?
Arbeitskreis Zurechnung, Thyssen Stiftung, Cologne, Germany
1-3 April 2019

Justice is in the Eyes of the Beholder: Eye Tracking Evidence on Balancing Normative Concerns in Torts Cases
(joint with Rima Maria Rahal)
29th Annual Meeting of the American Law and Economics Association, New York University Law School, USA
17-18 May 2019

Uncertain Judges
Comment on Charles F. Manski
37th International Seminar on the New Institutional Economics – Causality in the Law and in the Social Sciences
Porto, Portugal
5-8 June 2019

Manna from Heaven for Judges: Judges' Reaction to a Quasi-Random Reduction (joint with Keren Weinshall)
Workshop on "Judicial Decision-Making: Integrating Empirical and Theoretical Perspectives", University of Lucerne, Switzerland
9 July 2019

Property is Dummy Proof. An Experiment
University of Vienna, Austria
15 October 2019

Justice is in the Eyes of the Beholder: Eye Tracking Evidence on Balancing Normative Concerns in Torts Cases
(joint with Rima Maria Rahal)
and
Comment on Lewis Kornhauser: Testing a Fine is a Price in the Lab
and
Manna from Heaven for Judges. Judges' Reaction to a Quasi-Random Reduction in Caseload
(joint with Keren Weinshall)
14th Annual Conference on Empirical Legal Studies, Claremont, USA
15-16 November 2019

2020

Risk Taking in the Household. Strategic Behavior, Social Preferences, or Interdependent Preferences?
(joint with Alexandra Fedorets and Olga Gorelkina)
Social Psychology Workshop, University of Freiburg
22 January 2020

Judicial Tech
Kick-off Conference "The Roundabouts of Digital Governance"
Erasmus School of Law, Rotterdam, The Netherlands
28 January 2020

Law as a Behavioral Discipline. A Programmatic Introduction
A Primer on Methods for Studying Behavioral Effects
Property is for Dummies
(joint with Oren Bar-Gill)
Shying Away from the Fundamental Transformation of Exchange into Dependence?
(joint with Eric Helland)
Tax Morale and Fairness in Conflict
(joint with Luigi Mittone and Azzurra Morreale)
Justice is in the Eyes of the Beholder
(joint with Rima Rahal)
Dieter Heremans Lecture in Law and Economics, and series of lectures, Catholic University of Leuven, Belgium
24-27 February 2020

Diploma Theses, Dissertations, and Habilitations

Dissertations

October 2017
Henning Prömpers, Friedrich Schiller University, Jena (Economics): Heterogeneous Risks at Auditing of Trade Accounts Receivable and their Default in Payment within Personal Insolvency

December 2017
André Schmelzer, Technical University Berlin (Economics): Essays on Market Design and Regulation under Bounded Rationality

January 2018
Shaheen Naseer, Erasmus University Rotterdam (Law): The Policy Choices of Bureaucrats: An Institutional Analysis

April 2018
Svenja Hippel, Friedrich Schiller University, Jena (Economics): Institutional Solutions to Social Dilemmas: A Behavioral Economics Perspective

May 2018
Konstantin Chatziathanasiou, University of Bonn (Law): Verfassungsstabilität – Eine von Art. 146 GG ausgehende juristische und (experimental-)ökonomische Untersuchung [Constitutional Stability – Applying the Tools of Experimental Economics to Art. 146 German Basic Law]

May 2018
Wladislaw Mill, Friedrich Schiller University, Jena (Economics): Spite in Auctions. Theoretical and Experimental Investigations

October 2018
Leonhard Hoeft, University of Bonn (Law): Normen im Labor. Eine Annäherung an H. L. A. Harts Teilnehmerperspektive aus Sicht der experimentellen Verhaltensökonomie [Norms in the Lab. Reading H. L. A. Hart's Participant Perspective from the Vantage Point of Experimental Economics]

April 2019
Lars Freund, University of Cologne (Economics): Implementation in the Presence of Social Preferences

July 2019
Christina Strobel, Friedrich Schiller University, Jena (Economics): Accountability and Appraisal of Artificial Intelligence

March 2020
Gentiana Imeri, University of St. Gallen (Law): The Expressive Function of Law

July 2020
Eugenio Verrina, University of Cologne (Economics): Essays on Moral and Ethical Behavior in Experimental Economics

October 2020
Yoan Hermstrüwer, Friedrich Schiller University, Jena (Economics): Engineering Games in the Public Interest. Essays in Experimental Law and Market Design

October 2020
Carina Hausladen, University of Cologne (Economics): Behavioral Economics – Enhanced: Machine-Learning and Decision-Making

Habilitations

January 2017
Armin Steinbach, University of Bonn (Law): Rationale Gesetzgebung
 [Rational Legislation]

October 2019
Alexander Morell, University of Cologne (Law): Der Beibringungsgrundsatz [The Principle of Adversarial Proceeding: A Justification]

Professional Activities

Editor

Review of Law and Economics

Ad hoc reviewer

Journal of Legal Studies, Journal of Empirical Legal Studies, Journal of Law, Economics and Organization, American Law and Economics Review, International Review of Law and Economics, American Journal of Comparative Law, International Journal of Constitutional Law, European Journal of International Law,

Econometrica, Management Science, Science Advances, Economic Journal, Journal of Public Economics, Games and Economic Behavior, Research Policy, Experimental Economics, Journal of Economic Behavior and Organization, International Journal of Industrial Organization, Labour Economics, Economics Letters, Journal of Economic Psychology, Journal of the Economic Science Association, Journal of Behavioral and Experimental Economics, Review of Behavioral Economics, Public Choice, Games, Economics Bulletin, Journal of Public Economic Theory, Journal of Institutional and Theoretical Economics, Journal of Institutional Economics, Metronomica

European Research Council, Alexander von Humboldt Foundation, Thyssen Foundation, Zentrum für Europäische Wirtschaftsforschung, Israeli Science Foundation, United States – Israel Binational Science Foundation, Israel Institute for Advanced Studies

Co-Chair: International Max Planck Research School Adapting Behavior to a Fundamentally Uncertain World (with Oliver Kirchkamp)

Chair: International Max Planck Research School Behaviorally Smart Institutions

Member of the Board: Society of Empirical Legal Studies, 2015–2019 (as first non-American member)

Chair: Max Planck Committee on a potential MPI for Geoanthropology

Alina Fahrenwaldt

Overview

Broadly speaking, I am interested in the psychological, individual, and situational determinants of ethical judgment and behavior. In my projects at the Max Planck institute, which I joined in July 2019, I focus on situational characteristics that facilitate selfish behavior, the effect of the type of claimant on cheating occurrences, the development of dishonesty over time, and on predictors of deontological versus utilitarian moral judgments. Moreover, we seized the opportunity to use the COVID-19 pandemic as a natural experiment to test the impact of governmental measures on perceived social norms, personal attitudes, and intervention intentions. I will describe these projects in more detail below.

Meta-Analysis of the Effect of *Moral Wiggle Room* on Social Decision-Making
The traditional economic view of human agents as rational and selfish decision-makers has been questioned by research suggesting that humans may actually have a preference for prosociality. Specifically, for experimental games in which selfishness would be rational, many studies have shown that people make prosocial decisions more often and to a higher degree than predicted by classical economic theory. However, some researchers argue that people may not only derive utility from material gain, but also from feeling and appearing like moral human beings. This approach suggests that situational characteristics, which make it harder to infer an agent's motives from his actions (termed *moral wiggle room*), may increase selfish behavior. Together with Fiona tho Pesch and Susann Fiedler (work in progress), we quantitatively review the existing literature on the effect of various types of *moral wiggle room* on social decisions in a meta-analysis. So far, we have screened the literature, identified the relevant studies, and are currently working on the coding procedure for this meta-analysis.

Context-Dependent Cheating: Betraying a Stranger or an Institution
Cheating by self-ascribed honest individuals is subject to scientific debates about the proposed underlying cognitive and attentional processes. While self-concept maintenance theory assumes cheating to be conscious profit-maximizing behavior that creates ethical dissonance, the bounded ethicality approach holds that it may be the result of motivated, yet unconscious, attentional and reasoning mechanisms. Previous research suggests that cheating may be easier when harming an institution, compared to a person, and may depend on interindividual differences in prosocial traits. Together with Susann Fiedler (manuscript in progress), we present evidence from a pupil dilation and attention study (N = 101), investigating cheating behavior contingent on cheating the research institute compared to another anonymous participant. We find that the hypothesized differences in the propensity of cheating depend on the type of claimant and the social value orientation. However, analyzing the experienced arousal, we discover very similar arousal patterns for both contexts. The same holds true for the analysis of biased attention. This means we find more attention given to the tempting decision option both when cheating a fellow participant as well as the research institute. These first results indicate that the underlying processes of cheating are not context-dependent, but instead universal.

Dishonesty Escalation over Time
Large-scale fraud scandals have led researchers to wonder whether unethical behavior can be self-reinforcing and might thus spiral out of control. Evidence for this theory comes from a neuroscientific study that finds that escalation of dishonest behavior is accompanied by a decrease in the

Contact

fahrenwaldt@coll.mpg.de

https://www.coll.mpg.de/alina-fahrenwaldt

amygdala's sensitivity to these immoral acts. Importantly, this part of the brain is associated with fear, but also with reward signals. In keeping with the self-concept maintenance theory mentioned above, the authors argue that this signal reduction mirrors a habituation to the negative arousal stemming from ethical dissonance, and that the reduction in aversion to one's unethicality then drives the observed dishonesty escalation. However, other research finds that people may not only experience negative emotions when being dishonest, but also derive some kind of positive thrill from this behavior, termed the *cheater's high*. Together with Susann Fiedler (work in progress), we argue that, apart from a habituation to negative arousal, people could also habituate to this *cheater's high* (similar to the build-up of tolerance to a drug), and we assume that both mechanisms are valid. Specifically, we hypothesize that the importance of each proposed mechanism may depend on interindividual differences in sensation-seeking. For individuals scoring low on sensation-seeking, we expect the habituation to negative arousal to be most relevant, while tolerance to the *cheater's high* may be more prevalent in individuals scoring high on sensation-seeking. Consequently, in individuals with average sensation-seeking scores, both mechanisms could drive behavior, which lets us expect the highest dishonesty scores to be found for these 'average' individuals. We test our predictions in an online study and will subsequently investigate the underlying attentional patterns and arousal dynamics in an eye-tracking study.

Meta-Analysis of Intuitive Deontological versus Utilitarian Moral Judgment
A long-standing debate among philosophers has not yet resolved the question which ethical concept captures human moral reasoning best: deontology or utilitarianism. While the former is guided by rather rigid rules (such as "Thou shalt not kill"), the latter favors actions that focus on the greater good (i.e., sacrificing one for many). The popularity of dual-process frameworks,

where decisions are attributed to either intuition or rationality, has also affected the domain of moral judgment research: some researchers argue that deontological judgments are the intuitive response, while utilitarian judgments stem from deliberation. Together with Jerome Olsen, Susann Fiedler, and Rima-Maria Rahal (work in progress), we set out to investigate the cumulative evidence in favor of intuitive deontology to estimate the underlying population effect size, as well as potential moderators of the effect, in a meta-analysis. So far, we have screened the literature and identified and started coding the studies that are eligible for this meta-analysis.

The Effect of Governmental Measures on Social Norm Perception and Intervention Behavior
To contain the COVID-19 pandemic, governments worldwide implemented physical-distance rules. However, little is known about how such rules have influenced systems of social norms. Together with Daniel Toribio-Flórez, Julia Sasse, and Anna Baumert (manuscript in progress), and in a pre-post natural experimental design, we tested the effects of governmental physical-distance rules (introduced in Germany on 22 March 2020) on perceptions of social norms and personal attitudes regarding physical-contact behavior, as well as their relationship with people's intentions to intervene against deviations. We argue that governmental rules can inform and disambiguate social norms. The introduction of governmental rules reduced the perceived prevalence (i.e., perceived *descriptive norms*) of physical-contact behavior; unexpectedly, however, these rules did not reduce the perceived norm ambiguity, nor did they affect the perceived social appropriateness (i.e., perceived *injunctive norms)* of this behavior; instead, they even increased personal appropriateness ratings (i.e., *personal attitudes*). Furthermore, personal and perceived social appropriateness ratings independently predicted intervention intention, irrespectively of the introduced governmental rules. We conclude that governmental rules may prompt the per-

ception of behavioral change, but their contribution to processes of normative change may be less straightforward than theoretically proposed.

Working Papers

Fahrenwaldt*, A., Toribio-Flórez*, D., Sasse, J. and Baumert, A. (2020). The Effect of Governmental COVID-19 Measures on Physical Distancing Norms and Intervention against Deviations: A Case Study in Germany. (*shared first authorship)

Work in Progress

Fiedler, S., Fahrenwaldt, A. and Glöckner, A. (in preparation) Fooling Whom Out of His Money? Investigating Arousal Dynamics in the Context of Betraying Institutions or Strangers.

Olsen, J., Fahrenwaldt, A., Fiedler, S. and Rahal, R. M. The Intuition of Deontological Judgments: A Meta-Analysis.

tho Pesch, F., Fahrenwaldt, A. and Fiedler, S. The Effect of Moral Wiggle Room: Meta-Analytic Evidence.

Fahrenwaldt, A. and Fiedler, S. Dishonesty Escalation (Online): Testing Two Affect Habituation Mechanisms and the Relevance of Interindividual Differences.

Lectures and Presentations (since 2017)

About "In-Group Love", "Out-Group Hate", and Effects of Stress in Female Political Sympathizers (invited)
SPUDM (Subjective Probability, Utility, and Decision Making) conference, University of Amsterdam, the Netherlands
22 August 2019

Fooling Whom Out of His Money? Investigating Arousal Dynamics in the Context of Betraying a Stranger or an Institution (invited)
Cognitive Economics Virtual Conference, online
10 July 2020

Professional Activities

August 2020 – ongoing
Member of the Max Planck PhDnet Survey Group

May 2020 – May 2021
External PhD representative for the year

Teaching

Winter term 2019/2020
Bachelor thesis supervision
Fernuniversität Hagen

Summer term 2019
Bachelor thesis supervision
Fernuniversität Hagen

D. Research Portraits

Ranveig Falch

Overview

I joined the EEG group of the Max Planck Institute for Research on Collective Goods in August 2020 as a Senior Research Fellow. My primary field of research is behavioral economics, and my work is primarily empirical, implementing experiments in controlled laboratory or field settings with large, nationally representative samples. My research is primarily focused on preferences for inequality in income and education, and seeks to answer the following research questions: (i) How are preferences for inequality shaped? (ii) Why do boys perform worse at school than girls do in most developed countries? (iii) What can be done to reduce inequality in education? (vi) What are people's preferences for reducing inequality in education?

How Are Preferences for Inequality Shaped?

Inequality is a pressing social issue and inequality considerations figure prominently in almost all spheres of society. However, there are striking differences in the attitudes to inequality across the world, and an important question is why people in some countries are more willing to accept inequality than people in other countries. Cappelen, Falch, Huang, and Tungodden (2020a) shed light on how inequality acceptance in society may be transmitted from one generation to the next through oblique socialization by documenting systematic differences in how adults handle distributive conflicts among children in two societies characterized by very different levels of income inequality: China (Shanghai) and Norway. In a large-scale experiment, including over 6,000 adults, we find a striking country difference, where adults in China implement more than twice as much income inequality between children (5, 9, 13, and 17 years old), compared to adults in Norway making the same type of distributive decisions. This finding is robust to varying the age of the children and key dimensions of the distributive situation.

As a second part of the same project, Cappelen, Falch, Huang, and Tungodden (2020b) have children (in the same age groups as those for whom the adults made decisions) make the same set of distributive decisions that the adults made. However, the children make decisions within their own age group, meaning that they distribute between children their own age. Taken together, the experiments allow us to investigate how adults make distributive choices for children at different ages, and how this corresponds to the distributive choices made by children in the same age groups. To map out how children and adults compare in different societies, and how children in different societies compare, we have implemented the experiments with heterogeneous samples of adults and children in both China and Norway.

Previous research has also shown that moral preferences may be shaped by important life events, such as wars, natural disasters, and economic shocks. Cappelen, Falch, Sørensen, and Tungodden (2020) seek to understand how the COVID-19 pandemic may affect people's moral preferences and their inequality acceptance. To provide causal evidence on how the COVID-19 pandemic may shape people's moral views, we conducted a large-scale pre-registered survey experiment with a nationally representative sample of more than 8,000 Americans. We examined how a reminder of the COVID-19 pandemic causally affects people's views on solidarity and fairness. We randomly manipulate whether respondents are asked general questions about the crisis before answering moral questions. By making the pandemic particularly salient for treated respondents, we provide causal evidence on how the crisis may change moral views. We find that a reminder about the crisis makes respondents more willing

Contact

falch@coll.mpg.de

https://www.coll.mpg.de/ranveig-falch

to prioritize society's problems over their own problems, but also more tolerant of inequalities due to luck. We show that people's moral views are strongly associated with their policy preferences for redistribution. The findings show that the pandemic may alter moral views and political attitudes in the United States and, consequently, the support for redistribution and welfare policies.

Finally, Cappelen, Falch, and Tungodden (2020) provide a review of the experimental research on fairness and income inequality. The chapter describes how people differ in the weight they attach to fairness and in what they perceive to be fair and unfair inequalities. Moreover, the handbook chapter illustrates how the pluralism in fairness preferences is essential to understanding a larger number of economic phenomena, including incentive structures in the labor market, bargaining, and redistribution. Finally, the chapter provides an overview of the experimental research on the origins of fairness preferences, focusing on studies of how fairness preferences develop in childhood and adolescence, and on how fairness preferences are shaped by the social environment.

Inequality in Education

In all but six OECD countries, a larger proportion of boys than girls do not attain the baseline level of proficiency in core subjects. Boys are also dropping out of high school at higher rates than girls and, in higher education, females have surpassed the rate of males graduating in nearly all OECD countries. Similarly, in high-income countries there is a growing concern about the prospects for low-skilled males. The negative developments among males in education and the labor market prompts the question of whether people interpret inequalities differently depending on whether males or females are falling behind. Cappelen, Falch, and Tungodden (2019) study this question in a new large-scale distributive experiment with a general population sample of over 14,000 Americans. Our data provide strong evidence of discrim-

ination against males who fall behind, particularly among female participants. A large set of additional treatments establishes that the gender discrimination among female participants reflects statistical fairness discrimination. The study provides novel evidence on the nature of discrimination and on how males falling behind are perceived by society.

Related to inequality in education, and the students who fall behind, I am working on the first experiment designed to elicit people's preferences for the distribution of educational resources in society (Falch, 2020). Investment in "human capital" is at the heart of national strategies to promote economic prosperity. Inherent to these investments are challenging distributional considerations: who should get what? In this project, I provide new insights into people's preferences for the distribution of educational resources in society. I conduct an incentivized experiment designed to elicit such preferences, specifically examining how a general population sample of over 2,000 Americans trade off educational resources between quick and slow learners. I find that they give priority to slow learners, assigning, on average, two thirds of the educational resources to this group. Using treatment manipulations, I find that both cost efficiency and the relative motivations of the learners causally affect the resource allocations, but the priority given to slow learners remains. The findings provide important insights for the present policy debate on how to distribute educational resources in society.

Outlook for 2020-2021

In addition to the ongoing projects outlined above, I will be implementing a new field experiment with Fanny Landaud during the fall of 2020. The project will inform the ongoing debate on how to reduce inequality in education. In this project, we will study through a controlled experiment whether providing correct information about the study effort of peers impacts students' will-

ingness to invest in schoolwork, among students who initially spend relatively little time on schoolwork. We will combine experimental, survey, and administrative data on a large sample of Norwegian 10th-graders to answer this question.

Publications (since 2017)

Book Chapter

Cappelen, W. A., Falch, R. and Tungodden, B. (2020). Fair and Unfair Income Inequality. In: Zimmermann K. (ed.), *Handbook of Labor, Human Resources and Population Economics*. Springer, Cham, 1–25.

Revise & Resubmit

Cappelen, W. A., Falch, R., Sørensen, E. Ø. and Tungodden, B. (2020a). Solidarity and Fairness in Times of Crisis. R & R: *Journal of Economic Behavior & Organization*.

Working Papers

Cappelen, W. A., Falch, R. and Tungodden, B. (2019). The Boy Crisis: Experimental Evidence on the Acceptance of Males Falling Behind. *NHH Department of Economics Discussion Paper* 06/2019.

Work in Progress

Falch, R. (2020). How Do People Trade Off Resources Between Quick and Slow Learners?

Cappelen, W. A., Falch, R., Sørensen, E. Ø. and Tungodden, B. (2020b). Experienced Welfare Under the COVID-19 Pandemic.

Cappelen, W. A., Falch, R., Huang, Z. and Tungodden, B. (2020a). How Do Adults Handle Distributive Conflicts Among Children? Experimental Evidence From China and Norway.

Cappelen, W. A., Falch, R., Huang, Z. and Tungodden, B. (2020b). The Development of Social Preferences: Experimental Evidence from China and Norway.

Falch, R. and Landaud, F. (2020). Peer Perceptions and Students' Investments in Schoolwork.

Professional Activities

Referee for

Management Science, *Scandinavian Journal of Economics*, *Experimental Economics*

Susann Fiedler

Summary Report

I am fascinated by how individuals and institutions (in the broadest sense) shape the behavior, and a good part of my projects explores how the design of decision environments is linked to economic outcomes: What guides counterproductive behavior? How are strategic vs. non-strategic decisions formed? Which aspects of a decision environment are weighted most strongly in the decision-making process? I have also worked on the mechanisms and drivers of cooperative behavior in connection with underlying inter-individual social preferences. Examples include the link between Social Value Orientation and altruistic giving, but also strategic behavior in the context of social dilemma situations. Ultimately, a better understanding of the underlying cognitive processes and its link to observable behavior can be used to develop more targeted interventions and support social and business developers by creating structures fostering a trusting and cooperative environment.

Building on results from the previous year's description of the relationship between inter-individual differences in social preferences and information search behavior in social dilemma situations (Fiedler, Glöckner, Nicklisch, and Dickert, 2013), I aim to describe and predict the cognitive underpinnings and mental construction processes within various decision situations. Understanding the inter-individual differences in the perception of, for example, the decision to volunteer in social projects, contributing to open source technologies, or the decision to vote will help to design incentive structures and institutional settings that foster social welfare-maximizing behavior. This is an emerging field within the area of social psychology and behavioral economics which is highly relevant for social planners, since it potentially has large benefits in terms of reducing cost within society.

Advancing, in particular, an experimental series on the link between social preferences and information search in the context of social dilemmas gave us insights into the effects of cognitive constraints and time pressure (Fiedler, Olsen, and Lillig, work in progress), framing (Fiedler and Hillenbrand, 2020), intergroup situations (Rahal, Fiedler, and De Dreu, 2020), incentives (Fiedler and De Dreu, work in progress), nationality (Fiedler, Hellmann, Dorrough, and Glöckner, 2018), and different recipient groups (Hellmann, Fiedler, and Glöckner, work in progress). Using gaze recordings and fully interactive decision paradigms, we have already found out that individuals with a strong prosocial orientation search for more information about their partners or group members. Following up on this, we went further and examined the role of systematic ignorance in the context of outgroup discrimination (Rahal, Fiedler, and De Dreu, 2020; Rahal, Fiedler, and De Dreu, work in progress), as well as situations that call for civil courage (Tho Pesch, Fiedler, and Baumert, work in progress).

Extending this first line of research, which shows the strong link between social preferences and attention, as well as between attention and social decision-making (Fiedler and Ghaffari, 2018), we were curious about the potential subsequent effects of these interrelations. In a joint project by Minou Ghaffari, Bettina von Helversen, and Susann Fiedler, we replicate the link between social preferences and the extent of information search. Specifically, prosocial individuals invest more time in their search for information in decomposed dictator games and, in this particular setting, are more likely to inspect relevant behavioral indices of their interaction partner. As a result of this, prosocials show better memory performance when asked for their interaction partners' behavior than individuals who have rather individualistic preferences (Ghaffari, Fiedler, and von Helversen, work in progress).

Contact

fiedler@coll.mpg.de

https://www.coll.mpg.de/susann-fiedler

Another area of behavior that I am particularly interested in is identifying the drivers of counterproductive behavior and dishonesty, especially the affective and cognitive mechanisms involved while such behavior occurs. It has often been suggested that decision-makers are bounded in their ethicality, meaning that they develop "blind spots" for their own unethical behavior and that of others. Using gaze and arousal recordings in fully incentivized decision paradigms, we are currently investigating the systematic and predictable ways in which humans act unethical beyond their own awareness. One result we have found in an ongoing series of experiments is that the process of cheating involves both tension reduction mechanisms dealing with the experienced arousal, but also bounded ethicality mechanisms, e.g., avoiding information that makes one's own unethical behavior salient (Fiedler, Fahrenwaldt and Glöckner, work in progress). Building on these first results, I focused on these mechanisms in the context of (1) discrimination (Dorrough and Fiedler, work in progress), (2) civil courage (Tho Pesch, Fiedler, and Baumert, work in progress; Fiedler, Hu, and Weber, 2019) and (3) a plan to extend to decision environments involving potential losses. Based on this theory driven work, I additionally plan to develop interventions targeting these existing blind spots of unethical behavior by means of nudging and changes in the institutional structures.

Besides my process-tracing research, I further developed my work within the Open Science community and meta-science. In my role as the director of the logistics committee of the Psychological Science Accelerators, I developed initial structures that can be scaled for any type of multi-side collaborations, making inter-cultural work much easier in the future. This will allow us to move one step closer to one goal in psychology that is largely ignored – generalizability. Additionally, together with colleagues from Hagen, I set up a large-scale student cumulative science project with, by now, 100 original studies from the Journal of

Judgment and Decision Making being replicated. The next steps in the project are the re-analysis of the replications, and the dissemination of the results (Jekel, Fiedler, Glöckner, Dorrough, and Allstadt Torras, work in progress). With a first concept paper that is currently developing into a guideline for setting up similar projects, we started reporting about this project (Fiedler, Jekel, Allstadt Toras, Mischkowski, Dorrough, and Glöckner, 2020). In joint work with Andreas Glöckner, in preparation for a DFG proposal, we showed the role of theory databases in psychological science and discussed how efficiency of the scientific work could be increased by using standards of transparency and generalizability (Glöckner, Fiedler, and Renkewitz, 2018). Applying the same principles to research using eye-tracking, and in collaboration with Michael Schulte-Mecklenbeck, Frank Renkewitz, and Jacob Orquin, I developed an easy-to-use guide for eye-tracking research that allows researchers as well as reviewers to test and understand the reliability and transparency of the reported results (Fiedler, Schulte-Mecklenbeck, Renkewitz, and Orquin, 2020).

Publications (since 2017)

Articles in Peer-Reviewed Journals

Levin, F., Fiedler, S. and Weber, B. (Registered report in principle acceptance). Positivity Effect and Decision Making in Ageing. *Cognition and Emotion*.

Bago, B., Aczel, B., Kekecs, Z., Protzko, J., Kovacs, M., Nagy, T. … Fiedler, S. … and Chartier, C. (Registered report in principle acceptance). Exploring the Influence of Personal Force and Intention in Moral Dilemma Judgements. *Nature Human Behaviour*.

Evans, A., Fiedler, S. and Kogler, C. (2020). Process Tracing Methods in Social Psychology. *Journal of Experimental Social Psychology*.

Rahal, R. M., Fiedler, S. and De Dreu, C. K. (2020). Prosocial Preferences Condition Decision Effort and Ingroup Biased Generosity in Intergroup Decision-Making. *Scientific reports*, 10(1), 1-11.

Fiedler, S. and Hillenbrand, A. (2020). Gain-Loss Framing in Interdependent Choice. *Games and Economic Behavior*, 121, 232-251.

Fiedler, S., Hu, Y. and Weber, B. (2020). What Drives the (Un)Empathic Bystander to Intervene? Insights From Eye-Tracking. *British Journal of Social Psychology*, 59(3), 733–751. (shared first authorship)

Fiedler, S., Jekel, M., Allstadt Torras, R., Mischkowski, D., Dorrough, A. R. and Glöckner, A. (2020). How to Teach Open Science Principles in the Undergraduate Curriculum – The Hagen Cumulative Science Project. *Psychology Learning & Teaching*, 19(1), 91–106. (shared first authorship)

Fiedler, S. and Rahal, R. (2019). Understanding Cognitive and Affective Mechanisms in Social Psychology Through Eye-tracking. *Journal of Experimental Social Psychology*, 85, 103842. (shared first authorship)

Levin, F., Fiedler, S. and Weber, B. (2019). The Influence of Episodic Memory Decline on Value-Based Choice. *Aging, Neuropsychology, and Cognition*, 26(4), 599–620.

Fiedler, S. and Ghaffari, M. (2018). The Power of Attention: Using Eye Gaze to Predict Other-Regarding and Moral Choices. *Psychological Science*, 29(11), 1878–1889. (shared first authorship)

Moshontz, H., Campbell, L., Ebersole, C. R., IJzerman, H., Urry, H. L., Forscher, P., Fiedler, S., … & Flake, J. K. (2018). Psychological Science Accelerator: Advancing Psychology through a Distributed Collaborative Network. *Advances in Methods and Practices in Psychological Science*, 1(4), 501–515.

Fiedler, S., Hellmann, D. M., Dorrough, A. R. and Glöckner, A. (2018). Cross-National in-Group Favoritism in Prosocial Behavior: Evidence From Latin and North America. *Judgment and decision making*, 13(1), 42–60.

Glöckner, A., Fiedler, S. and Renkewitz, F. (2018). Belastbare und effiziente Wissenschaft: Strategische Ausrichtung von Forschungsprozessen als Weg aus der Replikationskrise. *Psychologische Rundschau*. 69(1), 1–15.

Bouwmeester, S., Verkoeijen, P. P., Aczel, B., Barbosa, F., Bègue, L., Brañas-Garza, P., Fiedler, S., … and Evans, A. M. (2017). Registered Replication Report: Rand, Greene, and Nowak (2012). *Perspectives on Psychological Science*, 12(3), 527–542.

Book Chapters, Invited Comments, and Research Reports

Fiedler, S., Schulte-Mecklenbeck, M., Orquin, J. and Renkewitz, F. (2020). Increasing Reproducibilty of Eyetracking Studies: The EyeGuidelines. In M. Schulte-Mecklenbeck, A. Kühberger and R. Ranyard (Eds.), *A Handbook of Process Tracing Methods for Decision Research. A Critical Review and User´s Guide*. New York and Hove: Psychology Press, 65-75.

Fiedler, S., Weber, B. and Ettinger, U. (2019). Neuroeconomics. In C. Klein U. Ettinger (Eds.), *Eye Movement Research: An Introduction to its Scientific Foundation and Applications*. Springer.

Open Science Collaboration (2017). Maximizing the Reproducibility of Your Research. In S. O. Lilienfeld and I. D. Waldman (Eds.), *Psychological Science Under Scrutiny: Recent Challenges and Proposed Solutions*. New York, NY: Wiley.

Revise & Resubmit

Eriksson, K., Strimling, P., Gelfand, M., Wu, J., Abernathy, J., … Fiedler, S., … and Van Lange, P. (R & R). The Appropriateness of Informal Sanctions in 57 Countries. *Nature Communications.*

Tho Pesch, F., Fiedler, S. and Baumert, A. (R & R). Seeing Moral Transgressions: Moral Wiggle Room in Costly Punishment. *Journal of Economic Psychology.*

Ghaffari, M., Fiedler, S. and von Helversen, B., (R & R). The Cost of Imperfect Memory in Social Interactions. *Journal of Personality and Social Psychology.*

Fiedler, S., Schulte-Mecklenbeck, M., Orquin, J. and Renkewitz, F. (R & R). Guideline for Reporting Standards of Eye-tracking Research in Decision Sciences. *Behavior Research Methods.*

Working Papers

Rahal, R.-M., Hoeft, L. and Fiedler, S. (in preparation). Eyes on Morals: Investigating the Cognitive Processes underlying Moral Decision Making via Eye-Tracking.

Rahal, R.-M., Fiedler, S. and De Dreu, C.K.W. (in preparation). Staying Blind to Stay Fair: Inequality Averse Decision Makers Avoid Group Membership Information and Ingroup Favoritism.

Fiedler, S., Olsen, S. and Lillig, R., C.K.W. (in preparation). Social Preferences Under Constraints.

Fiedler, S. Fahrenwaldt, A. and Glöckner, A. (in preparation). Fooling Whom Out of His Money? Investigating Arousal Dynamics in the Context of Betraying Institutions or Strangers.

Lectures and Presentations (since 2017)

2017

Choice Construction in Social Dilemma Situations
Gigerenzer Symposium, Bielefeld, Germany
March 2017

Transparency and Reproducibility of Scientific Work
Network Evidence-Based Medicine, Hamburg, Germany
March 2017

Personality, Situation, and Cognitive Processes in Social Decision Making
Cognition, Person, and Situation: Unifying Explanations of Economic Behavior, Landau, Germany
March 2017

Maximizing Reproducibility: Everyday Possibilities of Increasing Your Scientific Contribution
Colloquium, Humboldt University, Berlin, Germany
May 2017

Understanding the Interplay of Social Preferences and Incentives
Colloquium, University of Würzburg, Germany
May 2017

Ignorance as a Tool of Self-Interest?
20th International Conference for Social Dilemmas, Taormina, Italy
June 2017

Understanding the Interplay of Social Preferences and Incentives via Eye-Tracking?
SPUDM, Haifa, Israel
August 2017

The Indirect Costs of Being Individualistic: Understanding the Link between Social Preferences and Memory Performance
Colloquium, Tilburg University, The Netherlands
November 2017

2018

Openness and Transparency: Everyday Possibilities of Increasing Your Scientific Contribution
Colloquium, Universität Landau-Koblenz, Landau, Germany
January 2018

The Indirect Costs of Being Individualistic: Understanding the Link between Social Preferences and Memory Performance
IMEBESS, Florence, Italy
May 2018

The Indirect Costs of Being Individualistic: Understanding the Link between Social Preferences and Memory Performance
Colloquium, Middlesex University, London, Great Britain
May 2018

Strengthening the Bond Between Theory and Evidence
International Meeting of the Psychonomic Society, Amsterdam, The Netherlands
May 2018

Staying Blind to Stay Fair: Inter-Individual Differences as Drivers of Information Avoidance
European Conference on Personality, Zadar, Croatia
July 2018

Prosocial Preferences in Intergroup Decision-Making
EADM Summer School, Salzburg, Austria
July 2018

Choice Construction in Social Dilemma Situations
Colloquium, Goethe-Universität Frankfurt, Germany
December 2018

Prosocial Preferences in Intergroup Decision-Making: Understanding Ignorance via Eye-Tracking
Colloquium, Universität des Saarlandes, Saarbrücken, Germany
December 2018

2019

Open Science: From Transparency to Efficient Theory Development
Colloquium on Comparative Psychology, Düsseldorf University, Germany
September 2019

Fooling Whom Out of His Money? Investigating Arousal Dynamics in the Context of Different Honesty Norms
Colloquium on Comparative Psychology, Düsseldorf University, Germany
November 2019

The Value of Reproducibility
Utrecht University in Bonn, Germany
December 2019

2020

Understanding Group Competition
Colloquium WU Vienna, Austria
January 2020

Underlying Mechanisms of Strategic Decision-Making
Virtual Process-Tracing Conference, ZOOM, Germany
July 2020

Strengthening the Bond between Theory and Evidence
Perspectives on Scientific Error, ZOOM, Italy
July 2020

Teaching

Summer & winter term 2018 & winter term 2019
Language, Thinking, Judgement, Decision-Making, and Consciousness, BA lecture
University of Hagen

Summer & winter term 2018 & winter term 2019
Perception, Attention, and Memory, BA lecture
University of Hagen

Summer & winter term 2018 & winter term 2019
Social Decision-Making, BA seminar
University of Hagen

Summer & winter term 2018 & winter term 2019
Theories of Judgment and Decision-Making, BA seminar
University of Hagen

Summer term 2018
PhD workshop, Openness & Transparency, PhD level
University of Saarbrücken

Winter term 2018
PhD workshop, "Theory development & integration", of the German Association for Psychology

Summer term 2018
Module, Judgment and Decision-Making, BA lecture & seminar
Döpfer University of Applied Sciences (private)

BA Theses

Supervision of 48 BA theses at the University of Hagen and the private Döpfer University of Applied Sciences.

MA Theses

Supervision of 6 MA theses (University of Tübingen (1), University of Leipzig (1), University of Göttingen (1), University of Cologne (2), University of Hagen (1)

Public Service

Since 2020
Program committee within the interdisciplinary German Research Foundation (DFG) priority program "META-REP: A meta-scientific program to analyze and optimize replicability in the behavioral, social, and cognitive sciences".

Since 2020
Founding Member of the German Reproducibility Network

Since 2020
Head, Einhorn Award Committee

Since 2020
Committee of Ombudspersons for the German Psychological Society (DGPs)

Since 2020
Co-host of the Virtual Process-Tracing Seminar Series & Conference (DGPs)

Since 2013
Equal Opportunities Officer at the MPI for Research on Collective Goods

Since 2014
Open Science Ambassador

2018-2020
Director of the Logistics Committee at the Psychological Science Accelerator (PSA)

Professional Activities

Editorial Boards

Science Advances (Associate Editor)

Journal of Experimental Social Psychology (Guest Editor of a special issue on process-tracing, 2020)

Economic Psychology (Associate Editor)

APS Journal of Advances in Methods and Practices in Psychological Science (Editorial Board)

Memberships

European Association of Decision Making (EADM)

Society of Judgment & Decision Making (SJDM)

German Psychology Association (DGPs)

Reviewer for

Nature Communications , *Journal of Experimental Social Psychology*, *Journal of Personality and Social Psychology*, *Organizational Behavior and Human Decision Processes*, *Journal of Experimental Psychology: Learning, Memory and Cognition*, *Cognition*, *Journal of Experimental Psychology: General*, *Journal of Judgment and Decision Making*, *Experimental Psychology*, *Theory & Decision*, *PlosOne*, *European Economic Review*, *Games and Economic Behavior*, *Management Science*, *Experimental Economics*, *Journal of Behavioral Research Methods*, *Social Psychology and Personality Science*, etc.

German Research Foundation (DFG), Swiss National Science Foundation, Austrian Science Foundation, Hertie School of Governance

Jens Frankenreiter

Summary Report

I was a Senior Research Fellow at the institute from March 2017 to September 2019. In the fall of 2018, I served as a Visiting Associate Professor of Law at the University of Virginia School of Law. Since 2018, I am also a member of the *Zukunftsfakultät* working group at the "Wissenschaftskolleg zu Berlin".

My research focuses on business law, in particular corporate and contract law, and the functioning of legal institutions. I am particularly interested in the challenges and opportunities that new technologies create for the legal system in these fields. Much of my work uses quantitative methods and other computational tools such as automated text analysis and machine learning.

My work at the institute can be divided into two parts. In the first part, I completed a research agenda that I had started as a PhD student at the Center for Law & Economics at ETH Zurich. This research agenda focused on investigating the behavior of actors involved in legal proceedings in Europe, a topic that is under-researched in comparison with the United States. This research resulted in a number of different publications. Besides, I was awarded the ETH Medal for outstanding dissertations as well as the SIAF Award 2018 for this work.

First, in two different studies, I used quantitative methods to investigate whether the political preferences of EU member-state governments are reflected in the behavior of the members of the European Court of Justice (the highest branch of the Court of Justice of the EU) appointed by these governments. While the study of the influence of the (political) background of judges on their decision-making has already received considerable attention in the U.S., these studies are among the first to tackle this question at the European level. The first study is **"Are Advocates General Political?"**, which investigates differences in the voting behavior of Advocates General at the Court, which correspond to the political preferences of Member State governments vis-à-vis European integration. The second study is **"The Politics of Citations at the ECJ"**, which focuses on references to prior case law in opinions authored by different judges. Both studies suggest that the political preferences of Member State governments play a significant role in the behavior of the members of the European Court of Justice.

Another publication that emerged from my work on courts and judges is **"Forum Selling Abroad"**, co-authored with Stefan Bechtold and Dan Klerman. This study uses a series of interviews with judges, court officials, and attorneys in Germany to investigate whether German judges sometimes engage in "forum selling", a term used to describe attempts by judges to handle cases in a way that attracts more cases to their courts. In the U.S., such behavior has been documented, for example, in the area of patent law. In Germany, we document that similar behavior can be observed in patent and press law. We also document various differences between forum selling in the U.S. and forum selling in German courts.

"Writing Style and Legal Traditions" marks the transition between the first and second parts of my work. Similar to a number of previous studies, this study investigates the behavior of judges at the European Court of Justice. Methodologically, however, it is closer to many projects that belong to the second part of my work. The study uses natural language processing and computational methods to investigate whether the writing style of the Court has changed over time, in a way that reflects a move away from the early dominance of judges from countries influenced by French legal culture towards a court in which all major legal European traditions are represented. Contrary to what

Contact

jgf2132@columbia.edu

https://www.coll.mpg.de/jens-frankenreiter

one might expect, it finds that judges from French-speaking countries still seem to exert a relatively high influence on the writing style of the court.

The second part of my work, most of which is still ongoing, does not focus primarily on courts, but mostly on different areas of business law. What holds this research together is a focus on how text can be used to inform and enrich the legal discourse in these areas. This is an important topic with potentially far-ranging consequences for legal research and practice. Traditionally, the primary research method of legal scholars was based on reading and interpreting legal texts. Advances in computing power, storage capacities, and new developments in machine learning and artificial intelligence allow researchers to conduct, for the first time, empirical studies directly on these texts, without the need to transform them first into numerical information by means of manual coding. This opens up a host of new and exciting possibilities for legal research. Besides, it also has profound implications for legal practice, where similar tools are introduced as part of "legal tech", i.e., initiatives attempting to automate the work of lawyers and other human workers in the legal industry.

My work includes investigations of various phenomena in business law alongside methodological contributions.

"Who Controls Online Privacy? Jurisdictional Conflict and Regulatory Spillover in the Regulation of Online Services" is an empirical investigation of whether, as many observers predicted, online services in the U.S. extended privacy protections mandated by EU law to their customers in the U.S. For this, I use a large longitudinal dataset of privacy policies, assembled in collaboration with Yoan Hermstrüwer. The results from this analysis suggest, first, that regulatory spillover might be less important than is commonly assumed, at least in the area of data privacy law. Second, the results also reveal important limits on the impact of EU data privacy law on the

operations of U.S. online services. Both findings have important implications for researchers and policy-makers alike.

"Hunting for Contracts on the Blockchain" (joint work with Julian Nyarko of Stanford Law School) makes an empirical contribution to ongoing discussions about the potential of "smart contracts" to replace contract law as an infrastructure for impersonal exchange. The project provides a large-scale, descriptive overview of the landscape of smart contracts implemented on the blockchain platform Ethereum. We obtain information on the code of all roughly 45,000 verified smart contracts from etherscan.io and use various text analysis methods to analyze their content. The study finds that there are currently no smart contracts that act as a substitute for traditional contracts in a relevant range of applications.

"Computational Methods in Legal Analysis" (joint work with Michael Livermore of University of Virginia School of Law) provides an overview of how computational methods are being used by legal researchers to make large quantities of text amenable to legal research. For this, we document how these methods are affect research across the varied landscape of legal scholarship, from the interpretation of legal texts to the quantitative estimation of causal factors that shape the law.

Finally, I worked on several projects that lie outside my main areas of research. The first is **"Are Lawyers' Case Selection Decisions Biased? A Field Experiment on Access to Justice"**, another joint project with Michael Livermore. In this project, we conduct a field experiment to explore how attorneys in the U.S. respond to initial inquiries by senders whose names suggest they belong to different racial/ethnic groups. We find that inquiries from (perceived) minority clients receive fewer responses than inquiries sent under names common among persons identifying as white. The second is **"Hard Core Citation Strategery and the Barely Legal Gaming of Law School**

Rankings" (with Eric Talley), which investigates strategic incentives for law schools in the context of the potential introduction of citation metrics as an input to law school rankings in the U.S.

Since September 2019, I am an Associate Research Scholar at Columbia Law School and the Postdoctoral Fellow in Empirical Law and Economics at the Ira L. Millstein Center for Global Markets and Corporate Ownership. In this new role, I continue the various research projects that I began during the second part of my time at the institute.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Frankenreiter, J., Livermore, M. (2020). Computational Methods in Legal Analysis, *Annual Review in Law and Social Sciences*, 16, 39–57.

Bechtold, S., Frankenreiter, J., Klerman, D. (2019). Forum Selling Abroad. *Southern California Law Review*, 93(3), 487–559.

Frankenreiter, J. (2019). The Limits of Smart Contracts. *Journal of Institutional and Theoretical Economics (JITE)*, 175(1), 149–162.

Frankenreiter, J. (2018). Are Advocates General Political? Policy Preferences of EU Member State Governments and the Voting Behavior of Members of the European Court of Justice, *Review of Law & Economics*, 14(1).

Frankenreiter, J., (2017). Network Analysis and the Use of Precedent in the Case Law of the CJEU – A Reply to Derlén and Lindholm, *German Law Journal*, 18, 687–694.

Frankenreiter, J. (2017). The Politics of Citations at the Ecj. Policy Preferences of EU Member State Governments and the Citation Behavior of Members of the European Court of Justice, *Journal of Empirical Legal Studies*, 14(4), 813–857.

Book Chapters

Dumas, M., Frankenreiter, J. (2019). Text as Observational Data. In M. A. Livermore & D. Rockmore (Eds.), *Law as Data: Computation, Text, and the Future of Legal Analysis*, 59–70.

Frankenreiter, J. (2019). Writing Style and Legal Traditions. In M. A. Livermore & D. Rockmore (Eds.), *Law as Data: Computation, Text, and the Future of Legal Analysis*, 153–190.

Work in Progress

Frankenreiter, J., Who Controls Online Privacy? Jurisdictional Conflict and Regulatory Spillover in the Regulation of Online Services.

Frankenreiter, J., Livermore, M., Are Lawyers' Case Selection Decisions Biased? A Field Experiment on Access to Justice.

Frankenreiter, J., Hwang, C., Nili, Y. Talley, E., Cleaning Corporate Governance.

Frankenreiter, J., Nyarko, J., Hunting for Contracts on the Blockchain.

Frankenreiter, J., Hermstrüwer, Y., The Global Impact of European Privacy Law

Frankenreiter, J., Talley, E., Hard Core Citation Strategery and the Barely Legal Gaming of Law School Rankings

Lectures and Presentations (since 2017)

2017

Informal Judicial Hierarchies
European Association of Law and Economics (EALE), London
September 2017

Informal Judicial Hierarchies
EUTHORITY Seminar Series, KU Leuven, Leuven
October 2017

Writing Style and Legal Traditions
Computational Study of the Law Working Group, Santa Fe Institute
December 2017

2018

Writing Style and Legal Traditions
Conference on Empirical Legal Studies in Europe (CELS-E), KU Leuven
May 2018

Forum Selling Abroad
American Law and Economics Association (ALEA), Boston University
May 2018

Forum Selling Abroad (with Dan Klerman)
Society for Inst. & Org. Economics (SIOE), HEC Montreal
June 2018

Forum Selling Abroad
Law and Economics Workshop
University of Michigan Law School
September 2018

Forum Selling Abroad (with Stefan Bechthold)
Conference on Empirical Legal Studies (CELS), University of Michigan
November 2018

Forum Selling Abroad
Law & Economics Colloquium, University of Virginia School of Law
November 2018

2019

Are Advocates General Political? An Empirical Analysis of the Voting Behavior of the Advocates General at the European Court of Justice
PluriCourts Seminar Series, Oslo University
March 2019

World Privacy Law, Or: Is Brussels Calling the Shots in U.S. Online Privacy?
Center for Law & Economics, ETH Zurich
June 2019

Forum Selling Abroad
Sechuan University, Chengdu, China
July 2019

Are Lawyers' Case Selection Decisions Biased? A Field Experiment on Access to Justice
Academica Sinica, Taipei, Taiwan
July 2019

Are Lawyers' Case Selection Decisions Biased? A Field Experiment on Access to Justice
Canadian Law & Economics Association
University of Toronto, Toronto
September 2019

Are Lawyers' Case Selection Decisions Biased? A Field Experiment on Access to Justice
Conference on Empirical Legal Studies (CELS), Claremont McKenna College, Claremont, CA
November 2019

2020

Who Controls Online Privacy? On the Global Regulation of Online Services
Yale ISP Ideas Lunch, Yale Law School, New Haven, CT
January 2020

Hard Core Citation Strategery and the Barely Legal Gaming of Law School Rankings (with Eric Talley)
LEAP Text Analysis in Law Conference, UC Berkeley
February 2020

Who Controls Online Privacy? On the Global Regulation of Online Services
LEAP Text Analysis in Law Conference, UC Berkeley
Februrary 2020

Hunting for Contracts on the Blockchain
BYU Winter Deals Conference, Park City, UT
March 2020

Are Lawyers' Case Selection Decisions Biased? A Field Experiment on Access to Justice
(with Mike Livermore)
Summer Faculty Workshop, University of Virginia School of Law
June 2020

Teaching

Summer Term 2017
Analytische Methoden für Juristen
HU Berlin

Summer Term 2018
Analytische Methoden für Juristen
HU Berlin

Fall Term 2018
LawTech (with Michael Livermore)
UVA School of Law

Winter Term 2018/19
Gesellschaftsrecht und Ökonomie
University of Bonn

Summer Term 2019
Analytische Methoden für Juristen
HU Berlin

Summer Term 2019:
Corporate Law and Economics (short course)
Hamburg University

Winter Term 2019/20
Gesellschaftsrecht und Ökonomie
Uni Bonn

Professional Activities

Manuscript Referee
Journal of Legal Studies, *Journal of Law, Economics, and Organization*, *Journal of Empirical Legal Studies*, *American Law and Economics Review*, *Review of Law & Economics*, *Law & Social Inquiry*

Membership in Organizations
Society for Empirical Legal Studies

Others
Co-organizer of the LawEcon Workshop at Bonn University, 2018-2019

D. Research Portraits

Lars Freund

I was a Research Fellow at the Max Planck Institute for Research on Collective Goods from 2015 to 2018. During this time, I completed my dissertation, *"Implementation in the Presence of Social Preferences: A Behavioral and Experimental Economic Perspective"*, which deals with the interaction between humans where private information is present. After the submission of my dissertation in 2018, I started working for a consultancy on how to apply game-theoretical methods. In my final year at the institute, my research was mainly about finalizing the following four papers.

Research

The Role of Intention in Bilateral Trade Environments: An Experiment

In a controlled laboratory experiment, I study the role of intentions among privately informed market participants in a bilateral trade environment. In contrast to theoretical insights by Bierbrauer and Netzer (2016), I do not find empirical support for their counterexample to the revelation principle. The authors show that the implementation of a social choice function equally shares the gains of trade. As predicted, the modification increases the perceived kindness of the truth-telling strategy, but I conclude that the unsuccessful implementation is due to the decreasing trust towards sellers to behave kindly. Although there is significantly less truth-telling in this indirect mechanism, compared to the direct one, I find no differences in the frequency of efficient trade between the two mechanisms. The reasoning here is that, in the indirect mechanism, multiple equilibria lead to the efficient trade. I also conclude that there are no differences with respect to subjective well-being between the mechanisms.

The Dependence of Crémer-McLean Auctions on Selfish Preferences

In this paper, I study the effect of outcome-based social preferences on auction design in correlated environments. I consider two bidders with two possible valuation types, who bid for a single unit object. I show that in general the auction by Crémer and McLean (1985) is not robust against outcome-based social preferences. In the standard case of an indivisible good, selfish preferences are not only sufficient, but also necessary for the existence of a truth-telling ex-post equilibrium. The binding incentive compatibility for both valuation types permits the possibility of affecting the ex-post payoff of the other bidder without consequences for the own ex-post payoff. I consider two less restrictive cases: the ex-post implementation of a divisible good, and Bayesian implementation. For these cases, I conclude that uncertainty over the distribution of outcome-based social preferences increases the volatility of the expected profit for the auctioneer.

The Case of Correlated Valuations in Social Robust Auctions

This study investigates the effect of the externality-freeness condition on the optimal design of auctions, under the assumption that valuation types of bidders are correlated. Again, I consider two bidders with two possible valuation types, who bid for a single unit object. Bierbrauer and Netzer (2016) introduce the externality-freeness condition to ensure robustness with respect to an unknown heterogeneity of social preferences among bidders. I consider ex-post and Bayesian incentive compatibility and relate the results to insights in the literature. In general, I show that the first-best implementation is no longer possible under the externality-freeness constraint. For the case of Bayesian incentive compatibility, I find

Contact
larsfreund@gmx.net

a continuous effect of the intensity of correlation on the auctioneer's expected profit. Under ex-post incentive compatibility, there are no differences for the optimal auction design given correlated and uncorrelated valuation types.

**Behaviorally Efficient Remedies
– An Experiment**

In a joint study with Christoph Engel, we compare the behavioral efficiency of different compensation schemes (specific performance vs. expectation damages vs. reliance damages). Based on findings obtained in a laboratory experiment, we observe that specific performance seems to be behaviorally more efficient than the monetary compensation schemes. We base the observation on (1) an increased amount of beneficial trade and (2) the elicited WTP for different kinds of compensation. Furthermore, we observe no difference between expectation and reliance damages, and we learn that the size of the compensation does not affect the amount of trade or the willingness to pay for compensation. In total, we conclude that contractual parties care deeply about the fulfillment of a contractual agreement.

Publications (since 2017)

Submissions

Álvarez Benjumea, A., Freund, L., Luckner, K. and Winter, F. (2018). Public Signals as Coordination Devices: The Moderating Effect of Group Identity.

Lectures and Presentations (since 2017)

2018

The Role of Intention in Bilateral Trade Environments: An Experiment
Thesis Workshop, Ringberg
March 2018

Behaviorally Efficient Remedies: An Experiment
ALEA Meeting, Boston
May 2018

The Role of Intention in Bilateral Trade Environments: An Experiment
ESA World Meeting, Berlin
June 2018

Minou Ghaffari

Summary Report

I was a Research Fellow at the institute from 2014 to 2018, being a member of Susann Fiedler's research group and the IMPRS program. During this time, I completed my dissertation on underlying cognitive processes in social dilemmas. After completing my PhD, I started working as a behavioral psychologist for a debt-collection agency in Berlin, PAIR Finance. Here, I am conducting research in an applied setting to investigate the decision-making behavior of debtors. My research during my time at the institute focused on the underlying cognitive processes and mechanisms of human decision behavior. To do this, I used a game-theoretic decision environment where the participants' visual attention was measured via eye-tracking. In the following, I will provide an overview of the projects I worked on during my last year at the institute.

Using Eye Gaze to Predict Other-Regarding and Moral Decisions (Ghaffari & Fiedler, 2018)
In cooperation with Susann Fiedler, this project was a detailed investigation of the two channels that connect attention to choices: top-down and bottom-up processes. Imagine encountering a stranger who struggles with her grocery bags. When considering whether to help her, the cost of your time and physical effort are weighed against the benefit for the stranger. Thus, personal self-interest is in conflict with what is best for someone else. Does the timing of asking what you want to do about this situation alter your subsequent choice? To shed light on the processes underlying decision-making, a number of studies used gaze recordings and provided consistent evidence for a correlation between eye gaze and subsequent choices. Both top-down preferences and characteristics of choice presentation were previously suggested to drive information search. Inspired by these findings, we aimed to disentangle these two drivers of the correlation between eye gaze and choice behavior. In doing so, we critically tested the causality claims made in recent publications in two high-powered eye-tracking studies using eye gaze to predict other-regarding and moral choices.

To identify the magnitude of each channel, we exogenously varied information intake by systematically interrupting the participants' decision processes in Study 1. The results showed that participants were more likely to choose a predetermined target option. Because selection effects limited the interpretation of the results, we used a sequential-presentation paradigm in Study 2. To partial out bottom-up effects of attention on choices, in particular, we presented alternatives by mirroring the gaze patterns of autonomous decision-makers. The results revealed that final fixations successfully predicted choices when experimentally manipulated (bottom up). Specifically, up to 11.32% of the link between attention and choices was driven by exogenously guided attention (1.19% change in choices overall), while the remaining variance was explained by top-down preference formation. To investigate the level of universality of this proposed attention–choice relationship, we tested for its context dependency. The respective results showed that the link between attention and choice was systematically stronger for moral than for other-regarding choices in both studies. In conclusion, last fixations were more strongly linked to subsequent choices when they occurred as a by-product of the preference-formation process (top-down) than when experimentally manipulated (bottom-up), and we observed a context dependency of the link between attention and choice.

The Cost of Imperfect Memory in Social Interactions (Ghaffari, Fiedler and von Helversen, work in progress)
The next project was a collaboration together with Susann Fiedler and Bettina von Helversen. In this project, we inves-

Contact
minou@ghaffari.info

tigated whether the ability to remember how a social interaction partner has behaved is related to an individual's social preference. Memory has been proposed as one of the most crucial cognitive capacities required for successful cooperation in social dilemmas. Remembering whether a person cooperated or defected in a previous interaction enables decision-makers to avoid being exploited by free-riders. From an evolutionary perspective, the ability to remember an interaction partner's behavior and avoid exploitation should be particularly important for prosocial individuals. In three preregistered studies (two online studies and one eye-tracking study), we investigated the link between social preferences and recall of an interaction partner's cooperation behavior. Further, we aimed to identify potential drivers of the effect by analyzing information search during encoding of the partner's behavior. Using eye-tracking, we recorded the participants' gaze behavior during the observation of the other players' previous choices in decomposed games. Subsequently, the participants were asked to recall the behavior of each observed player. We then used the individuals' social preferences (measured as social value orientation, SVO) to predict the participants' memory performance.

The results showed that prosocial individuals were more likely to recall an interaction partner's past behavior than proself individuals. Going beyond this simple observation of choice behavior, process analyses indicated that the link between SVO and explicit memory was partly driven by the extent of information search during the first interactions. More prosocial individuals took longer to encode information regarding their partner's behavior and exhibited more thorough information searches (i.e., higher number of fixations). Testing for boundary conditions of the effect of SVO on memory, we additionally investigated the link between SVO and long-term memory for social interaction partners. The results indicated that the influence of SVO on memory did not persist over a retention interval of three weeks. In sum, our results suggest that prosocial individuals were more likely to remember their interaction partner's behavior, which could protect them from being exploited in future interactions.

Organization of the 10th JDM Meeting for Early-Career Researchers
Between 31 May and 2 June 2017, Rima-Maria Rahal and I organized the 10th JDM Meeting for Early-Career Researchers, which took place at the institute in Bonn. The JDM meeting is an annual event organized and run by PhD students for other early-career researchers. It offers a platform for PhD students and early postdocs who are active in the judgment and decision-making community to present and discuss recent research and ideas with their colleagues in an open and relatively informal atmosphere. During their presentations, participants had the chance to present their research and receive feedback on their own work. The keynote speaker of the meeting was Armin Falk (University of Bonn), and his talk was on the determinants and consequences of preferences, presenting evidence from a global study. In addition, the meeting included three applied workshops on the topics of conducting online experiments, decision-making in civil disputes and litigation, and programming experiments in PsychoPy. All in all, the meeting was a successful event, and the institute once again proved to be an outstanding location to bring interdisciplinary researchers together and develop research projects further.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Fiedler, S. and Ghaffari, M. (2018). The power of attention: Using eye gaze to predict other-regarding and moral choices. *Psychological science*, 29(11), 1878–1889. (shared first authorship).

Bouwmeester, S., Verkoeijen, P. P., Aczel, B., Barbosa, F., Bègue, L., Brañas-Garza, P., ... and Evans, A. M. (2017). Registered replication report: Rand, Greene, and Nowak (2012). *Perspectives on Psychological Science*, 12(3), 527–542.

Dissertation

Ghaffari-Tabrizi, M. (2018). Opening the black box of social preferences: essays on underlying cognitive processes in social dilemmas (Doctoral dissertation, University of Zurich).

Revise & Resubmit

Ghaffari, M., Fiedler, S. and von Helversen, B., (R & R). The cost of imperfect memory in social interactions. *Journal of Personality and Social Psychology.*

Working Papers

Ghaffari, M. and Fiedler, S. (2018). Social value orientation predicts information search in strategic environments: An eye-tracking analysis.

Lectures and Presentations (since 2017)

The Power of Attention: Using Eye Gaze to Bias Social Preference Choices
10th JDM Meeting for Early-Career Researchers, Bonn
June 2017

The Cost of Forgetting: Understanding the Link between Memory and Social Preferences
36th Annual Meeting of the European Group of Process Tracing Studies, Galway
June 2017

Teaching

Winter term 2018/19
Psychologie der Entscheidung
Hochschule Döpfer, Cologne

Summer term 2019
Theorien und aktuelle Befunde der Entscheidungspsychologie, Fernuniversität in Hagen

Winter term 2019/20
Theorien und aktuelle Befunde der Entscheidungspsychologie, FernUniversität in Hagen

Summer term 2020
Theorien und aktuelle Befunde der Entscheidungspsychologie, FernUniversität in Hagen

Professional Activities

Memberships
Member of the European Association for Decision Making

Reviewer for
Experimental Psychology
Social Psychology

Nina Grgić-Hlača

Research Summary

I am a PhD student at the Max Planck Institute for Software Systems and the Max Planck Institute for Research on Collective Goods, co-advised by Krishna P. Gummadi and Christoph Engel. Prior to joining the Max Planck institutes, I obtained an MA in Information Science and Philosophy from the University of Zagreb, Croatia.

In my research, I study the interaction between humans and systems based on Machine Learning (ML). My research focuses on two main topics: (i) *algorithmic fairness*, and (ii) *machine-assisted decision-making*.

Algorithmic Fairness

ML-based algorithms are used to assist human decision-makers in a variety of scenarios, ranging from predicting risk of criminal recidivism to medical diagnostics. The potential societal impact of these decisions has raised concerns about the *fairness of algorithmic decision-making*. The majority of prior work on algorithmic fairness normatively prescribed what constitutes fair decision-making. In contrast, in my work, I take a *descriptive* approach, to understand how people perceive and reason about fairness in the context of algorithmic decision-making. Additionally, while most prior work studied distributive aspects of algorithmic fairness, I focus on *procedural* aspects. This line of work has resulted in several publications at top-tier computer-science venues, including the Web Conference (WWW) and the Conference on Artificial Intelligence (AAAI).

In Grgić-Hlača et al. (2018a), my co-authors and I proposed a framework for understanding why people believe that it is (un)fair for ML algorithms to utilize certain features. Our framework identifies eight underlying properties of features, such as their *relevance*, *volitionality*, and *reliability*, which guide people's moral reasoning about the fairness of using these features in algorithmic decision-making. We validated our framework through a series of large-scale vignette-based surveys. We found that, in the legal scenario which we consider, people's perceptions of fairness of using a feature indeed depend on their assessments of the eight underlying properties of the feature.

In Grgić-Hlača et al. (2018b), we proposed procedural measures of algorithmic fairness, which account for the perceived fairness of using features in algorithmic decision-making. We also provided a submodular feature-selection algorithm, which optimizes the tradeoff between prediction accuracy and our measure of procedural fairness. We applied our measures and feature-selection algorithm on two real-world datasets from the legal domain. We empirically observed that our notion of procedural fairness may be achieved with only a small cost to certain common notions of distributive fairness, but that some loss of predictive accuracy is unavoidable.

Machine-Assisted Decision-Making

ML-based decision aids are nowadays frequently used to assist human decision-makers in a variety of different domains. However, these machine decision aids, as the name suggests, are not the final decision-makers – they only assist human decision-makers. Hence, when designing machine-decision aids, it is crucial to go beyond focusing on the decision aid's accuracy and fairness, and to consider how *human decision-makers* take its advice. In my research, I focus on understanding how ML-based decision aids influence human decision, and on identifying the factors which determine the magnitude of this influence. This line of research led to a publication at the Conference on Computer-Supported Cooperative Work and Social Computing (CSCW), a top-tier computer-science venue.

Contact

grgic-hlaca@coll.mpg.de

https://www.coll.mpg.de/
nina-grgic-hlaca

In Grgić-Hlača et al. (2019a), Christoph Engel, Krishna P. Gummmadi, and I explored machine-assisted decision-making in the context of bail decisions. We ran a vignette experiment with laypeople, and studied how receiving advice from a machine decision aid influenced their decisions to grant or deny bail. We found that machine advice had a small, but significant, effect on people's decisions, biased in the direction of granting bail. Providing feedback about the correctness of machine predictions had no effect on advice-taking, and neither did monetary incentives for accuracy. Only monetary incentives to follow machine advice were effective, and indeed increased the influence of machine advice.

In ongoing work, my collaborators and I are building upon this work, and studying how other properties of the machine-assisted decision-making setting influence people's advice-taking behavior. In Engel and Grgić-Hlača (work in progress), Christoph Engel and I are currently exploring how receiving warnings about the decision aid's properties impact its influence. This research was inspired by a recent ruling of the Supreme Court of the State of Wisconsin, which cleared the use of machine advice in sentencing only if judges are properly warned about the decision aid's limitations. Also, in Grgić-Hlača et al. (work in progress), with Krishna P. Gummmadi and other collaborators, I am studying how the type and distribution of a decision aid's errors impacts advice-taking.

Publications (since 2017)

Peer-reviewed Conferences

Grgić-Hlača, N., Engel, C. and Gummadi, K. P. (2019). Human Decision Making with Machine Assistance. An Experiment on Bailing and Jailing. *Proceedings of the ACM on Human-Computer Interaction.*

Speicher, T., Heidari, H., Grgić-Hlača, N., Gummadi, K. P., Singla, A., Weller, A. and Bilal Zafar, M. (2018). A Unified Approach to Quantifying Algorithmic Unfairness: Measuring Individual & Group Unfairness via Inequality Indices. *Proceedings of the 24th ACM SIGKDD International Conference on Knowledge Discovery & Data Mining*, 2239-2248.

Grgić-Hlača, N., Redmiles, E. M., Gummadi, K. P. and Weller, A. (2018a). Human Perceptions of Fairness in Algorithmic Decision Making: A Case Study of Criminal Risk Prediction. *Proceedings of the 2018 World Wide Web Conference*, 903-912.

Grgić-Hlača, N., Bilal Zafar, M., Gummadi, K. P. and Weller, A. (2018b). Beyond Distributive Fairness in Algorithmic Decision Making: Feature Selection for Procedurally Fair Learning. *Thirty-Second AAAI Conference on Artificial Intelligence*.

Peer-reviewed Workshops

Grgić-Hlača, N., Weller, A. and Redmiles, E. M. (2019b). Dimensions of Diversity in Human Perceptions of Algorithmic Fairness. *Learning from Team and Group Diversity Workshop @ CSCW*.

Grgić-Hlača, N., Bilal Zafar, M., Gummadi, K. P. and Weller, A. (2017). On Fairness, Diversity and Randomness in Algorithmic Decision Making. *Fairness, Accountability, and Transparency in Machine Learning Workshop @ KDD*.

Work in Progress

Engel, C. and Grgić-Hlača, N. Machine Advice with a Warning about Machine Limitations: Experimentally Testing the Solution Mandated by the Wisconsin Supreme Court.

Grgić-Hlača, N., Castelluccia, C. and Gummadi, K. P. Impact of Machine Errors on Human Advice Taking in Machine-Assisted Decision-Making.

Lectures and Presentations (since 2017)

2017

Beyond Binary Discrimination: Measures and Mechanisms for Process Fairness
Machine Learning Summer School, Tübingen, Germany
June 2017

On Fairness, Diversity and Randomness in Algorithmic Decision Making
Fairness, Accountability, and Transparency in Machine Learning Workshop @ KDD, Halifax, Canada
August 2017

2018

Beyond Distributive Fairness in Algorithmic Decision Making: Feature Selection for Procedurally Fair Learning
Conference on Artificial Intelligence (AAAI), New Orleans, Louisiana, USA
January 2018

Understanding and Accounting for Human Perceptions of Fairness in Algorithmic Decision Making
Data, Learning and Inference (DALI), Lanzarote, Canary Islands
April 2018

Human Perceptions of Fairness in Algorithmic Decision Making: A Case Study of Criminal Risk Prediction
The Web Conference (WWW), Lyon, France
April 2018

Human Perceptions of Fairness in Algorithmic Decision Making: A Case Study of Criminal Risk Prediction
Women in Data Science Workshop @ WWW, Lyon, France
April 2018

2019

Machine-Assisted Decision-Making: Understanding and Accounting for Human Factors
Explainable AI Workshop, Aarhus, Denmark
April 2019

Effects of Experiencing Classifier Design on Perceptions of Fairness
ICSI Summer Intern Workshop, Berkeley, California, USA
August 2019

Human Decision Making with Machine Assistance: An Experiment on Bailing and Jailing
MPI for Research on Collective Goods, Bonn, Germany
October 2019

Human Decision Making with Machine Assistance: An Experiment on Bailing and Jailing
Conference on Computer-Supported Cooperative Work and Social Computing (CSCW), Austin, Texas, USA
November 2019

Dimensions of Diversity in Human Perceptions of Algorithmic Fairness
Learning from Team and Group Diversity Workshop @ CSCW, Austin, Texas, USA
November 2019

Teaching

Winter term 2018/19
Human-Centered Machine Learning
Saarland University
(Teaching Assistant)

Professional Activities

Reviewer for

Conference on Computer-Supported Cooperative Work and Social Computing, Human-Centered Approaches to Fair and Responsible AI Workshop, International Workshop on Algorithmic Bias in Search and Recommendation, European Conference on Information Systems, Human-centered Machine Learning Workshop, Safe Machine Learning Workshop

D. Research Portraits

Werner Güth

I studied economics at the University of Münster, where I also received my doctoral degree and habilitation. I was professor for economic theory at the University of Cologne, the University of Frankfurt (Main), and the Humboldt University of Berlin, before becoming the director of the Strategic Interaction Group in 2001 at the Max Planck Institute of Economics in Jena till the end of 2014.

Research stays took me to various universities and research institutions in Europe, Israel, Asia, Australia, and the United States.

Since 2002, I have been an honorary professor of economics at the Friedrich Schiller University in Jena and a member of the Berlin-Brandenburg Academy of Sciences. In 2010, I received honorary degrees from the universities of Tübingen and Karlsruhe. After Jena, I was Senior Professor at the Frankfurt School of Finance & Management (2015 to December 2016), emeritus at the Max Planck Institute for Research on Collective Goods, Bonn, and Professor for economics at LUISS University, Rome.

My main research topics are game theory, experimental economics, and microeconomics. I consider myself more as a social scientist with strong interests in psychology, philosophy, (evolutionary) biology, and the political sciences.

My own emeritus funding by the Max Planck Society will expire at the end of 2020. I am extremely thankful for this generous support and for the hospitality of the Max Planck Institute during the past six years. I have cooperated with all its directors, present and former ones, and have truly enjoyed the inspiring research atmosphere. Of course, I will try to remain active with some support by the institute, even when my contract with LUISS University in Rome expires.

The top priority of my recent research has been to develop bounded rationality theory in the light of empirical – in my case, experimental data. There are now several (partly published) studies

■ whose choice data are aspiration levels,
■ whose data complement choice data with data on the process of generating (non-Bayesian) beliefs, as well as forming and adapting success aspirations.

I have tried to clarify the main methodological aspects of such research in my recent paper "(Un)Bounded Rationality of Decision Deliberation".

From the beginning of my career, I have been interested in procedural fairness and have been fortunate (since the mid-1980s) to base this on intuitive axioms for "procedurally fair game forms" in contexts where agents express their (private) evaluations of collective outcomes via bidding. I have tried to describe the applicability of this axiomatic approach in my paper "Direct (Bidding) Mechanisms – When Are They Procedurally Fair?"

To my own surprise, my research on "indirect evolution", a general methodology to derive the rules of the game, instead of exogenously imposing them, has been revived by four projects (two with Paul Pezanis-Christou, Adelaide; one with Oliver Kirchkamp, Jena; and one with Stefan Napel, Bayreuth).

It is probably less surprising that, in cooperation with several co-authors, I am still very active in experimental research, based on a wide variety of topics like conceding, learning, administering advice to reduce suboptimality, etc. In addition to studying strategic interaction, we have systematically explored individual decision-making as a necessary requirement for developing "behavioral game theory".

© Tristan Vostry

Contact

gueth@coll.mpg.de

https://www.coll.mpg.de/werner-gueth

Publications (since 2017)

Articles in Peer-Reviewed Journals

Di Cagno, D., Güth, W. and Pace, N. (forthcoming). Experimental Evidence of Behavioral Improvement by Learning and Intermediate Advice. *Theory and Decision.*

Güth, W. and Pezanis-Christou, P. (2020). An Indirect Evolutionary Justification of Risk Neutral Bidding in Fair Division Games. *International Journal of Game Theory.*

Angelovski, A. and Güth, W. (2020). When to Stop — a Cardinal Secretary Search Experiment. *Journal of Mathematical Psychology*, 98.

Angelovski, A., Di Cagno, D., Güth, W. and Marazzi, F. (2020). Telling the Other What One Knows? Strategic Lying in a Modified Acquiring-a-Company Experiment With Two-Sided Private Information. *Theory and Decision*, 88(1), 97–119.

Avrahami, J., Ezer, A., Güth, W., Kardosh, N., Kareev, Y. and Zak, U. (2020). To Be at the Tail of the Lions or the Head of the Foxes? *Journal of Behavioral Decision Making*, 33(2), 121–138.

Fischer, S., Güth, W., Kaplan, T. R. and Zultan, R. (2020). Auctions With Leaks About Early Bids: Analysis And Experimental Behavior. *Economic Inquiry,* 1-18.

Güth, W. and Otsubo, H. (2020). Trust in Generosity: An Experiment of the Repeated Yes–No Game. *Evolutionary and Institutional Economics Review*, 1-15.

Angelovski, A., Di Cagno, D., Grieco, D. and Güth, W. (2019). Trusting versus Monitoring: An Institutional Choice Experiment. *Evolutionary and Institutional Economics Review,* 16, 329–355.

Angelovski, A., Galliera, A. and Güth, W. (2019). Partial versus General Compulsory Solidarity: An Experimental Analysis. *Homo Oeconomicus*, 36(3-4), 249-279.

Chlaß, N., Güth, W. and Miettinnen, T. (2019). Purely Procedural Preferences – Beyond Procedural Equity and Reciprocity. *European Journal of Political Economy*, 59, 108–128.

Güth, W., Klempt, C. and Pull, K. (2019). Cognitively Differentiating between Sharing Games: Inferences from Choice and Belief Data of Proposer Participants. *Economics Bulletin*, 39(1), 605-614.

Güth, W., Pull, K., Stadler, M. and Zaby, A. K. (2019). Compulsory Disclosure of Private Information: Theoretical and Experimental Results for the Acquiring-a-Company Game. *Journal of Institutional and Theoretical Economics*, 175(3), 502–523.

Angelovski, A., Di Cagno, D., Güth, W., Marazzi, F. and Panaccione, L. (2018). Does Heterogeneity Spoil the Basket? The Role of Productivity and Feedback Information on Public Good Provision. *Journal of Behavioral and Experimental Economics*, 77, 40–49.

Angelovski, A., Di Cagno, D., Güth, W., Marazzi, F. and Panaccione, L. (2018). Behavioral Spillovers in Local Public Good Provision: An Experimental Study. *Journal of Economic Psychology*, 67, 116–134.

Bruttel, L. and Güth, W. (2018). Asymmetric Voluntary Cooperation – a Repeated Sequential Best Shot Experiment. *Journal of Conflict Resolution*, 47(3), 873–891.

Di Cagno, D., Galliera, A., Güth, W. and Panaccione, L. (2018). Gender Differences in Yielding to Social Influence: An Impunity Experiment. *Games*, 9(4).

Engel, C. and Güth, W. (2018). Modeling a Satisficing Judge. *Rationality and Society*, 30(2), 220–246.

Alberti, F., Fischer, S., Güth, W. and Tsutsui, K. (2017). Concession Bargaining – An Experimental Comparison of Protocols and Time Horizons. *The Journal of Conflict Resolution*, 62(9), 2017–2039.

Avrahami, J., Güth, W., Kareev, Y. and Uske, T. (2017). On the Incentive Effects of Sample Size in Monitoring Agents – A Theoretical and Experimental Analysis. *German Economic Review*, 18(1), 91–98.

Di Cagno, D., Galliera, A., Güth, W., Marzo, F. and Pace, N. (2017). (Sub) Optimality and (Non) Optimal Satisficing in Risky Decision Experiments. *Theory and Decision*, 83(2), 195–243.

Di Cagno, D., Galliera, A., Güth, W. and Pace, N. (2017). Behavioral Patterns and Reduction of Sub-Optimality: An Experimental Choice Analysis. *Theory and Decision*, 85, 151–177.

Di Cagnio, D., Galliera, A., Güth, W., Pace, N. and Panaccione, L. (2017). Experience and Gender Effects in Acquisition Experiment With Value Messages. *Small Business Economics*, 48, 71–97.

Di Cagno, D., Galliera, A., Güth, W. and Panaccione, L. (2018). Intention-Based Sharing. *Games*, 9(2), 22.

Güth, W. and Ploner, M. (2017). Mentally Perceiving How Means Achieve Ends. *Rationality and Society*, 29(2), 203-225.

Journal Articles (not peer-reviewed)

Anjum, G. and Gueth, W. (2019). Becoming Generous and Respecting Honor: An Experiment Based on Donation and Trust-Game With Multiple Trustees. *IBA Business Review*, 14(2), 47–64.

Book Chapters

Güth, W. and Kliemt, H. (forthcoming). Corporate Social Responsibility. In L. Degli Sacconi and G. Antoni (Eds.), *Handbook on the Economics of Social Responsibility: Individuals, Corporations and Institutions*, Cheltenham: Edward Elgar.

Güth, W. and Kliemt, H. (2020). Experimental Economics – A Philosophical Perspective. *Oxford Handbook of Philosophy.*

Güth, W. (2017). Mechanism Design and the Law. The Oxford Handbook of Law and Economics. *Methodology and Concepts,* Parisi, F. (Ed.). 1, 483–492.

Submissions

Ackfeld, V., Güth, W. (2020). Personal Information Disclosure under Competition for Benefits: Is Sharing Caring? *Games & Economic Behavior.*

Alberti, F., Güth, W., Tsutsui, K. (2020). Experimental Effects of Institutionalizing Co-Determination by a Procedurally Fair Bidding Rule. *Journal of Business Ethics.*

Angelovski, A., Brandts, J., Güth, W. (2020). Bidding for the Better Jobs: Novel Evidence on Gender Differences in Competition. *Experimental Economics.*

Conte, A., Güth, W., Pezanis-Christou, P. (2017). More Money vs More Certainty? Behaviour in Stochastic Alternating-Offer Experiments. *Journal of Risk and Uncertainty.*

Crosetto, P., Güth, W. (2020). What Are You Calling Intuitive? Subject Heterogeneity as a Driver of Response Times in an Impunity Game. *Journal of Economic Psychology.*

Di Cagno, D., Güth, W., Panaccione, L., Scarafile, M.C. (2019). Conceding When not Having to Fear Conflict. An Impunity Experiment. *Journal of Economic Psychology.*

Güth, W. (2020). Direct Bidding Mechanisms – When are They Procedurally Fair? *Journal of Institutional and Theoretical Economics.*

Güth, W. (2020). (Un)Bounded Rationality of Decision Deliberation. *Journal of Economic Behavior and Organization.*

Güth, W., Kirchkamp, O. (2020). Believing in Corporate Social Responsibility – An Indirect Evolutionary Analysis. *Journal of Institutional and Theoretical Economics.*

Güth, W., Marazzi, F., Panaccione, L. (2020). Exploiting Ultimatum Power When Responders are Better Informed – Theoretical and Experimental Analysis of Conflict Resolution. *Journal of Conflict Resolution.*

Adam, M., Brecht, F., Güth, W. Koroleva, K. (2019). Evaluating Own and Other's Prospects. *Evolutionary and Institutional Economics Review.*

Cappeletti, D., Güth, W., Ploner, M. (2019). Motivational Heterogeneity Behind Conditional Cooperation: The Role of Reciprocity, Inequity Aversion, and Heuristic Matching in Public Goods Provision. *Experimental Economics.*

Avrahami, J., Güth, W., Kareev, Y., Ploner, M. (2018). Impulse Balancing Versus Equilibrium Learning – An Experimental Study of Competitive Portfolio Selection. *Journal of Evolutionary Economics.*

Bruttel, L., Güth, W., Hertwig, R., Orland, A. (2018). Do People Harness Deliberate Ignorance to Avoid Envy and Its Detrimental Effects? *Nature Human Behavior.*

Working Papers

Alberti, F., Güth, W., Kliemt, H., Tsutsui, K. (2020). Implementing Stakeholder Participation as "Egalitarian Bidding" – The Test of the Kantian Pudding is in the Institutionalized Eating.

Angelova, V., Güth, W., Kocher, M. (2019). Co-evolving Wage Discrimination and Gift Exchange When Employing Agents (Not) Differing in Tenure.

Bruttel, L., Güth, W., Nithammer, J., Orland, A. (2019). The Effect of Voluntary Transfers in the Stochastic Ultimatum Game.

Güth, W., Otsubo, H. (2018). Whom to Blame? An Experiment of Collective Harming and Punishing.

Projects (experiments run)

June 2017 – December 2019
Decision Making and Game Playing
LUISS Guido Carli Rome

Lectures and Presentations (since 2017)

2017

Reinhard Selten – Leading Scholar of Perfect and Bounded Rationality and Pioneer of Experimental and Interdisciplinary Research
Presentation in honor of Reinhard Selten, University of Frankfurt
March 2017

Egalitarian Corporate Governance – Experimental Exploration of Decision Codetermination in Terms of Fair Bidding
Presentation at the Luxembourg School of Finance
September 2017

– **Egalitarian Corporate Governance – Experimental Exploration of Decision Codetermination in Terms of Fair Bidding**
– **On Behavioral Economics and Ultimatum-Like Experiments**
– **Push, Pull or Both – On Indirect Evolution**
– **(Sub)Optimality Versus (Non)Optimal Satisficing – A Portfolio Choice Experiment**
Four "Schumpeter Lectures", University of Graz
November 2017

2018

(Sub)Optimality versus (Non)Optimal Satisficing – A Portfolio Choice Experiment
Workshop at the Max-Planck-Institute for Tax Law and Public Finance
March 2018

Bounded Rationality – Theory and Experiments
On Behavioral Economics and Ultimatum-Like Experiments
Workshop at the University of Bologna,
June 20018

2019

Social & Strategic Interaction – In View of Methodological Dualism
Presentation at the Wissenschaftszentrum Berlin
February 2019

On the Architecture of Social and Strategic Interaction
Presentation at the University of Verona
March 2019

Hiding and Revealing when Acquiring a Company – An Indirect Evolutionary Analysis
Workshop at the Max-Planck-Institute for Tax Law and Public Finance
April 2019

On Behavioral Economics and Ultimatum-Like Experiments
University of Vienna
June 2019

Methodological Dualism – Its Philosophical and Behavioral Perspective
Lecture at the University of Nottingham
October 2019

Methodological Dualism – Its Philosophical and Behavioral Perspective
Lecture at the University of Middlesex
November 2019

Methodological Dualism – Its Philosophical and Behavioral Perspective
Seminar at the University Tor Vergata, Rome
November 2019

2020

Methodological Dualism – Its Philosophical and Behavioral Perspective
Lecture at the Private University Schloss Seeburg
March 2020

Teaching

LUISS Rome Department of Economics and Finance

Winter Term 2017 till Summer Term 2019
Course Title: Consumer Behavior in DIM (with Daniela Di Cagno)

Winter Term 2017 till Summer Term 2019
Course Title: Managerial Decision Making (with Luca Panaccione)

Summer/Winter Term 2019/2020
Course Title: Managerial Decision Making (with Vittorio Larocca)

Winter Term 2019/2020
Course Title: Experimental and Behavioral Economics (with Noemi Pace)

Winter Term 2020/2021
Course Title: Experimental and Behavioral Economics (with Irene Buso)

D. Research Portraits

Hanjo Hamann

My research addresses law and its interdisciplinary interfaces in five broad categories:

Law and Digitalisation. In recent years, the legal academy has been increasingly addressing the challenges that digitalization places on the existing legal frameworks. For instance, I have been concerned with blockchain regulation, as I was designated both to report on its high-level discussion among civil law professors in Germany (AcP 2018) and to serve as a lead editor for the *Stanford Technology Law Review* (STLR) in the academic year 2019/20, where I coordinated the blockchain editorial team. The latter came as part of my recent SPILS fellowship at Stanford Law School, where I obtained a Master of the Science of Law degree (J.S.M.) in June 2020, as well as the Stanford Graduate Certificate in Digital Humanities (GCDH) in September 2020. Upon my return to Germany, I was invited by the Weizenbaum Institute for the Networked Society ("The German Internet Institute") and worked, during the summer of 2020, as a Weizenbaum Fellow on a project concerning the digital availability of German court decisions. Over the last three years, I have been both a user of digital legal corpora, e.g., for my historical review of post-war public law commentary (AöR 2018), and a producer of new legal datasets such as www.LegistiK.de. This is a digital collection of handbooks and guidance documents on the practice of drafting and editing parliamentary laws ("legistics"), which I launched in 2019 as a public research resource, publishing subsequently on the future prospects of digital legistics in Germany (ZG 2020; JZ 2020).

Empirical Legal Studies. In addition to the challenges of digitalization, legal scholars increasingly acknowledge the research potential of digital data to enrich legal interpretation through empirical methods and quantitative statistics. I started being involved in this research through my JSD-equivalent doctoral thesis (Dr. iur.) on the "methods and epistemic value of empirical research in law" in 2014 and a consecutive PhD-equivalent dissertation (Dr. rer. pol.) on "market myopia and agent delegation in economic decision-making" in 2016. My own research agenda centers on what I called "evidence-based jurisprudence", and resulted most recently in projects on methodological standards for – and future prospects of – questionnaire research in law (AcP 2017; GJZ-Jahrbuch 2018), in a conference report on current debates in empirical legal studies (JZ 2018), and in a paper written jointly with a South African co-author on experimentally studying cultural decision-making (REE 2018). In mid-2019, I joined colleagues at the institute to co-host an in-house workshop with guests from Germany, Italy, and the US, discussing "experimental comparative law" approaches, and also to co-found a scholarly blog on "legal empirics in Europe" (www.LegalEmpirics.com).

Legal Corpus Linguistics. In recent years, empirical legal studies have begun to intersect with a branch of language sciences called corpus linguistics, which analyzes statistical patterns in big data (of legal text). After teaming up with corpus linguist Friedemann Vogel in 2014, we established a research group on "Computer Assisted Legal Linguistics (CAL²)", supported by an initial grant from the Heidelberg Academy of Sciences that expired in 2017, but was subsequently renewed for another two years. This enabled us to publish a special journal issue covering the first international conference on legal corpus linguistics which we had hosted previously (JLL Special Issue 2017), to contribute to the first US conference on "Law & Corpus Linguistics" as the sole international guests (BYU L. Rev. 2018), to review the nascent field in a joint white paper by our working group (Law & Soc. Inq. 2018), and to host another conference in 2019 that brought

Contact

hamann@coll.mpg.de

https://www.coll.mpg.de/hanjo-hamann

together linguists and legal professionals from Germany. In my additional publications on legal linguistics, I reviewed and discussed prior work on and the theories behind German legal linguistics (Handbuch Sprache im Recht 2017), U.S. textualism (Recht ist kein Text 2017), and law and cultural linguistics (ARSP 2018). Apart from such substantive work, I serve as an editor-in-chief for the open-access journal of the International Language & Law Association, JLL (www.LanguageAndLaw.eu), and reported on the journal's progress during the triennium 2016–2018 when I was still its managing editor (JLL 2019).

Open Legal Science. Editing an open-access journal is one of the ways in which I try to introduce legal scholars to the open-science and open-data movement. After completing a grant-based "Free Knowledge Fellowship" by Wikimedia Germany and the Stifterverband in 2016/17, I published and continually updated the "Federal Courts Dataset" (www.Richter-im-Internet.de), reporting about this open dataset and its methodological innovations in both Germany and the U.S. (fhi 2017, JurPC 2018, JELS 2019). I also engaged in public outreach regarding the digital availability of legal texts (LTO 2017, 2018), I organized an open-access workshop at the Center for Interdisciplinary Research in Bielefeld, where I have served as a "Young ZiF" Fellow since 2016, and I co-hosted an international conference for some 70 attendees on "Open Access for the Legal Academy" in Frankfurt 2018. This conference resulted in a journal special issue that I co-edited with a Swiss colleague, Daniel Hürlimann, and which included three texts of my own (RW-Sonderheft 2019).

Legal Didactics. Another area which I attempt to infuse with digital methodologies is the nascent field of the didactics of teaching law. I introduced law students to the use and limits of empirical research (JURA 2017) and taught a graduate seminar on this topic at the University of Gießen (2018), a recurring undergraduate course at the University

of Bremen (2016–2018), as well as a summer school on "legal research and its future in a digital age" at Sichuan University in Chengdu, China (2019). My other recent publications – such as on teaching German sales law (ZJS 2018) and on evidence-based bar review (ZJS 2020) – were inspired by my experiences while teaching at the universities of Bonn and Mannheim. Following a summer school on law and linguistics that I taught in France together with Friedemann Vogel, I summarized much of our course material in a paper on the use of irony in legal contexts (NJW 2020). Throughout the last three years, I have also maintained an online portal on "law school mnemonics" (www.Esel-BrueckDich.de), which playfully inspires students to use psychological evidence to boost their law exam performance.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Hamann, H. (2019). The German Federal Courts Dataset 1950–2019. From Paper Archives to Linked Open Data. *Journal of Empirical Legal Studies (JELS)*, 16(3), 671–688.

Hamann, H. (2019). Die Internationale Zeitschrift für Rechtslinguistik JLL. *RW* (Sonderheft), 148–156.

Hamann, H. (2019). Lizenzmodelle rechtswissenschaftlicher Internetzeitschriften. Zur vernachlässigten normativen Dimension des „Open Access". *RW* (Sonderheft), 85–111.

Hamann, H. and Hürlimann, D. (2019). Open Access bei der Veröffentlichung rechtswissenschaftlicher Fachliteratur. Was soll das? *RW* (Sonderheft), 3–30.

Hamann, H. and Vogel, F. (2019). Seven Years of Language & Law. Editors' Progress Report on the Journal of the International Language & Law Association. *International Journal of Language & Law (JLL)*, 8, 1–8.

Vogel, F., Hamann, H. and Gauer, I. (2018). Computer Assisted Legal Linguistics: Corpus Analysis as a New Tool for Legal Studies, *Law & Social Inquiry (LSI)*, 43, 1340–1363.

Hamann, H. (2017). Empirische Erkenntnisse in juristischen Ausbildungsarbeiten. Prüfungsschema, Zitier- und Arbeitshilfen für das Jurastudium und danach. *JURA – Juristische Ausbildung*, 39, 759–769.

Hamann, H. and Vogel, F. (2017). Evidence-Based Jurisprudence meets Legal Linguistics. Unlikely Blends Made in Germany. *Brigham Young University Law Review (BYU L. Rev.)*, 6, 1473–1502.

Hamann, H. and Vogel, F. (2017). The Fabric of Language and Law. Towards an International Research Network for Computer Assisted Legal Linguistics (CAL²) (special issue introduction). *International Journal of Language & Law (JLL)*, 6, 101–109.

Journal Articles (not peer-reviewed)

Hamann, H. (2020). Verbesserung der Gesetzgebung. Tagung der Bayer-Stiftung für deutsches und internationales Arbeits- und Wirtschaftsrecht am 17. Mai 2019 in Leverkusen. *Juristenzeitung*, 75, 84–86.

Hamann, H. (2020). Ironie im Rechtswesen. *Neue Juristische Wochenschrift (NJW)*, 73, 713–718.

Hamann, H. (2020). Drei Desiderate zur Wissenschaft von der Gesetzestechnik – www.LegistiK.de. Reflexionen nach dem dritten Jahrestreffen des länderübergreifenden „Netzwerks Normprüfung". *ZG*, 35, 65–83.

Hamann, H. (2018). 70 Jahre Marginalien des deutschen Staatsrechts. Nachschau auf ein vergessenes Kapitel der Nachkriegspublizistik. *Archiv des öffentlichen Rechts*, 143(2), 282–311.

Hamann, H. (2018). Empirische Methoden für die Rechtswissenschaft. *Juristenzeitung*, 73(6), 291–293.

Hamann, H. and Hoeft, L. (2017). Die empirische Herangehensweise im Zivilrecht. Lebensnähe und Methodenehrlichkeit für die juristische Analytik? *Archiv für die civilistische Praxis (AcP)*, 217(3), 311–336.

Book Chapters

Hamann, H. (2019). Marken- und Wettbewerbsrecht als Vorbilder für die Vertragsauslegung? Demoskopische Befragungsmethoden und ihre ungewisse Zukunft. In: Christandl / Laimer /Nemeth / Skarics / Tamerl / Trenker / Voithofer / Walch (Eds.), *Intra- und Interdisziplinarität im Zivilrecht. Jahrbuch junger Zivilrechtswissenschaftler*, Baden-Baden: Nomos, 135–153.

Hamann, H. and Nicholls, N. (2018). Group Identity in Intermediated Interactions. Lessons from a Trust Game with Delegation in South Africa. In: Gunnthorsdottir / Norton (Eds.), *Experimental Economics and Culture*, Emerald Publishing, Bingley (UK), 227–264.

Hamann, H. (2017). Strukturierte Rechtslehre als juristische Sprachtheorie. In: E. Felder & F. Vogel (Eds.), *Handbuch Sprache im Recht*, Berlin, XIX, 175–186.

Hamann, H. (2017). Text, Kontext und Textualismus in der juristischen Auslegung. Frank Easterbrook neu gelesen und übersetzt. In: F. Vogel (Ed.), *Recht ist kein Text: Studien zur Sprachlosigkeit im verfassten Rechtsstaat*, Berlin: Duncker & Humblot, 135–150.

Hamann, H. (2017). Müssen Richter mit allem rechnen? Empirische Realitäten im Rechtssystem. In: Max-Planck-Gesellschaft (Ed.), Jahrbuch 2016.

Hamann, H. and Vogel, F. (2017). Computergestützte Rechtslinguistik (CAL²). Das Gewirk von Sprache und Dogmatik des Rechts am Beispiel des JuReko-Referenzkorpus. In: Heidelberger Akademie der Wissenschaften (Ed.), *HAW Jahrbuch 2016*.

Hamann, H. and Vogel, F. (2017). Die kritische Masse. Aspekte einer quantitativ orientierten Hermeneutik am Beispiel der computergestützten Rechtslinguistik. In: Schweiker / Hass / Novokhatko / Halbleib (Eds.), *Messen und Verstehen in der Wissenschaft. Interdisziplinäre Ansätze*, Wiesbaden: Verlag J.B. Metzler (Springer Fachmedien), 81–95.

Prizes and Honors

2019
Pupil of the American Inns of Court, William A. Ingram Inn, Santa Clara

2018
Manfred Fuchs Prize of the Heidelberg Academy of Sciences (HAdW)

2018
Postdoctoral Scholarship by Daimler and Benz Foundation, Ladenburg

2018
2nd Prize in Science Slam on "Open Codes. Living in Digital Worlds", Karlsruhe

2017
Award by German President Steinmeier for "Landmark Idea" in Research

Lectures and Presentations (since 2017)

2017

Computer Assisted Legal Linguistics (CAL²)
ILLA: International Language and Law Association Relaunch, Freiburg
8 September 2017

Marken- und Wettbewerbsrecht als Vorbilder für die Vertragsauslegung?
28. GJZ-Jahrestagung „Intra- und Interdisziplinarität im Zivilrecht", Innsbruck
7 September 2017

Lawyer CEOs. Comment on Henderson, Hutton, Jiang, & Pierson
CELSA: 1st Conference on Empirical Legal Studies in Asia, Taipei
15 June 2017

Evidence-Based Jurisprudence meets Legal Linguistics. Unlikely Blends Made in Germany
BYU Law & Corpus Linguistics Conference
3 February 2017

Lawyer CEOs. Comment on Henderson, Hutton, Jiang & Pierson
CELSA: 1st Conference on Empirical Legal Studies in Asia, Taipei
15 June 2017

Der freie Zugang zu wissenschaftlicher Fachliteratur, am Beispiel der Rechtswissenschaft
Zentrum für interdisziplinäre Forschung: Wintertreffen des Jungen ZiF, Bielefeld
27 January 2017

Sprache und Technik der Gesetzgebung / Redaktionsfehler aus dem Anwenderblick
Fachtagung Legistik des Netzwerks deutscher Rechtsnormprüfer, Berlin
19-20 January 2017

2018

Gesetzestechnische Möglichkeiten zur Gestaltung gut strukturierter Rechtsvorschriften
BMJV: 4. EU-Symposium zur Verständlichkeit von Rechtsvorschriften, Berlin
15 November 2018

Panel, "Future Research on Computers, Language, and Law"
International Language and Law Association: Focus Workshop, Copenhagen
8 September 2018

The German Federal Courts Dataset & Vanishing Trials, Settlement Judges? (Comment)
CELSE: 2nd Conference on Empirical Legal Studies in Europe, Leuven
1 June 2018

Why European Lawyers Call Their Trade a "Science" – Their Dynamical Systems Perspective
Intercontinental Academia Laws: Rigidity and Dynamics, Singapore
20 March 2018

Empirical Metrics as a Legal Decision Support
German-Israeli Foundation: GIF Young Scientists' Meeting, Potsdam
22 February 2018

Die Sprache der Verträge – und was Werbung damit zu tun hat
Junges Forum des Käte Hamburger Kollegs „Recht als Kultur", Bonn
11 January 2018

2019

Pricing What You Cannot Buy: Consistent Valuation of Non-Market Goods by Judges and Lawyers?
Academia Sinica Empirical Legal Studies Conference, Taipei
24 July 2019

Resources for Studying the Judiciary: The German Federal Courts Dataset 1950-2019
International Academic Conference on Empirical Legal Studies, Chengdu
20 July 2019

Positivism in Law? Thoughts on a Common Misconception About Legal Thinking
Sichuan University Law Faculty Summer Camp Opening Talk, Chengdu
10 July 2019

On Quantifying Habitability: Judicial Methods to Calculate Rent Reduction in Tenancy Contracts
Karlsruhe Institute of Technology: KIT seminar series „trends in research", Karlsruhe
6 June 2019

2020

Rent, Reduction, and Reason: An Incentivized Vignette Survey on the Economic Value of Lease Law Remedies
Law and Society Association: LSA Annual Conference #44, online
29 May 2020

Property & Psyche. Tracing the Trajectory of Tenancy through the Lens of Cultural Psychology
Legal Research in Progress (LRIP) Seminar, Stanford Law School
21 January 2020

Conferences and Workshops Organized

Conference on open access for legal studies, Exzellenzcluster Normative Ordnungen, Frankfurt/Main
70 participants (D/A/CH), budget of 8,000 €, with Hürlimann & Peukert, www.jurOA.de
18-19 October 2018

Workshop on language-use determination in law, Academy of Sciences, Heidelberg
29 May, budget of 8,000 €, with Walter & Vogel, www.CAL2.eu
9-10 May 2019

Workshop on experimental comparative law, Max Planck Institute for Research on Collective Goods, Bonn
14 participants (U.S. and Germany),
with Engel & Frankenreiter, coll.mpg.de/events/18906/73692
23-24 May 2019

Topic day on open access, especially in book sciences, University of Bielefeld
16 participants, with Florian Muhle, as part of the "Junge ZiF" summer meeting
5 July 2019

Teaching

Summer term 2017
Empirische Forschung im Recht
University of Bremen

Winter term 2017/18
Sprache und Interaktion im Recht
University of Siegen

Winter term 2017/18
Klausurtechnik und Fehlerquellen im Zivilrecht
University of Bonn

Winter term 2017/18
Examensrepetitorium Schuldrecht AT
University of Mannheim

Summer course 2018
Macht und Ironie in Sprache, Medien und Recht
German Academic Scholarship Foundation

Summer term 2018
Empirische Methoden für die Rechtswissenschaft
University of Gießen

Summer term 2018
Empirische Forschung im Recht
University of Bremen

Winter term 2018/19
Klausurtechnik und Fehlerquellen im Zivilrecht
University of Bonn

Winter term 2018/19
Examensrepetitorium Schuldrecht AT
University of Mannheim

Summer term 2019
Textlinguistik des Rechts
University of Zurich

Winter term 2019/20
Ironie in Sprache und Recht
University of Siegen

Summer course 2019
Legal Research and its Future in a Digital Age
Sichuan University (UIP)

Professional Activities

Editorial Boards

Editor-in-chief, *International Journal of Language and Law* (JLL)
www.languageandlaw.de

Founding co-editor, Law's Empirics:
Legal Empirics in Europe (L|E)
www.legalempirics.com

Lead Editor 2019/20, *Stanford Technology Law Review* (STLR)
stlr.stanford.edu

Fellowships

Fellowship from the Weizenbaum Institute for the Networked Society, Berlin

ICA Fellowship from the University-Based Institutes for Advanced Study, Singapore/Birmingham

Fellowship at the Young ZiF, Center for Interdisciplinary Research, Bielefeld

Elected Spokesperson of Junior Fellows at the Heidelberg Academy of Sciences (HAdW)

Carina Hausladen

Before joining Christoph Engel's group in October 2017, I completed a Master's degree in Economics. In October 2020 I joined Dirk Helbing's group at ETH Zürich as a postdoctoral researcher. My research investigates decision-making in various contexts with machine-learning methods. More specifically, I ask: Can we nudge people towards being more honest? Can we use language to find out who lies? Which factors influence a judge's decision, and how do people cooperate? In order to answer these questions, I work with experimental and field data. The methods I deploy are highly interdisciplinary and range from classical econometrics to mouse-tracking and machine-learning.

Together with Olexandr Nikolaychuk, I study a game where participants can lie without facing the risk of being punished (Hausladen and Nikolaychuk, 2020, pre-registered trial). In this context, rationality would predict individuals to claim the highest possible monetary payoff, but in reality, many subjects report sub-optimal payoffs in favor of an honest answer. In this context, one question is whether honesty is an intuitive response or whether much deliberation is needed. There are opposing opinions in literature because researchers have found either the truth or the lie as being human's default behavior. We solve this puzzle by introducing a new modification to a die-in-the-cup game combined with time pressure. Our main finding is that time pressure leads to more dishonest behavior, but only if the regular die is used. We also find that, when given the time to deliberate, the participants generally report lower values if the regular rather than the color die is used.

Instead of investigating the default answer, together with Martin Fochmann and Peter Mohr, I analyze the responses that participants plan to give (Hausladen et al., 2020, preregistered trial). More specifically, I analyze written language obtained from group chats to determine which of the participants in a tax-evasion game intends to lie. Knowledge about future decisions in the moral context is valuable for several reasons, e.g., a targeted intervention could be assigned to "future liars" to increase their potential to answer honestly.

Not all economic games are structured such that a rational player has to lie to earn the highest payoff. In a public-goods game, a subject can contribute nothing of his or her initial endowment to the public good and can gain money from the amount redistributed. Even if the Nash Equilibrium of this game is zero contributions, different strategy profiles with positive contributions are found in experimental data. Together with Christoph Engel and Marcel Schubert, I investigate those strategy profiles from a theoretical and empirical perspective (Engel et al., work in progress).

I have just outlined three games in which experimental studies have found irrational behavior.

Together with Marcel Schubert and Elliott Ash, I investigate irrational decisions outside of the laboratory, and in a legal context (Hausladen et al., 2020). A rational choice in the legal framework should be based on law and statutes. However, research shows that external variables, such as a judge's characteristics, influence such decisions. To capture such a relationship, the dependent variable, namely the legal decision, needs to be modeled in a measurable form. Our study maps the written opinion text of judges onto a two-dimensional scale representing political ideology.

Most of the research in the field of behavioral economics draws upon traditional econometrics for data evaluation. It is only recently that tools from other disciplines, such as computer science, are used to provide research insights into behavioral economics.
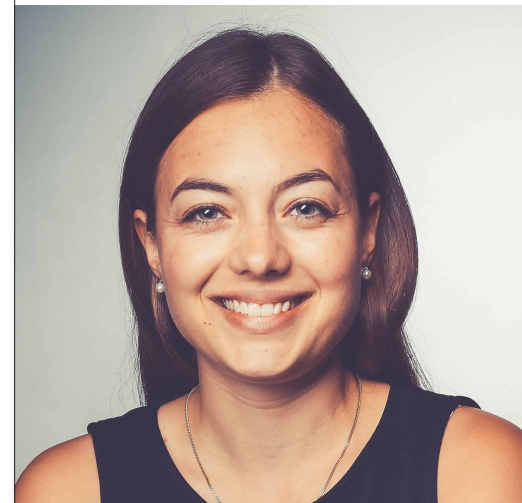
Contact

carina.hausladen@gess.ethz.ch

https://www.coll.mpg.de/carina-hausladen

One tool that I borrow from psychology research is mouse-tracking. This technique sheds light on the decision-making process, instead of just observing the final report, which is the current practice in the literature about (dis-)honest decision-making. More specifically, in Hausladen and Nikolaychuk (2020, preregistered trial), we deploy mouse-tracking and develop a new evaluation metric that expands the traditional two choice options screen setup to more choice options.

Even if data from laboratory experiments are structured, and only a fraction of the size of what would be considered Big Data, complexity still exists to such a degree that it is hard or even impossible to reduce it with traditional econometrics. These problems arise, for example, for text data and multi-round decisions, with temporal and inter-group dependencies.

Much behavioral experimental research allows for communication, for example in the form of chats between participants. However, in many cases, chat data are hardly analyzed at all because language is too complex to be captured by a simple model. An alternative solution would be to assess each piece of written text individually, but this approach is very resource-consuming. A possible solution is natural language-processing, which allows us to analyze the text in a resource-efficient way. In Hausladen et al. (2020, preregistered trial), we use natural language-processing to analyze chat texts from a tax-evasion experiment. More specifically, a classifier is trained to label chat text as either "honest" or "dishonest", depending on the income stated after the written conversation. Such an approach can be classified as supervised machine-learning.

In Hausladen et al. (2020), we use supervised machine-learning as well. For training, I exploit political ideology labels that were assigned to judicial

opinions by human coders. Training an automated classifier is especially useful in this context, as due to resource intensity of labeling, only a small fraction, less than 5%, of all available judicial opinions is labeled so far.

Apart from text, another instance of data that requires machine-learning techniques is multi-round decisions, with temporal and inter-group dependencies. More concretely, in Engel et al. (work in progress), we use unsupervised machine-learning to find strategies played by participants. The clusters found will be interpreted in the light of various learning models.

Publications

Articles in Peer-Reviewed Journals

Hausladen, C. I., Schubert, M. H., Ash, E. (2020). Text Classification of Ideological Direction in Judicial Opinions. *International Review of Law and Economics*, 62, 105903.

Pre-registered Trials

Hausladen, C. I., Nikolaychuk, O. (2020). Color me Honest! Time Pressure and (Dis-)Honest Behavior. *AEA RCT Registry.*

Hausladen, C. I., Fochmann, M., Mohr, P. (2020). Using Natural Language Processing to Enhance Compliance Behavior. *AEA RCT Registry.*

Work in Progress

Engel, C., Hausladen, C. I., Schubert, M. H., Identifying Theories about the Composition of the Type Space through Cluster Analysis of Linear Public Good Experiments.

Scholarships and Honors

2019

C-SEB Startup Grant, University of Cologne, Cologne, Germany, 3000 €.

IPAK Travel Grant, DAAD University of Cologne, Cologne, Germany, 1500 €.
Travel Grant, Empirical Legal Studies Replication Conference, Claremont, California, $ 500.

2018

C-SEB Gender Research Grant, University of Cologne, Cologne, Germany, 4000 €.

Lectures and Presentations (since 2017)

2018

Color Me Honest! Mouse Tracking, Time Pressure, and (dis-)Honest Behavior
6th Swiss Young Researchers Workshop in Behavioral Economics and Experimental Research, University of Neuchâtel, Switzerland
September 2018

2019

Classifying (dis-)Honest Decision-making Based on Experimentally Collected Chat Data
12th IMPRS Uncertainty Thesis Workshop, Wittenberg, Germany
March 2019

Text Classification of Ideological Direction in Judicial Opinions
PELS Replication Conference, Claremont McKenna College, Claremont, California
April 2019

Color Me Honest! Mouse Tracking, Time Pressure, and (dis-)Honest Behavior
Sixth International Meeting on Experimental and Behavioral Social Sciences (IMEBESS), Utrecht University, Utrecht, Netherlands
May 2019

2020

Identifying Theories about the Composition of the Type Space through Cluster Analysis of Linear Public Good Experiments
Amsterdam Cooperation Lab, Vrije Universiteit Amsterdam, Amsterdam, Netherlands
February 2020

Teaching

Winter term 2018/2019

Advanced Analytics and Applications
University of Cologne, Chair of Sustainable Energy and Economics, Cologne, Germany

Martin F. Hellwig

As in previous years, work in the period 2018–2020 proceeded in several areas, pure theory, as well as the theory and political economy of systemic risk in the financial sector, financial regulation, and monetary policy.

Pure Theory

In the area of pure theory, I have (co-)written two major papers.

"Incomplete-Information Games in Large Populations with Anonymity" provides theoretical foundations for models of strategic interdependence under uncertainty that have a continuum of agents and a decomposition of uncertainty into a macro component and an agent-specific micro component, with a law of large numbers for the latter. Such models are frequently used in applied work, including some of my own. However, their foundations have been unclear. In particular, what is the relation between these models and the standard Harsanyi/Mertens-Zamir model of strategic interdependence under incomplete information? Further, should we think of the decomposition of uncertainty into aggregate and agent-specific components as being introduced ad hoc or can this decomposition itself be derived from some deeper properties of the models? Finally, how should we deal with the mathematical difficulties inherent in the notion of a continuum of agents with agent-specific uncertainty?

The paper makes three important contributions. First, it develops a version of the Harsanyi/Mertens-Zamir model of strategic interdependence under incomplete information with a continuum of players. The probabilistic/measure theoretic framework is based on Sun's notion of a Fubini extension of the product of the space of states of nature and the space of agents. The basic idea is to enrich the algebra of measurable events to such an extent that cross-section distributions of characteristics can be defined even though, the characteristics of different agents are (essentially) independent. Using Sun's approach in the context of the Harsanyi/Mertens-Zamir model is not quite trivial because Sun's approach involves a fixed underlying probability space, but the analysis of strategic behavior under incomplete information is concerned with agents' beliefs, i.e., conditional distributions.

Second, the paper shows that the decomposition of uncertainty into a macro and a micro component can be derived from conditions of *anonymity*. One such condition requires that agents' types be essentially pairwise exchangeable; this condition assumes a common prior. Another condition, which I call *anonymity in beliefs* and which is what matters for strategic behavior, requires that, from the perspective of (almost) any one agent's beliefs, the other agents' types be essentially pairwise exchangeable. I show that, if beliefs are given by regular conditional distributions under a given prior, then for almost every agent, anonymity in beliefs holds almost surely if and only if, under the common prior, the agents' types are essentially pairwise exchangeable. With anonymity in beliefs as a sort of conditional exchangeability condition, this result is not contained in the work of Sun and his co-authors.

By Sun's version of de Finetti's theorem, exchangeability is equivalent to conditional independence with identical conditional distributions; moreover, in the framework of a Fubini extension, an exact conditional law of large numbers holds. Macro uncertainty can therefore be identified with uncertainty about the cross-section distribution of types in the population. Conditionally on this distribution, the agents' types are independent with a common conditional probability distribution that is equal to the cross-section distribution. All strategically relevant aspects of agents' beliefs are then contained in their *macro beliefs*

Contact

hellwig@coll.mpg.de

https://www.coll.mpg.de/martin-hellwig

about the stochastic properties of the cross-section distribution of types and in their beliefs about the cross-section distribution of other agents' strategies.

Third, the paper shows that, if the Fubini extension is sufficiently rich, the formalism imposes no restrictions on the scope of macro uncertainty. Any probability distribution over cross-section distributions of types can be generated by some specification of type random variables satisfying exchangeability. In contrast, the formalism does impose restrictions on macro-belief functions if these functions are to be derived from a common prior. The necessary and sufficient conditions under which this is possible have a family resemblance to the corresponding conditions that Harsanyi (1967/68) gave for the existence of a common prior in a game involving two agents.

"Social Choice in Large Populations with Single-Peaked Preferences" (with Felix Bierbrauer), studies strategy-proof social choice when there is a large population of agents with single-peaked preferences over a linearly ordered set of alternatives. The leading example would be a problem of public-goods provision with quasi-linear utility functions of the $\theta\, u(x) - k(x)$, where θ is an agent-specific preference parameter, x is the public-goods provision level, and $k(x)$ is the per-capita provision cost. If marginal utility is decreasing, and marginal per-capita provision cost increasing, preferences over provision levels are single-peaked.

For models with finitely many agents with single-peaked preferences over a linearly ordered set of alternatives, an important paper by Moulin (Public Choice 1980) had shown that an anonymous social choice function mapping vectors of preference parameters into outcomes can be implemented in dominant strategies (is strategy-proof) if and only if it can be implemented by a generalized median-voter mechanism, defined as a median-voter mecha-

nism for a population that is enlarged by a set of dummy voters with fixed and known preference peaks. Moulin (1980) also showed that, if a social choice function can be implemented by a generalized median-voter mechanism, then it is group strategy-proof as well as individually strategy-proof.

In a large population, group strategy proofness and individual strategy proofness are no longer equivalent. Because any one individual has no power to affect the aggregate outcome, *every* anonymous social choice function is in fact individually strategy-proof, but *not every* anonymous social choice function is group strategy-proof. The paper shows that, in a large population, as in a finite population, an anonymous social choice function is group strategy-proof if and only if it can be implemented by a version of Moulin's generalized median-voter mechanism.

Whereas in Moulin (1980), group strategy proofness only comes in as an afterthought, our arguments focus directly on what is needed to avoid collective manipulations by groups of agents with (locally) similar interests. The characterization relies on the linear ordering of the set of alternatives and on the fact that, when starting from any given alternative, participants with "higher" preference peaks all agree that they would like to move "up", and participants with "lower" preference peaks all agree that they would like to move "down". We show that, if a manipulation of social choice by either one of these two groups is to be avoided, the social choice function must not condition on the group's composition, but only on its size. The size, however, can be found out by having participants vote. If all participants have strict preferences over neighboring outcomes, it suffices to have people indicate for each outcome whether they want to move "up" from that outcome or not. The chosen outcome is then "lowest" at the point at which the "up" votes fail to meet a specified threshold. *The threshold may*

depend on the outcome considered, but the mapping from outcomes to thresholds must be non-decreasing.

In providing a link between social choice theory and voting, the analysis enhances our understanding of voting. The use of voting for decisions on resource allocation is often seen as problematic because voting does not take account of preference intensities. For example, particularly, in binary voting, a small set of people who care deeply about the decision may be unable to influence the outcome of the vote even though none of the other people may care very much at all. Our analysis shows that such inefficiencies may have a deeper cause than merely the coarseness of the information conveyed through voting: this coarseness itself may be implied by the requirement of group strategy proofness.

In contrast to other areas of economics and political science, the paradigm of a large population where each individual is too insignificant to affect the outcome for society has not been much used in social choice theory. However, in social choice, as in private markets or in voting, the impact that an individual in a population of millions can have on the overall outcome is so small that participants do not give it much consideration. The loss in precision that results from studying a continuum model in which the impact of a single person on aggregate outcomes is literally zero is therefore negligible and is outweighed by the gains in insight that can be obtained through the greater simplicity of the continuum model.

Applied Theory and Policy: Work on Financial Stability and Banking Regulation

"Germany and the Financial Crises 2007–2017", written for the annual macro-prudential conference at the Swedish Riksbank, attempts to answer the question why Germany was so strongly

affected by the great financial crisis. The paper refers to the traditional three-pillar banking system and to the intensification of competition in the 1990s. In the three-pillar system, the Landesbanken never had a viable business model to start with, and the "great" (private) banks had a business model whose margins disappeared in the 1990s. Attempts to deal with the situation by expanding quantities exacerbated the margin problem. Attempts to branch out into other activities (global banking) suffered from a lack of competence and a lack of proper incentives. The political system's failure to allow for sufficient consolidation through exit has caused crisis responses to be inadequate until now.

"Bank Leverage, Welfare and Regulation" (with Anat Admati) provides a welfare theoretical analysis of bank funding and regulation. The analysis focuses on the observation, formalized in Admati et al., "The Leverage Ratchet Effect", *Journal of Finance* 2018, that funding decisions of a person or an institution that already is indebted are *always* biased in favor of additional debt, rather than equity. This incentive problem might be contained by creditors' imposing covenants and discipline on debtors. However, the enforcement of covenants and discipline requires coordination among creditors. In this respect, banks differ from non-financial borrowers. Whereas debt funding of nonfinancial borrowers tends to be concentrated in the hands of a few banks, the banks' creditors are highly fragmented, and coordination among them is infeasible. Statutory equity requirements for banks can therefore be seen as a commitment device, which provides a substitute for the missing ability to provide viable commitments under *laissez-faire*.

"Competition Policy and Sector-Specific Regulation in the Financial Sector", written for an OECD Workshop, discusses the respective roles of the two forms of statutory intervention mentioned in the title. Drawing on earlier work on competition and sector-specific regulation in network industries, the paper

points to the difference between an approach based on prohibitions (of abusive behavior, of mergers, etc.) and an approach based on mandates (to hold minimum reserves, to fund with sufficient equity). The paper also discusses the anti-competition policy tradition in banking, the competition policy problems associated with artificial barriers to exit, due to government support, and the competition policy problems associated with too-big-to-fail policies creating artificial incentives for mergers.

"Valuation Reports in the Context of Banking Resolution: What Are the Challenges?", written for the European Parliament, discusses the difficulties involved in valuing the banks' assets in resolution. The first part of the paper provides a fundamental discussion of what valuation is about, in particular how valuation is trivial if the market system is complete (in the sense of Arrow and Debreu) or at least there are viable markets for securities replicating the assets that are to be valued, and then, how valuation necessarily involves an element of arbitrariness if such markets do not exist. The paper also elaborates on the observation that asset values depend on the strategies that are pursued, including the speed with which the assets are to be disposed. The second part of the paper illustrates the problem with the example of Banco Popular Español, where a lack of liquidity forced the authorities to sell the bank to Banco Santander, so that the question of alternative strategies became moot. The analysis leads to the conclusion that the valuation criteria given in the EU's Bank Recovery and Resolution Directive cannot possibly be fulfilled, and attempts to "repair" these criteria through judicial interpretation can lead to inconsistencies.

"How Important Is a European Deposit Insurance Scheme?", written for a conference at the Frankfurt Institute for Law and Finance, questions the often-made claim that completion of banking union should provide for a common deposit insurance system with high priority. As long as resolution mechanisms are not

working, deposit insurance is irrelevant. Moreover, there are reasons to believe that the difference that a common deposit insurance scheme can make is not large. Hence, political energy would be better devoted to reforming legislation to make resolution viable.

"Banks, Politics, and European Monetary Union", written for the 2019 ECB Forum in Sintra, explains that, on the one hand, Banking Union is essential for the survival of Monetary Union; on the other hand, Banking Union is not working because it lacks political legitimacy. The point is that banking is political, in more ways than one, and politics is national. The tension is illustrated by the way in which national authorities have dealt with – or failed to deal with – problem banks and by the reactions of electorates to such events.

Applied Theory and Policy: Work on Money and European Monetary Union

"Bargeld, Giralgeld, Vollgeld: Zur Diskussion um das Geldwesen nach der Finanzkrise", written for a 2018 Symposium of the Deutsche Bundesbank, gives an overview over various discussions about money and monetary policy since the global financial crisis. Most of these discussions involve flaws in the understanding of basic monetary theory. For example, much of the discussion about ECB monetary policy and about the risks to which this policy exposes taxpayers is based on the view that central bank balance sheets are to be taken literally, so the central bank's issue of notes and claims on notes must be interpreted as a form of debt. This view is invalid because in today's pure paper money system, the issue of money by a central bank imposes no obligation on the central bank. In accounting terms: The fair value of liabilities incurred is zero. At the same time, discussions about the funding of commercial banks are often based on the view that bank deposits are *not* a

form of debt because they are "money", which commercial banks can create at will, by granting additional loans. This view is invalid because deposits are claims for the surrender of central bank money (or claims thereon), which do impose obligations on commercial banks. The fair value of these liabilities is positive, and, in contrast to central banks, commercial banks can become insolvent for being unable to meet them. The views underlying the positions that central bank money is debt of the central bank and commercial-bank "money" is not debt of the commercial bank are both flawed; they seem mutually inconsistent, but that does not prevent some people from holding them at the same time. I am considering preparation of an English version, which would also have to encompass the more recent discussion about "modern monetary theory".

"Target-Falle oder Empörungsfalle? Zur deutschen Diskussion um die Europäische Währungsunion" provides a systemic account of the economics of the Eurosystems TARGET accounts. Following an article in the *Frankfurter Allgemeine Sonntagszeitung*, in which I warned of "TARGET hysteria", the editor of *Perspektiven der Wirtschafts-politik*, the policy journal of the Verein für Socialpolitik (German Economic Association) had asked me to lay out my arguments in detail. Based on a thorough study of the legal norms, the article points out that much of the German debate on the subject is due to several failures: (i) a failure to take account of the fact that, as an economic operator, the Bundesbank is not acting independently, but as part of the Eurosystem, with business outcomes shared among the participating central banks; (ii) a failure to take account of the fact that the balance sheets of national central banks in the Eurosystem commingle positions from joint activities and positions from individual activities in ways that would be illegal for private corporations; (iii) a failure to take account of the fact that TARGET positions belong to a system of internal accounts whose economic content ("fair

value") must be derived from the legal norms; and (iv) a misreading of the legal norms, in particular with respect to the notion of "interest on TARGET balances", which is purely an accounting device, without any impact on the profit shares of national central banks. The paper also criticizes the focus of German monetary policy discussion on fiscal issues, as opposed to issues related to the central bank's mandates. The article has provoked replies from Hans-Werner Sinn and others, which are again flawed. I am in the process of preparing a response.

The article in *Perspektiven der Wirtschaftspolitik* served as a basis for a joint statement by Isabel Schnabel and me for the Finance Committee of the Bundestag, which unfortunately I could not attend, so Isabel presented our view. This statement was subsequently published in two instalments in *Wirtschaftsdienst*.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Hellwig, M. F. (2020). Twelve Years after the Financial Crisis – Too-big-to-fail is still with us. Comments on the Financial Stability Board's Consultation Report 'Evaluation of the Effects of Too-big-to-fail reforms'. *MPI Discussion Paper* 2020/24. To appear in *Journal of Financial Regulation.*

Hellwig, M. F. (2020). Property Taxes and Dynamic Inefficiency: A Correction of a "Correction". *Economics Letters*, 197, 109603.

Admati, A. R., DeMarzo, P. M., Hellwig, M. F. and Pfleiderer, P. (2018). The Leverage Ratchet Effect. *Journal of Finance*, LXXIII(1), 145–198.

Gizatulina, A. and Hellwig, M. F. (2017). The Generic Possibility of Full Surplus Extraction in Models With Large Type Spaces, *Journal of Economic Theory,* 170, 385–416.

Hellwig, M. F. (2017). Finanzstabilität, Transparenz und Verantwortlichkeit: Stellungnahme für das Bundesverfassungsgericht, *Credit and Capital Markets/Kredit und Kapital* 50(4), 421–454.

Journal Articles (not peer-reviewed)

Hellwig, M. F. (2019). In memoriam Felix Höffler (1970–2019). *Zeitschrift für Wirtschaftspolitik,* 68(1), 1–5.

Hellwig, M. F., and Schnabel, I. (2019). Verursachen Target-Salden Risiken für die Steuerzahler?, *Wirtschaftsdienst*, 99(8), 553–561.

Hellwig, M. F., and Schnabel, I. (2019). Target-Salden, Leistungsbilanzsalden, Geldschöpfung, Banken und Kapitalmärkte, *Wirtschaftsdienst*, 9, 632–640.

Hellwig, M. F. (2018). Was wäre, wenn der Lehman-Konkurs heute stattfände?, *Wirtschaftsdienst*, 98 (8), 539–543.

Hellwig, M. F. (2018). Bargeld, Giralgeld, Vollgeld: Zur Diskussion um das Geldwesen nach der Finanzkrise. *Zeitschrift für das gesamte Kreditwesen*, 8, 37–41.

Hellwig, M. F. (2018). Target-Falle oder Empörungsfalle? Zur deutschen Diskussion über die Europäische Währungsunion. *Perspektiven der Wirtschaftspolitik*, 19(4), 345–382.

Hellwig, M. (2018). HSH Nordbank: Verkauf – ein Schlussstrich? *Wirtschaftsdienst*, 98, 224–224.

Hellwig, M. F. (2017). Deutschland und die Finanzkrise(n), *Wirtschaftsdienst*, 97(9), 606–607.

Hellwig, M. F. (2017). Wachstumsschwäche, Bankenmalaise und Bankenregulierung, *Wirtschaftsdienst*, 97 (Sonderheft), 43–48.

Hellwig, M. F. (2017). Man sollte mehr Mut haben, Banken in die Insolvenz gehen zu lassen: Ein Gespräch über Leistungsbilanzen, staatliche Investitionen, Schulden, Geldpolitik und Bankenregulierung, *Perspektiven der Wirtschaftspolitik*, 18, 226–244.

Hellwig, M.F . (2017). HSH Nordbank: Verantwortlichkeit in der Demokratie (HSH Nordbank: Accountability in a Democracy), *Wirtschaftsdienst*, 97(1), 4–5.

Chapters in Edited Volumes

Hellwig, M. F. (2020). How Important is a European Deposit Insurance Scheme?, in: A. Dombret and P. S. Kenadjian (eds.) EDIS, NPLs, Sovereign Debt, and Safe Assets, Institute for Law and Finance Series Volume 23, De Gruyter, Berlin/Boston, 7–19.

Hellwig, M. F. (2019). Banks, Politics, and European Monetary Union, in: European Forum on Central Banking 2019: Twenty Years of European Economic and Monetary Union, Conference Proceedings, 250–261.

Admati, A. R. and Hellwig, M. F. (2019). Bank Leverage, Welfare, and Regulation, in: D.W. Arner, E. Avgouleas, D. Busch and A.L. Schwarcz, Systemic Risk in the Financial Sector: Ten Years after the Great Crash, Centre for International Governance Innovation, Waterloo, Ont., 217–233.

Hellwig, M. F. (2018). Bargeld, Giralgeld, Vollgeld: Zur Diskussion um das Geldwesen nach

der Finanzkrise, in: Deutsche Bundesbank: 4. Bargeldsymposium 2018, Frankfurt, 94–147.

Revise & Resubmit

Hellwig, M. F. (2019/2020). Incomplete-Information Games in Large Populations with Anonymity. *MPI Discussion Papers* 2019/14, 2020/20, R & R: *Theoretical Economics.*

Working Papers

Bierbrauer, F. J. and Hellwig, M. F. (2020). Social Choice in Large Populations with Single-Peaked Preferences: Group Strategy Proofness and Voting, mimeo, Cologne/Bonn, 2020.

Hellwig, M. F. (2020). Dynamic Inefficiency and Fiscal Interventions in an Economy with Land and Transaction Costs. *MPI Discussion Paper* 2020/7.

Admati, A. R. and Hellwig, M. F. (2019). The Parade of the Bankers' New Clothes Continues: 34 Flawed Claims Debunked, Rock Center for Corporate Governance at Stanford University Working Paper No. 143, Stanford University Graduate School of Business Research Paper No. 15-58, revised, August 2019.

Hellwig, M. F. (2018). Germany and the Financial Crises 2007–2017, Case Study on a Past Crisis: The Case of Germany, Paper presented at the fourth Annual Macroprudential Conference of the Swedish Riksbank, June 2018.

Hellwig, M. F. (2018). Competition Policy and Sector-Specific Regulation in the Financial Sector. *MPI Discussion Paper* 2018/7.

Hellwig, M. F. (2018). Valuation Reports in the Context of Banking Resolution: What Are the Challenges? *MPI Discussion Paper* 2018/6.

Hellwig, M. F. (2017). Precautionary Recapitalizations: Time for a Review, *MPI Discussion Paper* 2017/14.

Hellwig, M. F. (2017). Carving Out Legacy Assets: A Successful Tool for Bank Restructuring?, *MPI Discussion Paper* 2017/3.

Newspaper Articles and Interviews

Bofinger, P., Hellwig, M. F., Hüther, M., Schnitzer, M., Schularick and Wolff, G. (2020). Gefahr für die Unabhängigkeit der Notenbank, *Frankfurter Allgemeine Zeitung*, 29 May 2020 (English version see: https://www.guntram-wolff.net/blog/the-independence-of-the-central-bank-at-risk/, published in Negocios, Politico, Kathimerini and La Repubblica)

Hellwig, M. F. (2020). Abschied von der heilen Welt: Die Grenzen der Eigenverantwortung, *Frankfurter Allgemeine Zeitung*, 15 May 2020.

Hellwig, M. F. (2019). Können wir uns die Deutsche Bank leisten?, *Frankfurter Allgemeine Zeitung*, 15 April 2019.

Hellwig, M. F. (2018). Die Rückkehr zur Normalität hat noch einen langen Weg vor sich, *TA NEA*, 15 December 2018.

Hellwig, M. F. (2018). Die Steuerzahler bleiben wohl auf 70 Milliarden Euro sitzen, *taz.die tageszeitung*, 14 September 2018.

Hellwig, M. F. (2018). Wider die deutsche Target-Hysterie, *Frankfurter Allgemeine Sonntagszeitung,* 29 July 2018.

Hellwig, M. F. (2018). Einlagen würden für Kunden teurer, *Der Tagesspiegel,* 10 June 2018.

Admati, A. and Hellwig, M. F. (2018). Risks Grow as Reform Resolve Disappears. *Global Public Investor*, 78–78.

Hellwig, M. F. (2018). Interview: Immer noch viele faule Kredite, Badische Zeitung Freiburg/Südlicher Breisgau, 11 April 2018 .

Hellwig, M. F. (2018). Beispiel für Populismus, *Frankfurter Allgemeine Zeitung*, 8 March 2018.

Hellwig, M. F. (2018). Viel Vages zu Europa, *Frankfurter Allgemeine Sonntagszeitung*, 11 February 2018.

Gersbach, H. and Hellwig, M. F. (2017). Bargeld abschaffen macht wenig Sinn**,** *Die Volkswirtschaft* 2017 (8–9), 6–9.

Hellwig, M. F. (09.08.2017). Das kann jederzeit wiederkommen, *Die Tageszeitung* (taz).

Hellwig, M. F. (30.08.2017). Es gab viel Aktivismus, *Handelsblatt*, Finanzen & Börsen, 167, 29.

Hellwig, M. F. (2017). Duitsland moet de Kritiek van andere Landen serieuzer nemen!, *NRC Handelsblad*, 9 June 2017.

Hellwig, M. F. (2017). Bitte nicht Groß-deutsch!, *Frankfurter Allgemeine Sonntagszeitung*, 14 May 2017.

Hellwig, M. F. (2017). Wenn die Zinsen steigen, wird es für manchen gefährlich, *AnlegerPlus*, May 2017.

Policy Reports

Scientific Advisory Board at the Federal Ministry for Economic Affairs and Energy (2020). Öffentliche Infrastruktur in Deutschland: Probleme und Reformbedarf [Public Infrastructure in Germany: Problems and Need for Reform], Berlin, July 2020.

Hellwig, M. F. (2020). Comments on the Financial Stability Board's Consultation Report of June 2020, "Evaluation of too-big-to-fail reforms", September 2020.

Scientific Advisory Board at the Federal Ministry for Economic Affairs and Energy (2020). Letter to Federal Minister Altmaier on the Challenges Caused by the Corona Crisis, Berlin, April 2020.

Hellwig, M. F. (2020). Stellungnahme für den Finanzausschuss des Deutschen Bundestages zum Antrag der Fraktion der FDP: "Basel III Finalisierung – Kreditversorgung Deutschlands erhalten" [Statement for the Finance Committee of the German Bundestag on a Motion by the FDP Parliamentary Group: "Basel III Finalization – Maintain Credit Supply for Germany"], Berlin, 10 March 2020.

Hellwig, M. F. and Schnabel, I. (2019). Stellungnahme anlässlich der öffentlichen Anhörung des Finanzausschusses des Deutschen Bundestages zu den Anträgen der Fraktion der FDP und AfD zum Thema "Target" [Statement on the Occasion of the Public Hearing of the Finance Committee of the German Bundestag on the Motions of the FDP and AFD Parliamentary Groups on the Topic "Target"] (BT-Drs. 19/6416 und 19/9232), Berlin, 5 June 2019 (published in two parts in Wirtschaftsdienst, 99(8), 553–561 and Wirtschaftsdienst, 9, 632–640.

Hellwig, M. F. (2018). Valuation Reports in the Context of Banking Resolution: What Are the Challenges? Report for the ECON Committee of the European Parliament, Brussels, June 2018 (also published as *MPI Discussion Paper* 2018/6).

Hellwig, M. F. (2018). Competition Policy and Sector-Specific Regulation in the Financial Sector. Paper prepared for OECD Workshop on Competition Policy and Financial Regulation, Paris, December 2017 (also published as *MPI Discussion Paper* 2018/7).

Scientific Advisory Board at the Federal Ministry for Economic Affairs and Technology (2017). Letter to Federal Minister Zypries on the Discussion About a Further Deepening of the European Union, Berlin, December 2017.

Hellwig, M. F. (2017). Precautionary Recapitalizations: Time for a Review, Report for the ECON Committee of the European Parliament, Brussels, July 2017 (also published as *MPI Discussion Paper* 2017/14).

Gutachten des Wissenschaftlichen Beirats beim Bundesministerium für Wirtschaft und Energie, Zur Diskussion um Bargeld und die Null-Zins-Politik der Zentralbank (Report of the Academic Advisory Committee of the Ministry for the Economy and for Energy Concerning the Discussion about Cash and about the Zero-Interest-Rate Policy of the Central Bank), February 2017.

Hellwig, M. F. (2017). Carving Out Legacy Assets: A Successful Tool for Bank Restructuring?, Report for the ECON Committee of the European Parliament, Brussels, March 2017 (also published as *MPI Discussion Paper* 2017/3).

Lectures and Presentations (since 2017)

2017

Globalisierung, "Shareholder Value" und Unternehmenslenkung
VDE Köln e.V. and VDI Kölner Bezirksverein e.V., Bonn
18 January 2017

Pourquoi avons-nous besoin des sciences économiques pour comprendre la réalité?
(Why Do We Need Economics to Understand the Real World?)
Académie des Sciences Morales et Politiques, Paris
27 February 2017

The Future of Banking in Europe: Regulation, Supervision, and the Changing Competitive Landscape
Delphi Economic Forum II, Delphi
4 March 2017

Acht Jahre nach Lehman Brothers: Wie steht es um die Finanzstabilität?
Rotary Club Kreuzberg, Bonn
6 March 2017

Carveouts of Legacy Assets – a Tool for Successful Bank Restructuring?
MPI Collective Goods, Bonn
20 March 2017

Bankenregulierung und Bankenaufsicht nach der Krise: Sind wir jetzt sicher? Warum nicht?
Rotary Club Köln-Kastell, Cologne
29 March 2017

The Too-Big-To-Fail Problem Remains Unsolved
Inter-Academy Symposium Law and Economics of the German National Academy of Sciences Leopoldina and the Israel Academy of Sciences and Humanities, Berlin
3 April 2017

Bargeld
Bundesministerium für Wirtschaft und Energie, Berlin
5 April 2017

Alternative Truths and Fake News: The Example of Banking Regulation
Ambrosetti's Finance Workshop,
The European House, Cernobbio
7 April 2017

The Return of Jurisdictional Borders in the Financial System
Public Finance Dialogue, Centre for European Economic Research, Berlin
25 April 2017

Ideologie oder Wissenschaft? Was kann orthodoxe Wirtschaftstheorie leisten?
Ringvorlesung, University of Cologne
26 April 2017

Europa in der Krise
Stiftung der Deutschen Wirtschaft, Frankfurt/M.
13 May 2017

A Treasury for the Banking Union?
Banco de España, Madrid
18 May 2017

Wissenschaft im Banne von "Exzellenz" und "Sichtbarkeit": Gründe, Methoden, Kosten, Alternativen
Symposium der Geistes-, Sozial- und Humanwissenschaftlichen Sektion der Max-Planck-Gesellschaft, Weimar
21 June 2017

Are Banks Still Special?
2017 Law and Banking/Finance Conference, Bad Homburg
23 June 2017

Liquidity Provision and Equity Funding of Banks
Society for the Advancement of Economic Theory (SAET), Faro
25 June 2017

Systemrisiko im Finanzsektor
Austrian National Bank, Vienna
4 July 2017

Systemic Risk, Macro Shocks, and Macro-prudential Policy
Leibniz-Institut für Wirtschaftsforschung Halle (IWH), Halle/Saale
29 August 2017

Geldtheorie, Bargeld und Giralgeld
Jahrestagung des Vereins für Socialpolitik, Vienna
4 September 2017

"Too big to fail" bleibt ein Problem
European Center for Financial Services, University Duisburg-Essen, Duisburg
7 September 2017

Bank Resolution in Europe – Bail In or Bail Out
Bank of America Merrill Lynch European Credit Conference 2017, London
13 September 2017

Revisiting Central Bank Governance
Bruegel-Graduate School of Economics, Brussels
2 October 2017

Nichts gelernt? Regulierung internationaler Finanzmärkte
Bund Katholischer Unternehmer e.V., Munich
6 October 2017

"Regulatory Capture" – Welche Effekte hat der Einfluss der Großindustrie auf die Gesetzgebung und die Behörden und was lässt sich verbessern?
Bundesarbeitsgemeinschaft Wirtschaft & Finanzen: Bündnis 90/Die Grünen, Berlin
7 October 2017

Bankenregulierung und Bankenaufsicht nach der Krise: Sind wir jetzt sicher? Warum nicht?
Rotary Club Bonn-Siebengebirge, Bonn
20 November 2017

Systemische Risiken als Herausforderung für die Regulierung des Finanzsektors
Deutsche Bundesbank, Frankfurt am Main
23 November 2017

Competition Policy and Sector-Specific Regulation in the Financial Sector
OECD Workshop on Competition and Regulation, Paris
4 December 2017

Europa in der Krise: Woran hapert es?
ZinsFORUM, Institut für Management GmbH, Frankfurt/M.
6 December 2017

Beitrag zur Paneldiskussion beim Symposium "Integrierte Infrastruktur- und Finanzplanung in Zeiten urbaner Transformation"
Veranstalter: Stadt Köln, Stadtwerke Köln, Deutsches Institut für Urbanistik sowie das Finanzwissenschaftliche Forschungsinstitut an der Universität zu Köln
14 December 2017

2018

Lecture, "Finance, State, and Society in the Financial Crisis", and Panel Contribution
Workshop "Defining Global, European, and Local Economies", at Socires International Conference on "The Finance – State – Society Triangle in Europe", Amsterdam
23 January 23, 2018

Bargeld, Giralgeld, Vollgeld
4. Bargeldsymposium (4th Cash Symposium) 2018, Deutsche Bundesbank, Frankfurt/M.
14 February 2018

Monetary Policy and Public Finance
ZEW Public Finance Conference, Mannheim
24 April 2018

Warum ist das Finanzsystem immer noch nicht sicher genug?
Geldgipfel (Money Summit) 2018: Von der Finanzwirtschaft zur Realwirtschaft – 10 Jahre nach Lehman Brothers, Universität Witten-Herdecke, Witten
28 April 2018

Die Unabhängigkeit der Zentralbank
Universität Bonn
5 May 2018

Systemic Risk, Macro Shocks, and Banking Regulation
3rd Annual European Central Bank Macro-prudential Policy and Research Conference, Frankfurt/Main
17 May 2018

Des Bankers neue Kleider
University of Salzburg
14 June 2018

Germany and the Financial Crises 2007–2017
Annual Macroprudential Conference, Sveriges Riksbank, De Nederlandsche Bank and Deutsche Bundesbank, Stockholm
16 June 2018

Regulatory Convergence or Divergence
The Transformation of Global Governance Project – The Governance of International Banking: Regulating for Crises, Past and Future, European University Institute/Bocconi University, Milan
12 September 2018

Liquidity Provision and Equity Funding of Banks
New Economic School, Moscow
8 October 2018

Bank Regulation. Ten Years After Financial Crisis
New Economic School, Moscow
8 October 2018

Deutschland und die Finanzkrisen des vergangenen Jahrzehnts
University of Hohenheim, Stuttgart
16 October 2018

Cross-Border Banking Issues in a Monetary Union
4th Policy Research Conference of the European Central Banking Network (ECBN) on "Cross-Border Aspects of Macroprudential Policy", Central Bank of Slovenia, Ljubljana
18 October 2018

Liquidity Provision and Equity Funding of Banks
German Institute for Economic Research (DIW Berlin), BERA-Soirée (Berlin Economics Research Associates)
23 October 2018

Systemic Risk, Macro Shocks, and Macro-Prudential Policies
Macroeconomic Policy Institute, Hans Boeckler-Stiftung, Berlin
25 October 2018

Die Überwindung von Babel: Chancen und Hindernisse im interdisziplinären Diskurs zwischen Rechts- und Wirtschaftswissenschaften
Goethe University Frankfurt/Main, Foundations of Law and Finance, Frankfurt/Main
1 November 2018

Lender of Last Resort: Who Should Do What?
Conference of the European Central Bank, National Bank of Belgium, the Toulouse School of Economics and the Solvay Brussels School of Economics and Management at National Bank of Belgium, Brussels
6 November 2018

Das politische Element in Wirtschaftstheorie und Politikberatung
Friedrich-August-von-Hayek-Lecture
University of Freiburg
12 November 2018

Why Have We Made So Little Progress in Bank Resolution Since the Financial Crisis?
Reserve Bank of New Zealand, Wellington
4 December 2018

Regulatory Reform Since the Financial Crisis – Where Do We Stand?
Victoria University of Wellington, Wellington
5 December 2018

Competition Policy and Sector-Specific Regulation in the Financial Sector
New Zealand Treasury, Wellington
7 December 2018

Liquidity Provision and Equity Funding by Banks
Victoria University of Wellington, Wellington
11 December 2018

2019

Target-Falle oder Empörungsfalle? Zur deutschen Diskussion um die Europäische Währungsunion
University of Osnabrück
15 January 2019

Europa in der Krise – Währungsunion, Bankenunion, Fiskalunion
University of Münster – Faculty of Economic Sciences
17 January 2019

Coalition-Proof Social Choice in Large Populations with Single-Peaked Preferences
Workshop on Centralised vs. Decentralised Forms of Social Organization and Public Good Provision, University of Bath, UK
31 January 2019

Regulatory Reforms after the Crisis: Has the Financial System Become Safe? Why Not?
Icelandic Supervisory Authority, Reykjavik, Iceland
5 March 2019

Staaten und Banken in der Währungsunion
IMK-Forum, Institut für Makroökonomie und Konjunkturforschung (IMK), Berlin
27 March 2019

Systemic Risk, Macro Shocks, and Macro-prudential Policy
OeNB Macroprudential Policy Conference 2019, Austrian National Bank, Vienna, Austria
9 May 2019

Discussion of Bank Capital Redux: Solvency, Liquidity, and Crisis
by Moritz Schularick, Bundesbank Spring Conference 2019, Deutsche Bundesbank, Frankfurt/Main
15 May 2019

Nationale Champions, Wettbewerbspolitik und Industriepolitik
Bundeskanzleramt, Berlin
23 May 2019

Social Choice in Large Populations with Single-Peaked Preferences, with an Application to Public-Good Provision
University of Bielefeld
28 May 2019

How Important Is a European Deposit Insurance Scheme?
Contribution to Panel: The Arguments For and Against EDIS
Institute for Law and Finance Conference on EDIS, NPLs, Sovereign Debt and Safe Assets, University of Frankfurt, Frankfurt/Main
14 June 2019

Banks, Politics, and European Monetary Union, Contribution to Panel on "The future of EMU"
ECB Forum on Central Banking, Sintra, Portugal
19 June 2019

Target-Falle oder Empörungsfalle? Zur deutschen Diskussion um die Europäische Währungsunion
University of Rostock
24 June 2019

Banks, Governments, and the ECB in the "Euro Crisis"
National University of Singapore, Risk Management Institute, Singapore
23 July 2019

Systemic Risk, Macro Shocks, and Macro-Prudential Policies
13th Annual Risk Management Conference, National University of Singapore
25 July 2019

Interne Modelle – Risikomessung oder Risikofaktor? (panel participant)
FMA Aufsichtskonferenz 2019, Österreichische Finanzmarktaufsicht (FMA), Vienna, Austria
3 October 2019

Governments, Banks, and Monetary Union
Financial Stability Conference 2019, Financial
Risk and Stability gGmbH, Berlin
28 October 2019

Staaten und Banken in der Währungsunion
Volkshochschule Erding
5 November 2019

**Post-Crisis Regulation: Old and New
Challenges to Financial Stability**
Finance Watch Conference 2019, Brussels,
Belgium
19 November 2019

2020

Reformen und Finanzstabilität nach der Krise
Ringvorlesung "Lektion gelernt? Staats-
schuldenkrisen und Finanzmarktstabilität",
University Cologne
27 January 2020

**Contribution to Panel on "Central Banks'
Objectives" at NIESR-Rebuilding Macro-
economics Conference on THE FUTURE OF
CENTRAL BANKING**
National Institute of Economic and Social
Research, London, UK
20 March 2020 (virtual)

**Contribution to Panel on "Central Banks to
the Rescue? Is This the Time for Helicopter
Money?" at Forum New Economy**
Bürgerbewegung Finanzwende e.V., Berlin
22 April (virtual)

**Regulatory Reforms after the Financial
Crisis: Has the Financial System Become
Safe? Why Not?**
University of Naples Federico II, Naples, Italy
6 July 2020 (virtual)

**Has Regulatory Reform since 2008 Made the
Financial System Safe? Why Not?**
European Central Bank, Frankfurt/M.
15 September 2020 (virtual)

**Regulatory Reforms after the Financial
Crisis: Has the Financial System Become
Safe? Why Not?**
University of Michigan, USA
25 September 2020 (virtual)

Dissertations

July 2019
Robert Scherf, University of Bonn
Essays in Public Finance

Public Service

Member, Scientific Advisory Council, Federal
Ministry for Economic Affairs and Energy,
Berlin, since 1995

Member, Expert Panel of the European
Parliament on Banking Union – Resolution,
2016-2019

Professional Activities

Scholarly Organizations

Fellow of the Econometric Society, since
1981

Fellow (Past President) of the European
Economic Association, since 1988

Honorary Member, American Economic Asso-
ciation, since 1995

Member, Academia Europaea, London, since
1990

Member, Berlin-Brandenburg Academy of
Sciences, since 1994

Foreign Honorary Member, American Acade-
my of Arts and Sciences, since 2002

Inaugural Fellow, European Corporate Gover-
nance Institute, since 2002

Economic Theory Fellow of the Society
for the Advancement of Economic Theory
(SAET), since 2013

Distinguished Fellow, Centre for Economic
Policy Research (CEPR) since 2019
Membre correspondant, Académie des
sciences morales et politiques, since 2018

Fellow, Financial Theory Group, since 2018

Editorial Activities

Member, Advisory Board, *Journal of the Euro-
pean Economic Association*, since 2003

**Advisory Committees etc. of Scholarly
Institutions**

Academic Partner, New Paradigm Plattform,
Berlin, since 2019

Member, Scientific Advisory Committee,
Wissenschaftsrat Cologne, Evaluation of
LOEWE-Zentrum für Finanzmarktforschung,
Frankfurt/Main, Deutsches Institut für
Wirtschaftsforschung (DIW), Berlin and Leib-
niz-Institut für Wirtschaftsforschung Halle
e.V. (IWH), Frankfurt/Main, May 2018

Member, Scientific Advisory Committee,
Deutsche Forschungsgesellschaft, Evaluation
of Research Group „Schaffung von Welt durch
Schlüsselindikatoren: Genese, Verwendung,
Folgen und Alternativen", Halle, April 2018

Yoan Hermstrüwer

Summary Report

Most of my current research is aimed at reconciling the requirements of market design and public law. It does so by bringing together mechanism design, experimental economics, empirical legal studies, and various areas of public law. In most of my projects, I build on methods used in the experimental law and economics framework. Throughout my work, I draw on insights from behavioral economics, models of bounded rationality, and (behavioral) market design more generally. This is what I call "behavioral law and market design" – an approach that I build on both in my habilitation thesis (from a legal angle) and in a series of projects in my economics dissertation (from an experimental angle).

In **Hermstrüwer (2019c)**, I start from the observation that many student admissions procedures do not provide any safeguards against strategic manipulation. Under the immediate acceptance algorithm, for example, a common procedure often referred to as the Boston mechanism (BOS), it is not safe for students to reveal their preferences for schools truthfully. As the German Constitutional Court notes, such a procedure is hardly compatible with equal protection rights, as it provides a systematic advantage to sophisticated applicants. To prevent the risk of manipulation and to achieve stable matchings, several US school districts have introduced strategy-proof admissions procedures based on the deferred acceptance algorithm, also known as the Gale-Shapley mechanism (GS). In addition, some school districts provide procedural information to applicants, telling them not to strategize. The German university admissions clearinghouse takes a very different approach. Rather than replacing BOS with strategy-proof alternatives, the clearinghouse tells students how to strategize in order to obtain a preferred seat. In a lab experiment, I compare the impact of information about the mechanism, information about individually optimal application strategies, and combined information under GS and BOS. I find that strategic and full information increase truth-telling and stability under GS. Under BOS, however, the adoption of equilibrium strategies remains unaffected. Contrary to prevailing assumptions in matching theory, I show that BOS improves perceived fairness. These results underscore the importance of procedural information and suggest that eliminating justified envy may not be a sufficient condition of fairness.

The study by **Cerrone, Hermstrüwer, and Robalo (R&R at *Games and Economic Behavior*)** is motivated by the observation that several sanctions commonly used to fight collusion in public procurement procedures may strike back against their designers. One of these sanctions is debarment, i.e., the exclusion of colluding bidders. On a Beckerian view, debarments should deter collusion. However, by reducing the market size, debarments might well decrease the level of competition and thus facilitate collusion. In a lab experiment, we explore the potentially countervailing effects of debarments on bidder collusion in procurement auctions. We find that debarments and their most common alternative, fines, reduce collusion and bids relative to a market with no sanction. The deterrent effect of debarments increases in their length. However, shorter debarments reduce efficiency and increase the bids of non-debarred bidders. This suggests that debarments that are too lenient may trigger tacit collusion among the bidders who remain in the market, thereby facilitating the very behavior they are intended to deter.

In **Hermstrüwer and Dickert (2017)**, we start from the assumption that government surveillance may increase the general level of conformity and thus generate a "chilling effect". Combining elements of a lab and a field experiment, we show that salient and incentivized

Contact

hermstruewer@coll.mpg.de

https://www.coll.mpg.de/yoan-hermstruewer

consent options are sufficient to trigger this behavioral effect. Salient ex-ante consent options may lure people into giving up their privacy and increase their compliance with social norms, even when the only immediate risk of sharing information is publicity on a digital platform. A right to be forgotten (Art. 17 GDPR), however, seems to reduce neither privacy valuations nor chilling effects. In spite of low deletion costs, people tend to stick with a retention default. The study suggests that consent architectures may play out on social conformity rather than on consent choices and privacy valuations. Salient notice and consent options may not just empower users to make an informed consent decision; they may well trigger chilling effects.

The upshot of these projects is that many of the behavioral assumptions underlying market design and public law are based either on uncorroborated intuitions or excessively rational models of human behavior. Without empirical or experimental support, market designers and lawyers run the risk of implementing rules that foster the very effects they intend to curb. This holds particularly true for complex matching algorithms. One possibility to facilitate choices under complexity is to exploit the power of nudging. In **Cerrone, Hermstrüwer, and Kesten (work in progress)**, for example, we investigate the effects of a mechanism under which students can consent to a priority waiver in order to mitigate the inefficiency associated with the stable matching generated by the deferred acceptance algorithm. To test the effect on consent rates and preferences for schools, we vary the default design of this option and implement a version of the algorithm with coerced efficiency adjustments.

In a series of other projects, I extend my methodological toolbox to account for specific legal and institutional features that cannot possibly be captured in the lab. **Frankenreiter and Hermstrüwer (work in progress)**, for example, is an observational study that explores the

impact of the GDPR on privacy laws in eight jurisdictions, including Germany and the US. Our sample consists of more than 700 privacy policies that we collected on a weekly basis since 2017, yielding roughly 100,000 observations. We exploit the entry into force of the GDPR as an exogenous shock and find that the spillover effects of the GDPR on U.S. law are much weaker than proponents of the "Brussels effect" suggest.

Sometimes, using data from an incentivized lab experiment or from a natural experiment will not do, especially to the extent that a behavioral effect hinges on context. In **Hermstrüwer and Langenbach (work in progress)**, we run a series of vignette studies on MTurk to investigate how procedural fairness perceptions vary with the degree to which an administrative decision is based on machine-learning predictions. Our vignettes cover three different administrative decision-making contexts: predictive policing, predictive schooling, and the distribution of refugees based on predicted employment. Our pilot study suggests that fairness perceptions are higher in all contexts when decisions are entirely based on human predictions.

Some of these projects fall within the broader research area of my habilitation project **(Hermstrüwer, work in progress)**. My habilitation thesis is not just intended to discuss the frictions between the design of matching markets and public law. It is, above all, supposed to shed light on neglected problems of public admissions procedures and to reconstruct administrative and constitutional doctrines in light of recent theoretical and empirical research on matching markets. To achieve this epistemic goal, I cover and compare three areas of public education law: the assignment of children to daycare institutions, school choice, and the university admissions procedure. The comparison across different areas of public education law illustrates relevant differences both on a doctrinal view and in terms of the specific concerns of distributive justice underlying the respective legal rules.

In a series of separate projects in the making, I extend this approach to other areas of public law, including the allocation of living donor organs (transplantation law), the distribution of refugees (refugee law), and the adoption of children (public adoption law). These projects will assemble further pieces in the puzzle of behavioral law and market design.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Hermstrüwer Y. (2019a). Democratic Blockchain Design. *Journal of Institutional and Theoretical Economics (JITE)*, 175(1), 163–177.

Hermstrüwer Y., Dickert S. (2017). Sharing is Daring: An Experiment on Consent Options, Chilling Effects and a Salient Privacy Nudge. *International Review of Law and Economics (IRLE)*, 51, 38–49.

Hermstrüwer Y. (2017). Contracting Around Privacy: The (Behavioral) Law and Economics of Consent and Big Data. *Journal of Intellectual Property, Information Technology and Electronic Commerce Law (JIPITEC)*, 8(1), 9–26.

Journal Journal Articles (not peer-reviewed)

Hermstrüwer, Y. (forthcoming). The Limits of Blockchain Democracy. *New York University Journal of Law & Liberty* (NYU JLL), 14.

Hermstrüwer, Y. (forthcoming). Fairnessprinzipien der algorithmischen Verwaltung: Diskriminierungsprävention beim staatlichen Einsatz von Machine Learning, *Archiv des öffentlichen Rechts (AöR)*, 145.

Hermstrüwer Y. (2018). Anreize und Nudging zur Patientencompliance: Staatliche Entscheidungen über Heilung und Ressourcenverteilung. *GesundheitsRecht (GesR)*, 21–27.

Books

Hermstrüwer, Y., Lüdemann, J. (forthcoming). Der Schutz der Meinungsbildung im digitalen Zeitalter: Instrumente und Instrumentenvergleich, 205 p., Mohr Siebeck: Tübingen.

Book Chapters

Hermstrüwer, Y. (forthcoming). Wahrheit als Regelungsproblem -- Instrumente zum Umgang mit Fake News, in: Hermstrüwer, Y. / Lüdemann, J. (eds.), Der Schutz der Meinungsbildung im digitalen Zeitalter: Instrumente und Instrumentenvergleich, Mohr Siebeck: Tübingen, 149-188.

Hermstrüwer Y. (forthcoming). Blockchain and Public Administration, in: Pollicino, Oreste / De Gregorio, Giovanni (Eds.), Blockchain and Public Law: Global Challenges in the Era of Decentralisation, Edward Elgar: Cheltenham.

Hermstrüwer, Y., Lüdemann, J. (forthcoming). Internationales Kommunikationsrecht, in: Tietje, Christian / Nowrot, Karsten (Eds.), Internationales Wirtschaftsrecht, 3rd ed., De Gruyter: Berlin.

Hermstrüwer, Y. (2020a). Artificial Intelligence and Administrative Decisions Under Uncertainty, in: Wischmeyer, Thomas / Rademacher, Timo (Eds.), Regulating Artificial Intelligence, Springer International Publishing: Cham, 199–223.

Hermstrüwer, Y. (2019b). Algorithmische Verteilungsmechanismen im Infrastrukturrecht: Überlegungen zur Stauregulierung aus einer Marktdesign-Perspektive, in: Krönke, Christoph (Ed.), Regulierung in Zeiten der Digitalwirtschaft, Mohr Siebeck: Tübingen, 145–162.

Hermstrüwer, Y. (2018). Die Regulierung der prädiktiven Analytik: eine juristisch-verhaltenswissenschaftliche Skizze, in: Hoffmann-Riem, Wolfgang (Ed.), Big Data – Regulative Herausforderungen, Nomos: Baden-Baden, 99–116.

Revise & Resubmit

Cerrone, C., Hermstrüwer, Y. and Robalo, P. Debarment and Collusion in Procurement Auctions. R & R: *Games and Economic Behavior*.

Working Papers

Hermstrüwer, Y. (2020b). Fairnessprinzipien der algorithmischen Verwaltung: Diskriminierungsprävention beim staatlichen Einsatz von Machine Learning, Working Paper, 1–46.

Hermstrüwer, Y. (2020c). The Limits of Blockchain Democracy: A Transatlantic Perspective on Blockchain Voting Systems. TTLF Working Papers No. 49, Stanford-Vienna Transatlantic Technology Law Forum, 1–65.

Hermstrüwer, Y. (2019c). Transparency and Fairness in School Choice Mechanisms. *MPI Discussion Paper* 2019/11, 1–72.

Work in Progress

Cerrone, C., Hermstrüwer, Y., Kesten, O., School Choice with Consent: An Experimental Study.

Hermstrüwer, Y., Langenbach, P., Governing with Humans and Machines: An Experimental Investigation.

Frankenreiter, J., Hermstrüwer, Y., Privacy's Great Shock: The GDPR and Privacy Polices around the Globe.

Hermstrüwer, Y., Rawlsian Matching.

Hermstrüwer, Y., Why Law and Market Design?

Hermstrüwer, Y., Children in the Queue: The Assignment Procedure for Daycare Programs.

Hermstrüwer, Y., Staatsorganisationsrecht, in: Engel, C., Egidy, S., Hermstrüwer, Y., Hoeft, L., Langenbach, P., O'Hara, L., (Eds.), Verhaltenswissenschaftliche Analyse des öffentlichen Rechts.

Hermstrüwer, Y., Öffentliche Verteilungsverfahren: Matching im Öffentlichen Recht (habilitation project).

Prizes and Honors

2019

Travel Grant of Cornell University for the 3rd Workshop on Mechanism Design for Social Good (MD4SG '19), Phoenix, AZ

2018

Grant of the Fritz Thyssen Foundation for the Workshop on Free Speech in the Digital Age, Max Planck Institute for Research on Collective Goods

Lectures and Presentations (since 2017)

2017

Debarment and Collusion in Procurement Auctions
Behavioral and Experimental Economics Workshop (BEEW), LUISS Guido Carli, Rome
March 2017

Kollektiv-orientierter Datenschutz. Nudging, Datenschutzpaternalismus oder modernes Datenrecht?
Karlsruher Dialog zum Informationsrecht, Karlsruher Institut für Technologie (KIT)
June 2017

Überwachung versus Autonomie im Recht der öffentlichen Gesundheit
Tagung des Instituts für Europäische Gesundheitspolitik und Sozialrecht, Goethe Universität Frankfurt
September 2017

2018

The Foundations of Social Bot Regulation
GIF Young Scientists' Meeting, Legal Rules for the Digital Economy, Potsdam
February 2018

Wahrheit als Regelungsproblem – Instrumente zum Umgang mit Fake News
Workshop Meinungsbildung im digitalen Zeitalter, Max Planck Institute for Research on Collective Goods
March 2018

Debarment and Collusion in Procurement Auctions
2nd Conference of Empirical Legal Studies Europe (CELSE 2018), KU Leuven
May 2018

Debarment and Collusion in Procurement Auctions
28th Annual Meeting of the American Law & Economics Association (ALEA 2018), Boston University
May 2018

Democratic Blockchain Design
36th Conference on Institutional and Theoretical Economics (JITE 2018), Florence
June 2018

Algorithmische Verteilungsmechanismen und Verkehrsregulierung
Workshop Regulierung der Digitalwirtschaft, Center for Advanced Studies (CAS), LMU Munich
July 2018

Managing Private and Public Procurement
MaCCI Law & Economics Conference on The Law and Economics of Market Design, ZEW Mannheim
November 2018

2019

Transparency and Fairness in School Choice Mechanisms
Law and Economics Colloquium, Center for Advanced Studies in Law and Economics (CASTLE), University of Bonn
January 2019

The Design of Consent Options: Normative Challenges
Privacy Icons Workshop, Weizenbaum Institute, Berlin
February 2019

Transparency and Fairness in School Choice Mechanisms
3rd Workshop on Mechanism Design for Social Good (MD4SG '19) & 20th ACM Conference on Economics and Computation (EC '19), Phoenix, AZ
June 2019

Debarment and Collusion in Procurement Auctions
Annual Meeting of the Institute for Operations Research and the Management Sciences (INFORMS 2019), Seattle, WA
October 2019

Transparency and Fairness in School Choice Mechanisms
4th Annual Conference of the French Law and Economics Association (AFED 2019), University of Rennes 1
October 2019

2020

Recht als Vernunftsystem – Computer als Vernunftmaschine?
Arbeitskreis Grundlagen, 60. Assistententagung im Öffentlichen Recht "Der digitalisierte Staat" (ATÖR 2020), University of Trier
March 2020

Transparency and Fairness in School Choice Mechanisms
37th Annual Conference of the European Association of Law and Economics (EALE 2020), Université Panthéon-Assas (Paris 2)
September 2020

Transparency and Fairness in School Choice Mechanisms
International Junior Scholars Forum in Law and Social Science, University of Chicago, ETH Zurich and Tsinghua University
December 2020

Teaching

Spring Term 2019
Telecommunications Law
Karlsruhe Institute of Technology (KIT)

Spring Term 2020
Telecommunications Law
Karlsruhe Institute of Technology (KIT)

Professional Activities

Feasibility Study on Market Design for Public Construction Projects, Cooperation with ZEW Mannheim (2018)

Co-organizer, Workshop on Free Speech in the Digital Age, Max Planck Institute for Research on Collective Goods (March 2018)

Co-organizer, Workshop on Free Speech in the Digital Age, Humboldt University Berlin (October 2018)

Member of the focus group of the ABiDa-Report (Assessing Big Data) "Nudging – Regulation by Big Data and Behavioral Sciences", Berlin Social Science Center (WZB) (November 2018)

Co-organizer, ECONtribute Law and Econ Workshop, University of Bonn & Max Planck Institute for Research on Collective Goods (since April 2020)

Program Committee, 4th Workshop on Mechanism Design for Social Good (MD4SG '20)

Adrian Hillenbrand

Summary Report

I joined the institute in October 2012 as a PhD student of the Bonn Graduate School of Economics (BGSE). In 2016, I joined the MPRG group of Fabian Winter, "Mechanisms of Normative Change", as a postdoc.

The last years have been pretty exciting. Together with Fabian Winter, we developed our DFG project "Volunteering under Population Uncertainty". In the experimental literature on cooperation and coordination, common knowledge about a certain group size is often a standard assumption. In the project, we study how uncertainty about the group size influences volunteering behavior. Our first paper in this line of research, *Volunteering under Population Uncertainty* (Hillenbrand, Winter, 2018), has already been published in *Games and Economic Behavior*. In a further paper (Hillenbrand, Werner and Winter, 2020), we study volunteering at the workplace. In a large-scale experiment with 2,800 workers on an online platform, we show that group size – and consequently, group size uncertainty – has no influence on volunteering in a work setting. This result is in stark contrast to theoretical predictions. In a setting where only one volunteer is needed, the same proportion of workers volunteers, regardless whether the team consists of 3, 30, or even 300 workers. We are currently working on a follow-up study to understand the underlying motives that drive the results. In the third project in this research area, we study how different volunteering norms emerge under population uncertainty in repeated interactions. Our theoretical predictions are corroborated by the experimental results. The DFG project will come to an end this year, and I am happy that our three papers now provide a strong contribution to the literature on volunteering and cooperation.

Together with Susann Fiedler, we published our work on *Gain-Loss Framing in Interdependent Choice* (Fiedler & Hillenbrand, 2020) in *Games and Economic Behavior*, where we use eye-tracking as a complementary measure to study how gain-loss framing influences choice in a dictator game. We show that, under loss framing, subjects are less altruistic and also focus their attention more on their own payoffs. This suggests that losses to the own outcome are weighted more than losses to the receiver.

In parallel to the above work, I ventured into a new field together with Svenja Hippel. Rapid technological developments in online markets fundamentally change the relationship between consumers and sellers. The rise of online platforms increases the transparency for consumers in many markets because a multitude of products can now easily be accessed and browsed through on a single web page. At first sight, this is beneficial for consumers, since they can find more relevant and better-fitting product offers. But online platforms can also more easily gather data about consumers, in particular about those with a more intense search behavior on the particular site. In *Strategic Inattention in Product Search* (Hillenbrand & Hippel 2020), we study the resulting trade-off for consumers theoretically, as well as in a laboratory experiment. Consumers can search intensively, receiving a well-fitting product, albeit at a very high price; or else they can search less, being strategically inattentive – and receive a worse fit, but potentially for a better price overall. While consumers do restrict their search in the experiment, we find that it is the sellers and not the buyers who profit from higher filter choices. We will extend this project in the future by analyzing the impact of competition, as well as the reaction of consumers to different forms of price discrimination, e.g., personalized discounts.

Contact

hillenbrand@coll.mpg.de

https://www.coll.mpg.de/adrian-hillenbrand

Publications (since 2017)

Articles in Peer-Reviewed Journals

Fiedler, S. and Hillenbrand, A. (2020). Gain-Loss Framing in Interdependent Choice. *Games and Economic Behavior*, 121, 232–25.

Hillenbrand, A. and Winter, F. (2018). Volunteering under Population Uncertainty. *Games and Economic Behavior*, 109, 65–81.

Hillenbrand, A. and Schmelzer, A. (2017). Beyond Information: Disclosure, Distracted Attention, and Investor Behavior. *Journal of Behavioral and Experimental Finance*, 16, 14–21.

Working Papers

Hillenbrand, A. (2018). Cooperation with Lists. *MPI Discussion Paper* 2018/1.

Hillenbrand, A. and Verrina, E. (2018). The Differential Effect of Narratives on Prosocial Behavior, *MPI Discussion Paper* 2018/16.

Hillenbrand, A., & Hippel, S. (2017). Strategic Inattention in Product Search. *MPI Discussion Paper* 2017/21.

Submissions

Hillenbrand, A., Werner, T. and Winter, F. (2020) Volunteering at the Workplace Under Incomplete Information: Teamsize Does Not Matter. *MPI Discussion Paper* 2020/4.

Hillenbrand, A. and Hippel, S. (2019). Strategic Inattention in Product Search.

Work in Progress

Álvarez Benjumea, A., Hillenbrand, A., Winter, F. and Zhang, N. Risk Perception and Normative Change During the COVID-19 Outbreak.

Hillenbrand, A. and Winter, F. How the Stability of Social Relations Shapes the Emergence of Latent Norms.

Lectures and Presentations (since 2017)

2018

Strategic Inattention in Product Search (invited talk)
GAEL Grenoble
March 2018

The Differential Effect of Narratives
ESA World Meetings, Berlin
June 2018

Strategic Inattention in Product Search
11th Maastricht Behavioral and Experimental Economics Symposium (M-BEES), Maastricht
June 2018

Strategic Inattention in Product Search (invited talk)
45th Annual Conference of the European Association for Research in Industrial Economics (EARIE), Athens
September 2018

Strategic Inattention in Product Search (invited talk)
Düsseldorf Institute for Competition Economics (DICE)
October 2018

2019

How the Stability of Social Relations Shapes the Emergence of Latent Norms
Sixth International Meeting on Experimental and Behavioral Social Sciences (IMEBESS)
May 2019

How the Stability of Social Relations Shapes the Emergence of Latent Norms
GfeW Meeting, DICE Düsseldorf
September 2019

How the Stability of Social Relations Shapes the Emergence of Latent Norms
ESA European Meeting, Dijon
September 2019

Strategic Inattention in Product Search (invited talk)
University of Paderborn
October 2019

Strategic Inattention in Product Search (invited talk)
ZEW Mannheim
November 2019

2020

Strategic Inattention in Product Search (invited talk)
KIT Karlsruhe
January 2020

Strategic Inattention in Product Search (invited talk)
Ghent University
January 2020

Svenja Hippel

Summary Report

I was part of Christoph Engel's research group from October 2014 until end of August 2018. I received my doctoral degree in April 2018 and, after leaving the institute, I joined Daniel Müller's Chair for Information Economics and Contract Theory at the University of Würzburg as a postdoc. I will report mainly on projects that I started or undertook during my time at the institute.

Property, Redistribution, and the Status Quo

This project with Konstantin Chatzia-thanasiou and Michael Kurschilgen has kept us busy for quite some time. Using a new experimental paradigm, we investigate the theoretical conjecture that redistribution might have a positive effect on economic efficiency by reducing conflict over property rights. Even in countries with expansive (and expensive) enforcement institutions, property rights are not perfectly secure. More effective self-enforcement could free up resources. We model an economy in which wealth is produced if players voluntarily comply with the – efficient, but inequitable – prevailing social order, and we vary exogenously whether redistribution is feasible, and how it is organized. We find experimental evidence that redistribution benefits all status groups as property disputes recede. It is most effective when transfers are not discretionary, but instead imposed by some exogenous administration. Most strikingly, it is the higher (and not the lower) status groups, who benefit from redistribution being compulsory rather than voluntary. The paper is published in *Experimental Economics*.

Institutional Stability and the Threat of Overthrow

With the same team of authors, we also use this experimental paradigm in another project. We explore whether the threat of an overthrow does benefit the stability of an institution. We test this by introducing into the experimental paradigm the possibility of resetting the status ranking. We do not find supporting evidence that the mere possibility of an overthrow motivates low status groups to accept the social order. At the same time, most high status players do not react sufficiently to the threat. They often fail to adapt their redistributive behavior to prevent overthrows. A stabilizing effect only appears in groups with socially-minded high status players. Our results address the theoretical assumptions underlying rights to resistance and have implications for the confidence we should place in such rights. If redistribution is to be counted on as a safeguard of a democratic constitution, one should not solely rely on the reasoning of elites. This might call for stronger fortification of social rights.

Strategic Inattention in Product Search

Together with Adrian Hillenbrand, I investigate consumer behavior in online platform markets when the situation makes the extent of consumers' product search a strategic choice. Rapid technological developments are currently changing the relationship between consumers and sellers. The rise of online platforms increases the transparency for consumers in many markets. On the one hand, this is beneficial for consumers, since they can find more relevant and better-fitting product offers. On the other hand, online platforms can also easily gather data about consumers. Therefore, consumers are potentially better off by restricting their search behavior because, in extreme cases, personalized search results allow for perfect price discrimination. Whether consumers appreciate the strategic situation and react suitably might have a severe impact on consumer welfare and on the need for regulation in online markets. In a laboratory experiment using a stylized market, we find that consumers do restrict their

Contact

svenja.hippel@uni-wuerzburg.de

https://www.coll.mpg.de/svenja-hippel

search behavior to a certain extent. But it is indeed the sellers (and not the consumers themselves) who profit from the consumers' more intensive search behavior. The *Harvard Business Manager* published an article titled "Nasty Filters" ["Fiese Filter"] about this research project in their 06/2019 issue. We plan to extend this project by creating a large-scale experimental online platform that allows systematically to assess the reaction of consumers to different forms of price discrimination.

The Informational Robustness of a Public-Goods Mechanism

This project is an explicit laboratory test of the concept of informational robustness that was developed in the theoretical literature on robust mechanism design. The experimental setup utilizes a generalized Vickrey-Clarke-Groves mechanism in a public-goods setting. In the different experimental conditions, the mechanism is played out either before or after the players get to know the counterpart's payoff type. This mirrors the theoretical equivalence demanded for achieving informational robustness. Additionally, the experiment varies the level of interdependence of valuations of the players to induce multiple (equally efficient) equilibria in some of the games resulting from the mechanism. Empirical results show that the mechanism used is indeed informationally robust and that there are no significant efficiency reductions for multiple equilibria. However, heterogeneous valuations for the public good pose a serious challenge to incentive compatibility. Truth-telling rates drop by half for individuals with a low valuation. To exclude that this effect was an artefact of the experimental setup, I collected a new wave of treatments for this project in the end of 2019.

Experimental Social Planners: Good Natured, but Overly Optimistic

Together with Christoph Engel, I try to bridge the gap between the experimental and the mechanism design literature on public goods. From the mechanism-design perspective, the normative problem originates in the heterogeneity of preferences. The experimental literature, however, mostly assumes away this problem. Typically, valuations are induced by the design of the experiment, homogeneous and common knowledge. We introduce the problem of the mechanism-design literature into the classical setup of a public-goods experiment by inducing heterogeneous valuations and endowments. Additionally, we add an experimental social planner. In a within-subject design, we vary whether the group members' valuations are public or private information. We also vary whom we entrust with choosing from a set of payment rules: the uninvolved planner or an involved member of the group. The results show that uninvolved social planners predominantly choose a payment rule that gives every group member the same final payoff, even if misrepresentation is possible. Authorities are overly optimistic about truth-telling. Interested social planners abuse their power, except if the opportunity cost of a more balanced rule is small.

Replications

Following a call for the *Empirical Legal Studies Replication Conference* in the end of 2017, together with Sven Hoeppner, I set out to replicate the highly influential paper "Biased Judgements of Fairness in Bargaining" (Babcock et al., AER, 1995) in the computer laboratory. The original study uncovers evidence that knowledge about one's role in a settlement-bargaining situation increases the frequency of bargaining impasse. Our results are largely in line with the original findings, although we obtain substantially smaller effects. Given our new data, a Bayesian replication analysis reallocates the large share of credibility to a null model, but we argue that this result is driven by the much smaller effect size that we observe in the highly controlled environment of the laboratory. The paper is published in the *International Review of Law and Economics*. Acknowledging the importance

of reproducibility of empirical research, we started a new replication project in 2019. Our replication of the experimental "Contracts as Reference Points" (Fehr et al., AER, 2011) study, which is in the field of behavioral contract theory, is forthcoming in the *International Review of Law and Economics*.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Hippel, S. and Hoeppner, S. (forthcoming). Contracts as Reference Points: A Replication. *International Review of Law and Economics.*

Chatziathanasiou, K., Hippel, S. and Kurschilgen, M. (2020). Property, Redistribution, and the Status Quo: A Laboratory Study. *Experimental Economics.*

Hippel, S. and Hoeppner, S. (2019). Biased Judgements of Fairness in Bargaining: A Replication in the Laboratory. *International Review of Law and Economics*, 58 (2019): 63-74.

Revise & Resubmit

Friehe, T., Hippel, S. and Schielke, A. (R&R). Appeasing Yourself or Others? The Use of Self-punishment and Compensation and How it Influences Punishment. *Journal of Economic Psychology.*

Working Papers

Chatziathanasiou, K., Hippel S., and Kurschilgen, M. (2020). Do Rights to Resistance Discipline the Elites? An Experiment on the Threat of Overthrow. *MPI Discussion Paper* 2020/27.

Hillenbrand, A. and Hippel, S. (2019). Strategic Inattention in Product Search. *MPI Discussion Paper* 2017/21.

Hippel, S. (2019). Testing the Informational Robustness of a Public Good Mechanism.

Engel, C. and Hippel, S. (2017). Experimental Social Planners: Good Natured, but Overly Optimistic. *MPI Discussion Paper* 2017/23.

Work in Progress

Herweg, F., Hippel, S. and Müller, D. (Dis-)Appearance of Cyclical Choices: An Experimental Test of Intransitive Theories for Choice under Risk.

Hippel, S. and Kim, C. The Persistence of Reduced Risk Taking: The Effect of Betrayal on Stock Market Investment.

Scholarships

NABE Foundation Scholarship for the 33rd Annual NABE Economic Policy Conference.

Lectures and Presentations (since 2017)

2017

Experimental Social Planners: Good Natured, but Overly Optimistic
NYU CESS 10th Annual Experimental Political Science Conference, New York
February 2017

Strategic Inattention in Product Search
33rd Annual NABE Economic Policy Conference, Washington, D.C.
March 2017

Experimental Social Planners: Good Natured, but Overly Optimistic
Northwestern University, Kellogg School of Management, Evanston
March 2017

Strategic Inattention in Product Search
ESA World Meeting, San Diego
June 2017

Experimental Social Planners: Good Natured, but Overly Optimistic
ESA World Meeting, San Diego
June 2017

Strategic Inattention in Product Search
11th IMPRS Uncertainty Topics Workshop, Trento
September 2017

2018

Testing the Informational Robustness of a Public Good Mechanism
Thurgau Experimental Economics Meeting, Kreuzlingen
April 2018

Biased Judgements of Fairness in Bargaining: A Replication in the Laboratory
Empirical Legal Studies Replication Conference, Claremont
April 2018

Testing the Informational Robustness of a Public Good Mechanism
11th Maastricht Behavioral and Experimental Economics Symposium, Maastricht
June 2018

Testing the Informational Robustness of a Public Good Mechanism
ESA World Meeting, Berlin
June 2018

Testing the Informational Robustness of a Public Good Mechanism
ZEW, Research Group Market Design, Mannheim
August 2018

Strategic Inattention in Product Search
Jahrestagung Verein für Socialpolitik, Freiburg
September 2018

Testing the Informational Robustness of a Public Good Mechanism
13th Nordic Conference on Behavioural and Experimental Economics, Odense
September 2018

2019

Testing the Informational Robustness of a Public Good Mechanism
24th Spring Meeting of Young Economists, Brussels
April 2019

Biased Judgements of Fairness in Bargaining: A Replication in the Laboratory
Barcelona GSE Summer Forum, Barcelona
June 2019

Property, Redistribution, and the Status Quo: A Laboratory Study
Jahrestagung der Gesellschaft für experimentelle Wirtschaftsforschung, Düsseldorf
September 2019

Property, Redistribution, and the Status Quo: A Laboratory Study
Jahrestagung Verein für Socialpolitik, Leipzig
September 2019

Strategic Inattention in Product Search
15th Bavarian Micro Day, Bayreuth
November 2019

Property, Redistribution, and the Status Quo: A Laboratory Study
University of Bayreuth, Economics Research Seminar, Bayreuth
December 2019

2020

(Dis-)Appearance of Cyclical Choices: An Experimental Test of Intransitive Theories for Choice under Risk
ESA Global Online Meetings
September 2020

Events Organized

Local Organizer, Meeting of the Committee for Organizational Economics of the Verein für Socialpolitik, University of Würzburg, scheduled for 8-9 September 2020, postponed to 2022.

Teaching

Winter term 2018/19
Advanced Microeconomics
Teaching Assistant
University of Würzburg

Winter term 2018/19
Contract Theory
Teaching Assistant
University of Würzburg

Summer term 2019
Ökonomische Theorie des Risikos [The Economics of Risk]
Teaching Assistant
University of Würzburg

Summer term 2019
Advanced Microeconomics
Teaching Assistant
University of Würzburg

Summer term 2019
Experimental Economics
Lecturer (One-week Summer School Course)
Institute of Law and Economics, University of Hamburg

Winter term 2019/20
Contract Theory
Lecturer
University of Würzburg

Winter term 2019/20
The Economics of Fairness
Lecturer (Block Seminar, together with Maj-Britt Sterba)
University of Bayreuth

Summer term 2020
Advanced Microeconomics
Teaching Assistant
University of Würzburg

Summer term 2020
The Economics of Fairness
Lecturer
University of Würzburg

Public Service

Member, Selection committees, Max Weber Program, Elite Network of Bavaria, since 2015.

Professional Activities

Memberships

Member of the American Economic Association

Member of the European Economic Association

Member of the Economic Science Association

Member of the German Association for Experimental Economic Research e.V. [Gesellschaft für experimentelle Wirtschaftsforschung e.V.]

Member of the German Economic Association [Verein für Socialpolitik]

Member of the Royal Economic Society

Referee for

International Review of Law & Economics, Journal of Conflict Resolution, Journal of Economic Behavior & Organization

Spring Meeting of Young Economists 2020

Leonard Hoeft

Summary Report

I finished my PhD in law in 2018. Since then, I have been working on my ongoing projects while completing my legal training by preparing for the second bar exam and working as a legal clerk.

My main research interests lie at the intersection of legal philosophy and social science. The former specifies theories of law which rely on specific assumptions concerning human behavior and legal institutions. These assumptions are often grounded in shared intuitions, but lend themselves to the challenge of empirical testing and the incorporation of interdisciplinary views.

My specific interdisciplinary approach focuses on the intersection with (behavioral) experimental economics. I believe that legal philosophy lends itself more naturally to this field than its doctrinal counterparts, as it often claims to be independent of a specific legal culture and context. Furthermore, legal philosophy is highly abstract and specifies the relationship of institutional mechanisms. This allows us to test jurisprudential hypotheses in abstract laboratory experiments. This view is increasingly shared, and in the last couple of years the field of experimental philosophy has formed a subsection named experimental jurisprudence. To further the exchange with legal philosophers, I organized a workshop on the foundations of law and social science, with Matthias Mahlmann of the University of Zurich as keynote speaker.

My main project in my PhD was to relate the legal theory of H.L.A. Hart, widely considered the most influential legal philosopher of the 20th century, to laboratory work on norm compliance in experimental economics. Hart proposed that the predominantly sanction-oriented concepts of law fundamentally misunderstood the nature of norm compliance. Instead, he proposed that

legal compliance is a shared endeavor and a subset of social norm compliance. Participants in this practice take an "internal point of view" towards norms, accepting them as guidelines, criticizing others, and accepting their criticism as legitimate. While Hart believed that in a coercive state only few officials must take such a point of view, he argued that a healthy system would exhibit a considerable number of people taking the internal point of view towards legal norms. My book examines whether laboratory findings instruct us that social norms are indeed a shared practice, and whether we have reason to believe that this extends to legal norms. The research suggests that both are true. Furthermore, I investigate how institutional features pervasive in legal systems interact with this practice. I find that concepts such as authority, voting, focal points, etc. indeed influence norm compliance, often by changing the beliefs about the shared practice in the respective experimental communities. During my clerkship, I finalized a short introduction into the experimental literature and arguments against sanction-based theories of law and published it in *Ratio Juris*, an international peer-reviewed journal for legal philosophy (a). My PhD will be published as a book with Duncker & Humblot.

Aside from my PhD, I began several experimental projects with co-authors, centering around the interaction of institutions and social norms. In addition to my clerkship, I have finalized and resubmitted these papers to various economic and psychology journals.

The first experimental project investigated power abuse in a laboratory setting. We implemented a linear public-goods game with only one second-party punisher, and we varied transparency and punishment power to see under which conditions punishers are willing to abuse their power by implementing contribution norms they do not adhere to themselves. Indeed, we

Contact

hoeft@coll.mpg.de

https://www.coll.mpg.de/leo-hoeft

find a large amount of abuse mediated by transparency, but only under high power. Part of this project was published in *Economic Letters* (b).

Another project with the aim of contributing to the question of legal norm compliance investigates the effect of authority on prosocial and selfish decision-making. We hypothesize that authority is particularly influential in settings with incomplete information, as it cuts short information search and the formation of preferences over the fully specified set of options. To that end, we implement a dictator game in which the payoffs of the other participants are not known to the dictator. We use the experimenter's position of authority to ask for specific actions, investigating when participants defer to authority, when they refuse to do so, and when they decide to uncover the information about the payoffs of the recipient.

The last laboratory project investigates moral decision-making. We use eye-tracking to investigate what kind of information participants focus on in moral dilemmas. According to the prevalent dual-process theory of moral decision-making, deontological decisions should feature a relatively shorter and less complex decision process, while utilitarian decisions should require more information search and deliberation. We hope to find systematic differences between typically utilitarian and typically deontological decision-makers. We expect utilitarian decision-makers to undergo a more effortful decision process with longer decision times and more fixations. Additionally, utilitarians should direct their attention more towards outcomes, while deontological decision-makers should focus more on cues about the respective action in question.

Finally, I have written a response to a survey study on contract interpretation with another co-author, published in a German law journal. We caution against the somewhat careless use of empirical methods for specific legal questions and show various pitfalls of naïve interpre-

tations of experimental results. Specifically, we argue that selecting specific decontextualized quotes from a ruling can distort the meaning of the specific passage as a whole and is therefore in need of justification. The article takes a stance against the suggestion of implementing semi-empirical methods among judges, in which they conduct informal polls among friends to justify contractual interpretation. It warns that this understanding of contractual implementation would reap little of the benefits of empirical studies and boils down to an intransparent authority argument (c).

Publications (since 2017)

Articles in Peer-Reviewed Journals

Hoeft, L. (2019). The Force of Norms, *Ratio Juris*, 32(3), 339–362.

Hoeft, L. and Mill, W. (2017). Selfish Punishers. An Experimental Investigation of Designated Punishment Behaviour in Public Goods, *Economics Letters*, 157, 41–44.

Hamann, H. and Hoeft, L. (2017). Die empirische Herangehensweise im Zivilrecht. Lebensnähe und Methodenehrlichkeit für die juristische Analytik? *Archiv für civilistische Praxis (AcP)*, 217(3), 311–336.

Working Papers

Hoeft, L. , Mill, W. and Vostroknutov, A. (2019). Normative Perception of Power Abuse, *MPI Discussion Paper* 2019/6.

Work in Progress

Hoeft, L. and Mill, W., The Abuse of Power: An Experimental Investigation of the Effects of Power and Transparency on Centralized Punishmen, *MPI Discussion Paper* 2017/15.

Rahal, R.-M., Hoeft, L. and Fiedler, S., Eyes on Morals: Investigating the Cognitive Processes Underlying Moral Decision Making via Eye-Tracking.

Hoeft, L, Mill, W. and Kurschilgen, M., Authority & Wiggle Room.

Zwetelina Iliewa

Overview

I am a financial economist with research interests in the fields of behavioral and experimental finance and experimental economics. I am a Senior Research Fellow at the Max Planck Institute for Research on Collective Goods (Experimental Economics Group), an external lecturer at the Copenhagen Business School (Finance Department), and a member of the managing board of the Society for Experimental Finance. I hold an MSc in Economics from the University of Mannheim and a PhD in Finance from the Ludwig-Maximilians University in Munich.

In Glaser et al. (2019), we use a series of experimental studies to document and explain the occurrence of two specific violations of the invariance assumptions of normative decision theory. Firstly, we show that presenting subjects' past price charts induces different expectations from showing them past return charts, even though the information is identical. Secondly, we show that asking subjects to forecast prices and asking them to forecast returns results in different expectations. Across three experimental studies, we vary the level of expertise of the subjects (students versus professionals), the amount of information, and the incentive schemes. We find strong effects, which are consistent across all studies: asking subjects to forecast returns, as opposed to prices, results in more optimistic expectations, whereas showing subjects return charts, as opposed to price charts, results in lower expectations. We show that professional experience in the finance industry is not a useful remedy, but cognitive reflection mitigates the impact of format changes. We conclude that differences in expectations are driven by characteristics of the intuitive number sense. Our paper was accepted at several top conferences, most notably the 2016 Experimental Finance Conference and the 2017 Annual Meeting of the American Finance Association (AFA).

In Heimer et al. (2020), we provide new insights into how individuals choose to take risks in dynamic environments where they can opt out at any time, and how they re-evaluate their decisions after experiencing gains and losses. Many economically important settings, from financial markets to consumer choice, involve sequential decisions under risk. Data from these dynamic settings run counter to findings in one-shot settings: people are anomalously risk-averse in the latter, while even taking on a negative expected-value risk in the former. We use two pre-registered experiments and a unique brokerage dataset of traders' investment plans and subsequent decisions to shed light on this discrepancy. A large majority of participants plan to follow "loss-exit" strategies – to continue taking risk after gains and to stop after losses. Actual behavior exhibited the reverse pattern: participants cut their gains early and chased their losses. We find an analogous dynamic inconsistency in the investment plans and subsequent decisions of traders in our unique brokerage dataset. We formally demonstrate that this behavioral pattern identifies the dynamic predictions of Cumulative Prospect Theory. A significant demand for commitment devices points to at least partial sophistication about the dynamic inconsistency. We use simulations to quantify that the welfare costs of naiveté for a representative agent are over one hundred and ten percent of the stakes in a one-round investment. Moreover, the participants' widespread demand for non-binding commitment, which is ineffective in mitigating dynamic inconsistency, highlights a second form of naiveté with regard to the effectiveness of such "soft" commitment. Our results have implications for evaluating unintended effects of recently introduced European regulations that mandate soft

commitment. This paper was presented at several conferences and workshops, most notably the 2019 SEF Experimental Finance Conference, the 2020 NBER Behavioral Finance Workshop, the 2020 SFS Cavalcade, and BEAM 2020 at U.C. Berkeley; it has also been accepted for the 2020 Annual Meeting of the European Finance Association.

The motivation behind Christoffersen et al. (work in progress) comes from the experimental finding that subjects overweight information they have obtained through observation (i.e., witnessing) over information they have learned from description. The study tests the boundaries of the experimental finding in the real world by examining the stock-market expectations of finance professionals with decades of experience in the finance industry. It shows that stock-market returns witnessed early on in a professional's career are more formative than those witnessed recently. The finding is unique in this strand of empirical literature, as previous studies have repeatedly shown the opposite (e.g., Malmendier and Nagel, 2011). The new empirical finding can be explained by the use of a proprietary dataset, which we have hand-collected, in order to measure accurately the exact beginning of the period over which the professionals have witnessed the stock market. The paper was accepted at major conferences, most notably the 2017 Annual Meeting of the European Economic Association (EEA), the 2017 Annual Meeting of the Financial Management Association (FMA), and the 2018 CESifo Summer Workshop on Expectation Formation.

In addition, in Dorner et al. (work in progress), we examine experimentally how to design a robo-adviser optimally for investment in financial assets. Specifically, we focus on robo-advisers which are able (i) to "speak" the language of the investors by communicating information on the statistical properties of risky assets in an intuitive way; (ii) to "listen" to the investor by monitoring her emotional reactions and providing her with biofeed-back and emotion regulation training; and (iii) to do both. The objectives of our study are twofold. First, we aim to understand how robo-advisers affect financial risk-taking and the revisiting of investment decisions. Second, we aim to identify who is most affected by robo-advice.

Publications (since 2017)

Peer-reviewed Articles

Glaser, M., Iliewa, Z. and Weber, M. (2019). Thinking about prices versus thinking about returns in financial markets. *The Journal of Finance*, 74(6), 2996–3039.

Working Papers

Heimer, R., Iliewa, Z., Imas, A. and Weber, M. (2020). Dynamic Inconsistency in Risky Choice: Evidence from the Lab and Field.

Work in Progress

Christoffersen, B., Hoffmann, A., Iliewa, Z. and Jaroszek, L., Fading Memory Fast and Slow: Experiential Learning on Main Street and Wall Street.

Dorner, V., Iliewa, Z., Weber, M. and Weinhardt, C., Can a Robo-Adviser be a Money Doctor?

Teaching

2019

Behavioral Finance
Copenhagen Business School

Mustafa Kaba

I joined the EEG of the Max Planck Institute for Research on Collective Goods in September 2020 as a Research Fellow. I expect to defend my PhD in November 2020 at the Economics Department of the European University Institute. My main areas of research are political economy and behavioral sciences. I aim to generate fine-grained and causal evidence for the effects of public policies and interventions targeted to improve key outcomes in economics and politics.

To this end, the majority of my research applies the causal inference methods of microeconometrics and field experiments. I work with observational, administrative, survey, and experimental data to generate new insights for both informing theory and decision-makers. The following describes my current work and future plans.

Current Work

Differential Electoral Returns to Local Public-Goods Provision:

The previous literature on the electoral effects of distributive spending has successfully documented causal evidence for such effects. Much less understood, however, are the mechanisms through which distributive spending exerts its effects on voting behavior. I investigate these mechanisms by leveraging the geographical variation in proximity of voters to a local food subsidy program that took place in Istanbul, Turkey, in 2019.

My contribution to this body of work is threefold. First, I provide causal evidence both for the vote- and the turnout-buying channels. The latter channel is particularly overlooked in the previous literature, although it is a very common form of political participation and it has important implications on political accountability. I document that the turnout-buying channel is at least as effective as the vote-buying channel.

Second, I document evidence on how partisanship conditions the effects of distributive spending on voting behavior. I find that it increases turnout in incumbent strongholds, whereas it suppresses turnout in opposition strongholds. This finding implies a possibility for a null result for the turnout-buying channel when partisanship is not taken into account. This null-result implication, in turn, may be very much related to the negligence of turnout channel in the previous literature.

Third, I show how the spatial distribution of partisan groups in the geographical catchment areas of local public goods may influence the electoral effects of such goods. It is usually a daunting task to obtain fine-grained geographical information on distributive spending programs. Yet, spatial distribution of partisan groups may influence both the allocation of public goods and also the associated electoral returns. Using precise geographical information, I show that the increased inter-group interaction may have a polarizing effect and reduce the net effects of distributive spending. To the best of my knowledge, this is the first evidence for the conditioning of electoral effects by spatial partisan distribution.

Understanding Corporate Culture, Leadership, and Development of Networks in Corporations

This joint work is based on a field experiment with several corporations in different provinces of Turkey. It is the first part of a larger project with Sule Alan, Gozde Corekcioglu, Mert Gumren, and Matthias Sutter.

Although the experiment is still being fielded, our goal in this first attempt is to understand better the development

Contact

kaba@coll.mpg.de

https://www.coll.mpg.de/mustafa-kaba

of professional and personal networks in corporations, and how, in turn, these networks affect turnover rates, performance metrics, and employee satisfaction and fulfillment. Using the baseline measurements that we collected in the field, we specifically investigate how the share of female leaders affects the structure of social networks within firms and the corporate climate as it is perceived by the employees.

International Reputation and Escaping Reputation Traps

The theoretical political economy and development economics literature have formally modeled and investigated *reputation* and *poverty* traps, respectively. The existing theoretical and empirical body of research in these fields tells us that a reputation trap may well explain a significant part of poverty traps. This, in turn, raises the question of how to escape the reputation trap and increase international reputation.

In a joint project with Nicole Stoelinga, who is a colleague of mine at the EUI, we hypothesize that mega sport events such as the Olympic Games provide a high cost and credible signal in terms of international reputation, and help the developing countries to escape the reputation trap. We employ a synthetic control design to evaluate whether hosting or bidding on the Olympics helps to escape a reputation trap in terms of trade.

Measuring Class Distinctiveness in Preferences

The evolution of preferences of distinct socioeconomic classes is important to understand today's political struggles. It is widely assumed that the class divisions in economic preferences have been blurring over time due to higher living standards. However, we lack a rigorous measure of it that is comparable across time and space. Using predictive modeling, I propose to use "the ability of inferring one's socioeconomic class solely from one's economic preferences" as the distinctiveness measure in

economic preferences. I then estimate this measure for 18 European countries for three points in time. This provides us with a systematic approach to track the evolution of class distinctiveness in economic preferences. Finally, I investigate the statistical relationship between the class distinctiveness in economic preferences and class voting – the phenomenon that voters make their choices based on their socioeconomic class.

Future Plans

Below, I summarize my future research plans in two categories. The first one broadly aims to make use of behavioral insights in understanding political and economic phenomena. The second one is related to advancing my research agenda on testing insights from political economy by means of experiments and causal inference methods.

1) Behavioral Insights in Political Economy

I am particularly interested in the misconceptions and reasoning mechanisms of citizens, and how these, in turn, relate to polarization, but also to the depolarization of society. From the recent works in behavioral sciences and political economy, we already know that people not only polarize on policy issues, but also on factual information such as the unemployment rate. I am especially curious about the role of experts in the forming of these misconceptions, the distrust in experts, and the implications on the polarization and depolarization of society.

Additionally, I am curious to know more about how economic preferences (such as risk-taking, time preferences, cooperation, competitiveness, etc.) overlap or intersect with political preferences and attitudes (such as respect for authority, cultural conservatism, advocating harsh punishments, favoring hierarchies, etc.), and how they form more general clusters of preferences encompassing both economic and political preferences.

2) Public Procurement, Governance, and Economic Development

In this joint project with my colleagues at Bogazici and Duke University, we are in the process of building a dataset that covers the universe of public procurement in Turkey from 2010 until today. The aim of this endeavor, in general, is to shed light on the relationships between public procurement, the discretion power of regional authorities, the quality of governance, and the local economic development.

More specifically, we are interested first in uncovering motivations in public procurement, such as conflict/violence mitigation, responding to the needs of the locality/median voter, vote-buying, rewarding the politically organized organizations, etc. Furthermore, we plan to explore the trends in the composition of public procurement over different procurement types such as goods, services, and construction; and we wish to investigate their effects on the local economy.

Working Papers

Kaba, M. (2020). The Partisan Conditioning of Electoral Returns to Local Public Good Provision.

Corekcioglu, A., Kaba, M. and Sutter, M. (2020). Leadership, Social Networks and Corporate Climate Through a Gender Lens.

Kaba (2020). Class Distinctiveness and Class Voting.

Kaba, M. and Stoelinga (2020). Escaping the Reputation Trap: Revisiting the Olympic Effect.

Professional Activities

Referee for

European Economic Review

Mahdi Khesali

I joined MPI on 1 October 2020. After completing a law degree in my home country, I started a multidisciplinary master program at Leuphana University, which awakened my interest in a trans-disciplinary approach to law. I have been convinced that the Max Planck Institute for Research on Collective Goods provides optimal conditions to pursue this interest. Therefore, I applied for IMPRS program.

I may break my interest down into three major questions for which I hope to find a proper answer, using the skills and methods I will gain during the program.

I)   Does the effectiveness of legal interventions partially depend on their relationship with informal institutions (e.g., morality and customs)? One of the oldest discussions in legal philosophy is about the interaction between legal and other normative systems. My purpose is to add a positive-oriented insight to this discussion.

II) How should we design a proper legal intervention for long-standing cooperation in a society? At the core of a prosperous and stable society, there are effective methods for solving the problem of collective action (cooperation) in different contexts. One purpose of a legal system is to provide frameworks conducive to long-standing cooperation. I intend to investigate conditions under which a legal system successfully reaches the aim.

III) What are biological mechanisms through which norms foster cooperation? The picture of long-standing cooperation is not complete unless we look at the mechanisms through which solutions to the collective action problem take effect. This falls into an intersection between life sciences and social sciences. All decisions ultimately have a biological explanation. I would like to investigate neuroscientific mechanisms that different norms trigger. While I am going to look at cultural aspects of the collective action problem in the second question, here I am more interested in the biological dimension.

Contact

khesali@coll.mpg.de

https://www.coll.mpg.de/mahdi-khesali

D. Research Portraits

Lukas Kiessling

Overview

I joined the EEG group of the Max Planck Institute for Research of Collective Goods in May 2019 as a Research Fellow for the last phase of my PhD at the Bonn Graduate School of Economics, which I completed in January 2020. Since February 2020, I have been a Senior Research Fellow at the institute. My research employs field experiments, large-scale surveys, and secondary analysis of observational datasets to answer research questions focusing on three themes: (i) how peers affect the well-being and behavior of adolescents; (ii) how parents raise their children with the corresponding consequences for the development of children's preferences; and (iii) determinants of gender disparities in educational and labor-market outcomes.

Peer Effects

It is widely accepted that peers influence consumption behavior, general well-being, and performance. Yet, we do not know much about how individuals choose these peers in the first place, nor about the consequences of systematic peer selection. In the context of a framed field experiment, Jonas Radbruch, Sebastian Schaube, and I try to fill this gap. First, we study the causal effect of being able to self-select peers on performance, and decompose differences into their possible causes (Kiessling et al., 2020a). We find that self-selection of peers improves performance; we also find evidence for peer effects in several dimensions; and we note that the peer composition changes under self-selection. Yet, these changes cannot account for the performance improvements that we observe. Rather, we show that self-selection allows for autonomy over the peer assignment, which in turn has a direct effect on performance through increased motivation. In a second paper, Kiessling et al. (2020b), we describe which factors – productivity, personality, and friendship ties – drive peer-selection processes. We show that, even conditional on friendship ties, strong homophily exists in productivity and personality. In light of these results, we discuss how this provides a micro-foundation for non-linear and/or heterogeneous peer effects commonly found in the literature.

In a recent paper with Jonathan Norris (Kiessling and Norris, 2020), we study how students' relative ranks in their school cohort affect their well-being, both in the short term and in the long run. We show that having a higher rank in school improves not only the students' immediate mental health, but these effects last for at least 14 years and carry over to economic outcomes in adulthood. The findings of this study thus provide evidence how the school environment can have long-lasting consequences for the well-being of individuals.

Parental Decision-Making and its Implications for the Development of Preferences

Not only peers shape an individual's preferences, skills, and well-being. Even more important for the development of children and adolescents is their families. In ongoing work with Shyamal Chowdhury, Hannah Schildberg-Hörisch, and Matthias Sutter (Kiessling et al., 2020c), we investigate how parents shape the development of time preferences in children in rural Bangladesh. We show that parents anticipate children's present bias and try to mitigate this by acting paternalistically. Moreover, we find the intergenerational transmission of time preferences to be more pronounced for non-paternalistic parents than for their paternalistic counterparts. These results thus contribute to the literature by showing how different forms of parenting shape children's preferences.

Given that different parenting styles are related to different transmission patterns, this raises the question how

Contact

lkiessling@coll.mpg.de

https://www.coll.mpg.de/lukas-kiessling

parents perceive the returns to different parenting styles. In Kiessling (2020), I study parents' beliefs about the returns to two factors affecting the development and long-term outcomes of children: (i) parenting styles defined by the extent of warmth and control parents employ in raising their children, and (ii) neighborhood quality. Based on a representative sample of over 2,000 parents in the United States, I show that parents hold well-formed beliefs: they expect large returns to the warmth dimension of parenting, as well as to living in a good neighborhood, and perceive parenting as being able to compensate partly for adverse environments. Yet, there is no socioeconomic gradient in perceived returns, but they are predictive for actual parenting styles. This suggests that parental beliefs are an important determinant of parental decision-making that cannot be proxied by other sociodemographic variables.

Gender Differences in Educational and Labor-Market Outcomes

In a third strand of research, I aim at understanding gender disparities in tertiary education and labor markets. In joint work with Pia Pinger, Philipp Seegers, and Jan Bergerhoff (Kiessling et al., 2019), we present evidence from a large-scale study on gender differences in wage expectations. Based on a sample of over 15,000 students in Germany, we document a large gender gap in wage expectations, amounting to approximately 500,000 EUR over the life cycle and resembling actual wage differences. In addition, we explore potential determinants of this gap and show that males and females follow different negotiation strategies.

In work in progress with Maria Bigoni and Stefania Bortolotti (the latter is a former member of the EEG group), we aim at evaluating whether male and female high-school students hold different beliefs about the pecuniary and non-pecuniary returns to STEM majors at university, and if so, how role models change the perceived costs and benefits of different majors. The results of this study will not only characterize gender differences in perceived returns, but in particular open the black box of role-model interventions to understand how these may help increase female enrollment in STEM majors.

Outlook for 2020–2022

In addition to the ongoing projects outlined above (Kiessling et al., 2020c; Bigoni et al., 2020), I would like to explore further what drives parental investments. While their importance for the development of children is undisputed and there is evidence of disparities in parenting practices by socioeconomic status, we do not know much about the underlying causes of these disparities and how parent-child interactions shape parental investments. Furthermore, I would like to extend my research on the economic causes and consequences of poor mental health: which economic factors affect mental health and how having poor mental health translates into economic decision-making.

Publications

Revise & Resubmit

Kiessling, L. (2020). How Do Parents Perceive the Returns to Parenting Styles and Neighborhoods? R&R: *Journal of Econometrics.*

Kiessling, L., Radbruch, J. and Schaube, S. (2020a). Self-selection of Peers and Performance. R&R: *Management Science.*

Working Papers

Kiessling, L., Pinger, P., Seegers, P. and Bergerhoff, J. (2019). Gender Differences in Wage Expectations: Sorting, Children, and Negotiation Styles, *IZA Discussion Paper no. 12522.*

Kiessling, L., Radbruch, J. and Schaube, S. (2020b). *Determinants of Peer Selection.*

Kiessling, L. and Norris, J. (2020). The Long-run Effects of Peers on Mental Health, *MPI Discussion Paper* 2020/12.

Work in Progress

Kiessling, L., Chowdhury, S., Schildberg-Hörisch, H. and Sutter, M. (2020c). *Parental Paternalism and the Intergenerational Transmission of Patience.*

Bigoni, M., Bortolotti, S. and Kiessling, L. (2020). *Gender Gap in Science: The Effect of Role Models on Expected Pecuniary and Non-Pecuniary Returns.*

Scholarships and Honors

2020

Nominated by the Verein für Socialpolitik as a participant for the 7th Lindau Meeting in Economic Sciences (postponed to 2021)

Professional Activities

Referee for

American Economic Review, Diligentia Foundation, Economic Journal, Educational Researcher, Journal of Economic Behavior and Organization, Labour Economics, LABOUR: Review of Labour Economics and Industrial Relations, Management Science

Pascal Langenbach

Summary Report

I have been a Senior Research Fellow in the Behavioral Law and Economics Group since July 2018. Before that, I held a part-time position as a Research Fellow in the same group while pursuing my legal traineeship (Rechtsreferendariat). Even before that, I was a doctoral student in the IMPRS Uncertainty, also at the MPI. So while this report covers the whole time span from 2017 to 2020, I will focus on the time from July 2018 onwards.

In the fall of 2019, I was a Visiting Fellow at the Law Department of the European University Institute in Florence, hosted by Professor Mathias Siems.

In my research, I engage with two different fields of study: legal research in the area of public law, and legal experimental work, mainly using the experimental law and economics framework. I see two partly concurring goals of my research at the MPI. First, I aim to produce high-quality experimental research at the intersection of law and behavioral sciences. Secondly, I try to incorporate an empirically and behaviorally informed perspective into my legal scholarship. A third goal is to complete the necessary requirements to qualify for habilitation in the field of public law during my time as a postdoc at the MPI.

In the first two years of my postdoc phase, I focused on two main aspects: First, to set on track the research processes for several experimental studies. Second, to choose a topic for my legal habilitation thesis. The reason for prioritizing empirical work in the first years stems from my experience that empirical projects take time. I therefore wanted to get these projects started as early as possible in order to increase the chance of completion/publication during my time at the MPI. This, of course, also implies that the focus will have to shift continuously from empirical research to theoretical and doctrinal legal research as time passes.

For the rest of this report, I would like to present the research I conducted since 2017 and what I am planning to do in the near future. I will start with a short description of the planned topic for my habilitation thesis and two smaller non-empirical legal texts. Then I will move on to my experimental projects and publications.

My intended habilitation project will deal with the challenges a heterogeneous population poses to public administration and administrative law. The project starts from the observation that people are not uniformly responsible for social problems and, moreover, also differ in their reactions to regulation and their ability to contribute to the solution to these problems. This heterogeneity is of potential relevance for the efficiency of public administration, as regulation could be tailored specifically to certain types of individuals.

The project will study the practical and legal challenges the administration might face when administering a heterogeneous population. Practical (and legal) problems arise, for example, from the questions of how the administration may identify the different types of addressees and how it may choose the adequate means to apply for each type. Further, differential treatment of some citizens compared to other citizens always has to be justified in the light of equality and antidiscrimination principles. While the classification of people and the consequences of personalized rules are often discussed in relation to applications of machine-learning in the legal arena, this project assumes that the underlying problem is not a new one. I presume (and will try to show this in the thesis) that the law already considers people's heterogeneity at different stages and, hence, treats them differently/allows for differential treatment.

Contact

langenbach@coll.mpg.de

https://www.coll.mpg.de/pascal-langenbach

With Langenbach (2019), I contributed a chapter – on the constitutional duty to protect – to a book edited by Dieter Grimm. The chapter studies how innovations in the jurisprudence of the Federal Constitutional Court have been prepared in constitutional legal scholarship. Together with Christoph Engel and some postdocs from the Behavioral Law and Economics Group, we will edit a book on the behavioral analysis of public law. I will contribute a chapter on the behavioral economic analysis of fundamental rights (Engel et al., work in progress).

On the legal experimental side, I am interested in the behavioral effects of democratic decision-making. In Langenbach and Tausch (2019), we study whether the cooperation-enhancing effect of direct-democratic procedures in the present generation also extends to future generations in which no democratic decision takes place. We find an asymmetrical effect: while the cooperative effect of the democratic adoption of a cooperation-enhancing rule vanishes in a future generation, the anti-cooperative effect of the democratic rejection of the same rule persists over generations. One interpretation might be that democratic laws are in need of constant democratic legitimation to produce additional behavioral effects.

The reported study adds to the empirical literature which studies the behavioral effects of direct-democratic decision-making. While the basic effect that direct-democratic decision-making enhances immediate cooperation has been replicated in several experimental studies, the behavioral effects of participation in representative democratic procedures have received much less attention. The few studies looking at cooperative effects of democratic representation report mixed results. In Langenbach and Verrina (work in progress), we will try to produce experimental evidence on the cooperation-enhancing effect of representative democratic decision-making. The experiment is scheduled to be conducted in late 2020.

In my experimental work, I do not restrict myself to research questions from the field of public law. Hence, I also conducted two experiments which study research questions from civil law and criminal law/criminology.

Baumann, Friehe, and Langenbach (2020) reports that the threat of damages to be paid to the victim of an accident leads to a higher amount of investment in accident prevention than the threat of a fine of equal size. We relate this finding to behavioral theory, especially to inequity aversion.

In Friehe, Langenbach, and Mungan (2020), we challenge the conjecture that learning about the detection probability can be separated from the sanction severity. In our laboratory experiment, subjects receive a signal about the detection probability for misbehavior. We find that – despite its theoretical irrelevance – the level of sanction severity influences how subjects process the signal about the detection probability if the sanction has been previously administered.

My empirical work applies mainly to the methodology of experimental law and economics. For many legal questions, however, other experimental approaches arguably also seem promising. This is especially true for online vignette experiments, as they allow one to add a lot of "legal" context to the situation and can therefore heighten the external validity of the findings and ease the application of experimental results in legal scholarship. The decision to broaden my methodological toolbox was also enforced by the contact I had with the joint empirical work by legal scholars and political scientists at the EUI in Florence. Therefore, I am currently running two experimental studies which make use of online vignettes.

The first of these studies, Langenbach and Hermstrüwer (work in progress) looks at how people feel about the algorithmic decision aids used in several legal and administrative contexts. More specifically, we study how people judge decisions of the police, school boards, and immigration authorities when these decisions have been prepared to varying degrees by computerized decision aids. We ran the study in the summer of 2020.

The second study, Langenbach and Schneider (work in progress), also uses online vignettes to assess whether the way through which a case reaches an international human rights court matters for the effect this court's ruling might have on public opinion about the policy issue at hand. Specifically, we study whether it matters that a case reaches the European Court of Human Rights through one's own legal system – that is, the European Court might explicitly contradict my own domestic highest court – or through another member state's legal system – that is, the European Court contradicts the highest court of another country. Data was collected in the fall of 2020.

Publications

Articles in Peer-Reviewed Journals

Langenbach, P. and Tausch, F. (2019). Inherited Institutions: Cooperation in the Light of Democratic Legitimacy. *The Journal of Law, Economics, and Organization*, 35(2), 364–393.

Kleine, M., Langenbach, P. and Zhurakhovska, L. (2017). How Voice Shapes Reactions to Impartial Decision-Makers: An Experiment on Participation Procedures. *Journal of Economic Behavior & Organization*, 143, 241–253.

Book

Langenbach, P. (2017). Der Anhörungseffekt: Verfahrensfairness und Rechtsbefolgung im allgemeinen Verwaltungsverfahren, III, 268 p. Tübingen: Mohr Siebeck.

Book Chapter

Langenbach, P. (2019). Die grundrechtliche Schutzpflicht: Das Fristenlösung-Urteil. In: Grimm, D. (Ed.), *Vorbereiter – Nachbereiter. Studien zum Verhältnis von Verfassungsrechtsprechung und Verfassungsrechtswissenschaft*, 161–191. Tübingen: Mohr Siebeck.

Working Papers

Baumann, F., Friehe, T. and Langenbach, P. (2020). Fines versus Damages: Experimental Evidence on Care Investments. *MPI Collective Goods*, Discussion Paper 2020/8.

Friehe, T., Langenbach, P. and Mungan, M. C., Sanctions Severity Influences Learning About Enforcement Policy.

Work in Progress

Engel, C., Egidy, S., Hermstrüwer, Y., Hoeft, L., Langenbach, P., O'Hara, L. (Eds.), Verhaltenswissenschaftliche Analyse des öffentlichen Rechts.

Hermstrüwer, Y. and Langenbach, P. Governing with Humans and Machines: An Experimental Investigation.

Langenbach, P. and Schneider, C. The Authority of Courts and Public Opinion: An Experiment.

Langenbach, P. and Verrina, E. Solving Social Dilemmas through Elected Policy Makers.

Prizes and Honors

2020–2025

Elected Member of the Junge Akademie (Young Academy) at the Berlin-Brandenburg Academy of Sciences and Humanities, and of the German National Academy of Sciences Leopoldina

2018

Otto Hahn Medal 2017 of the Max Planck Society for the legal doctoral thesis

2017

Grants from the Konrad Redeker Foundation and the Johanna and Fritz Buch Foundation for the publication of the legal dissertation

Lectures and Presentations (since 2017)

2019

Democratic Legitimacy and the Effectiveness of Legal Ordering: Experimental Evidence and Perspectives
Inaugural Conference of the German Chapter of ICON-S, Humboldt-University Berlin
March 2019

Fines vs. Liability: Experimental Evidence on Care Incentives
29th Annual Meeting of the American Law and Economics Association (ALEA), NYU School of Law
May 2019

Fines vs. Liability: Experimental Evidence on Care Incentives
Seminar, Department of Economics, University of Bologna
October 2019

2020

Sanction Severity Influences Learning About Enforcement Policy: Experimental Evidence
Kolloquium Recht & Ökonomie, Universität Bonn
May 2020

Teaching

September 2018
Workshop: Einführung in die empirische Rechtsforschung [Introduction to Empirical Legal Studies]
Gesellschaftswissenschaftliches Kolleg, German National Academic Foundation

Summer term 2020
Allgemeine Staatslehre
[Theory of the State]
University of Osnabrück

Public Service

Member of Selection Committees for the German National Academic Foundation

Member of the Works Council of the Max Planck Institute for Research on Collective Goods

Professional Activities

Memberships

Member of the American Law and Economics Association

Member of the European Association of Law and Economics

Member of the Young Academy at the Berlin-Brandenburg Academy of Sciences and Humanities, and the German National Academy of Sciences Leopoldina

Reviewer for

Journal of Economic Behavior & Organization, Review of Law and Economics

Volkswagen Foundation

D. Research Portraits

Lisa Lenz

Summary Report

I joined the institute as a guest researcher in October 2016. Currently I am a PhD student at the University of Cologne and the Cologne Graduate School in Management, Economics, and Social Science. I have successfully completed the International Max Planck Research School on Adapting Behavior in a Fundamentally Uncertain World.

Prior to my time at the Max Planck institute, I completed my Bachelor in corporate management and economics at the Zeppelin University in Friedrichshafen and my Master's in economics at the University of Bonn.

During my time as a PhD student, I studied the influence of varying social contexts through lab experiments as well as lab-in-the-field experiments.

Current Research Projects

My main research interest lies in the examination of how social contexts and the embeddedness in groups of interpersonal relations affect prosocial behavior, beliefs, and (social) preferences of decision-makers. Ever since the marginal revolution in economics in the 1870s, traditional microeconomic models of decision-making are based on the assumption that people's behavior can be explained by atomistic Robinson Crusoes making rational choices based on their stable preferences and constrained entirely by prices and incomes. In light of this radical simplification of human nature, representatives of neighboring social sciences and behavioral economists raise serious concerns that this neglection of embeddedness in social relations comes at the price of underestimating

- the importance of how the structure of social relations determines the search process for valid information;

- the impact of social preferences, status group, norms, and social dynamics on individual decisions and the underlying processes (Granovetter, 1985).

In my work, I account for this critique by addressing the questions how different structures of interpersonal relations influence prosocial preferences, beliefs about characteristics, and the behavior of others, as well as prosocial behavior in distinct decision-making environments in three different projects:

A Theory of Strategic Discrimination (Working Paper)

This is the first paper to study – theoretically as well as experimentally – discriminatory behavior of decision-makers, triggered by the embeddedness in social environments of interpersonal relations. In particular, we show that discriminatory behavior in embedded contexts can appear even if the decision-maker has no taste for discrimination or any reason to discriminate statistically for three different reasons: the decision-maker has altruistic feelings towards existing team members and enhances the utility of the other team members by selecting their preferred candidates; she anticipates a taste-based discrimination of the other team members; and she wants to trigger reciprocal behavior by signaling that she cares for the preferences of her other team mates. We test the different behavioral channels in a public-goods game, in which we allow for endogenous team formation.

The Effect of Inclusive Policies on Economic Types of Discrimination (Working Paper)

Inclusive social policies have been found to increase and to decrease prejudice and discrimination in field-experimental studies. These conflicting results might stem from the preferences and

beliefs of the individuals put into contact with the outgroups – that is, whether discrimination is based on taste or on statistics – as well as on the quality and features of the implemented policy. This article investigates the causal effect of inclusive social policies on taste-based, anticipated taste-based, and statistical discrimination. Lessons for policy-makers concerned with the reduction of discrimination involve the features that inclusive policies should strive for, as well as the individuals who might respond to the contact by changing preferences or beliefs, thus reducing discrimination.

Guilt in Multi-Agent Games (under Revision)

Guilt aversion defined as the desire not to betray the expectations of others can substantially induce prosocial behavior. However, this is the first study to investigate systematically whether agents will experience guilt less severely (Charness and Dufwenberg, 2006) in settings with more than two people, and if so, why. I distinguish between four different behavioral explanations and their relative importance: first, an agent may weigh the loss inflicted on a single person less gravely in multi-agent settings. Second, deviations from other people's expectations are associated with less disutility if individual decisions are less attributable. Third, economic agents may free-ride on the prosocial behavior of others. Fourth, decision-makers might experience less guilt in multi-agent settings if they anticipate the former three effects. Overall, I find a significant decline in prosocial behavior in multi-agent settings. Determining the relative importance of different channels, I find that the relaxation of the attributability of actions is the most important channel, explaining around 60% of the difference in prosociality in small group settings.

Teaching

Winter term 2018
Lecturer, Bachelor Seminar on Corporate Development
University of Cologne

Summer term 2019
Co-lecturer, Tutorial Sessions, Corporate Development
University of Cologne

Winter term 2019
Co-lecturer, Strategic Human Resources Management
University of Cologne

Summer term 2020
Co-lecturer, Incentives in Organization
University of Cologne

Summer term 2020
Lectures, Master's Seminar on Human Resources Management
University of Cologne

2018–2020
Supervision of various Bachelor and Master's Theses
University of Cologne

Fedor Levin

Summary Report

I have worked at the Max Planck Institute for Research on Collective Goods as part of my PhD studies with the MaxNetAging Research School. The program started in February 2016 with a six-month initial training period at the Max Planck Institute for Demographic Research in Rostock, continued in August 2016 at the Max Planck Institute for Research on Collective Goods, and finished in January 2019. Currently I am not at the institute, but I am finishing the remaining projects. My research focused on changes in value-based decision-making in older age and on possible links between aging-related changes in cognitive functioning and decision processes. More specifically, I investigated contributions of three age-related effects to decision-making – an influence of a decline of episodic memory on value-based decision-making, a possible contribution of age-related positivity effect to a bias in information search, and a potential benefit of episodic future thinking for decisions of older adults.

In 2016 and 2017, together with Susann Fiedler and Bernd Weber, I worked on a study addressing the relationship between an age-related decrease in episodic memory performance and value-based decision-making ("The Influence of Episodic Memory Decline on Value-Based Choice"). Previous research established the role of long-term declarative memory in the construction of subjective values of choice options. Aging can lead to a decrease in memory performance in some older adults; however, the impact of this decline on value-based decision-making has not been conclusively established. To study this effect, we conducted a study in 2017 with a group of older adults, testing their performance in a series of cognitive tests, as well as in a decision task using food choice as a model of value-based decisions. Overall, the findings supported the hypothesized link

between memory and decision-making in older age. The article on this study was published in 2018 in the journal *Aging, Neuropsychology, and Cognition*.

Following that project, we worked on a study testing the theorized influence of positivity effect on decision-making in older age ("Positivity Effect and Decision-Making in Aging"). The positivity effect refers to an age-related difference in processing information with emotional valence. According to socioemotional selectivity theory, the positivity effect represents not an age-related decline in cognitive performance, but rather a change in a manner in which older adults direct their cognitive functions in decision situations. Several studies have assessed the contribution of the positivity effect to information search and also to subjective decision satisfaction in decision-making. However, the likely impact of the positivity effect on the decision quality has not been systematically addressed by prior research. To investigate the positivity effect in decision-making with sufficient statistical power, we designed an online study comparing a group of older adults to a group of younger adults. The participants completed a task in which they made decisions about donating to various charities. We conducted this study in a format of a registered report – we first submitted a stage 1 manuscript outlining the rationale for the study and the planned procedure to the journal *Cognition and Emotion*. After a thorough peer-review process and a revision of the stage 1 report, the submission was granted a status of in-principle acceptance. Following that, we collected and analyzed the data. Contrary to the previous research on this topic, we did not find support for the age-related positivity effect, and both age groups – older and younger adults – on average demonstrated a positivity bias. The measure of an information search bias which indicated the degree of deviation from an even-handed review of positive
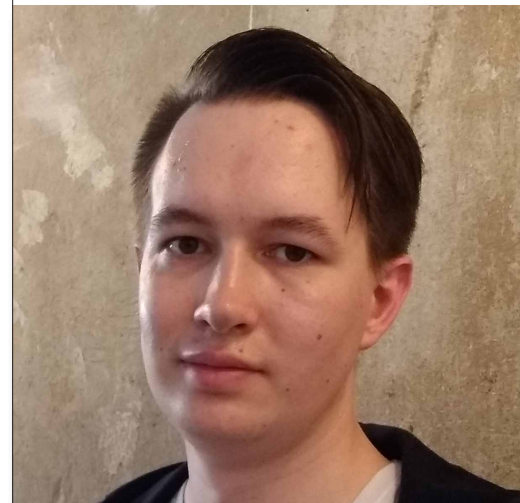
Contact
levin.fedor.m@gmail.com

and negative information did not predict decision quality. However, we confirmed the expected link between a higher positivity bias and a higher decision satisfaction. The findings of this study suggest the need for future research to re-examine previous assumptions about the specific conditions under which the positivity effect manifests itself in decision contexts. Currently, I am working on a revision of a stage 2 registered report which includes the previously submitted introduction and method parts, as well as added results and discussion.

Another project on which I started working with Bernd Weber in 2018 is focused on a role of episodic future thinking in the decision-making of older adults. This cognitive function is similar to episodic memory. It allows us to imagine specific episodic events in the future and thus contributes to planning and prospection. Previous research has shown that episodic future thinking also changes how people consider future rewards, for example by promoting more future-oriented choices in delay discounting tasks and in decisions with health-related outcomes. Therefore, episodic future thinking could be leveraged as part of a potential intervention in older age aimed at supporting adherence to a healthy lifestyle. However, there has been mixed evidence with regard to whether older adults can benefit from episodic future thinking. Therefore, in this study, I aimed to test whether episodic future thinking would decrease the rates of delay discounting in older adults and whether it would increase the likelihood of selecting healthier food items. An online study was designed to compare decisions of older adults engaged in an episodic future thinking to a control group in which the older adults engaged in an episodic recent thinking task. The results provided evidence for a preserved ability of older adults to engage in episodic future thinking, as well as its effect on delay discounting, thus indicating the likely benefit of interventions aimed at promoting episodic future thinking in older adults. However, we did not observe the hypothesized effect

of our task on food choice. This work extends previous research on episodic future thinking in older adults and offers future directions for research, such as an investigation of the factors that modify the effect of episodic future thinking on behavior with health outcomes.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Levin, F., Fiedler, S. and Weber, B. (Registered Report in principle acceptance). Positivity Effect and Decision Making in Ageing. *Cognition and Emotion.*

Levin, F., Fiedler, S. and Weber, B. (2018). The Influence of Episodic Memory Decline on Value-Based Choice. *Aging, Neuropsychology, and Cognition*, 26(4), 599-620.

Work in Progress

Levin, F. and Weber, B., Episodic Future Thinking and Decisions in Aging.

Mengyao Li

Summary Report

Three basic questions drive my research. First, why does group-based violence tend to spread and perpetuate itself? Second, how do violence and other moral transgressions impact the parties involved? Third, what are the constructive ways to respond to moral transgressions? I have examined these questions in various intergroup contexts, using different theoretical and methodological approaches. My work explores both individual-difference and contextual factors in intergroup processes. To achieve a comprehensive understanding of moral transgressions and moral repair, my research also aims to take a 360-degree approach, where victim, perpetrator, and third-party (bystander) perspectives are examined in tandem. I joined the institute as a Senior Research Fellow in June 2017. Over the past three years, I have carried out several research projects addressing a variety of research questions related to group-based violence and moral transgressions. My research uses different methodological approaches, including correlational and experimental designs, and online and field studies.

### An Integrative Framework of Moral Courage

Moral courage, or acting against perceived moral transgressions despite personal risks, is an important social force that shapes the functioning of human societies. With Anna Baumert and Julia Sasse, we conducted a systematic review of literatures that were previously disconnected, but offer collective insights into behavior that can be viewed as morally courageous (e.g., anti-bullying intervention, whistleblowing, high-risk collective action). Based on this review, we developed an integrative model of moral courage, highlighting the importance of considering individual attitudes and beliefs, moral emotions, relational and group-level processes, as well as contextual factors in tandem, in order to understand morally courageous behavior (Li, Sasse, Halmburger, and Baumert, under review).

In a similar attempt to integrate divergent literatures on moral courage, I served as a guest editor (with Anna Baumert, Julia Sasse, and Linda Skitka) for the special issue of the *Journal of Experimental Social Psychology*, "Standing Up Against Moral Transgressions: Psychological Processes of Moral Courage". In our editorial, we highlighted the insights gained from integrating research that examines morally courageous behavior from different perspectives, proposing directions for future research (Baumert, Li, Sasse, and Skitka, 2020).

Psychological Consequences of Harmful Normative Change

When faced with information that challenges the ingroup's morality, group members respond in various ways: from denial to moral disengagement to moral condemnation. Little is known, however, about how people react when ingroup transgressions are increasing, thus signaling a change in the group norm.

In three experiments, I examined how Americans responded to news reports describing anti-Muslim (Studies 1 and 2) and anti-Hispanic (Study 3) discrimination as having either increased or remained largely unchanged (with Anna Baumert, Aya Adra, and Fabian Winter). We found that high (but not low) U.S. glorifiers perceived a stronger future pro-discrimination norm after learning about the increasing than the static past trend, which in turn positively predicted moral justification of discrimination and perceived moral identity threat. Again, among high (but not low) glorifiers, moral justification further positively predicted support for anti-Muslim and anti-Hispanic policies, whereas moral identity threat negatively predicted support for these policies. Interestingly, identity threat also positively predicted behavioral support (e.g., donations to

Contact
li@coll.mpg.de

https://www.coll.mpg.de/mengyao-li
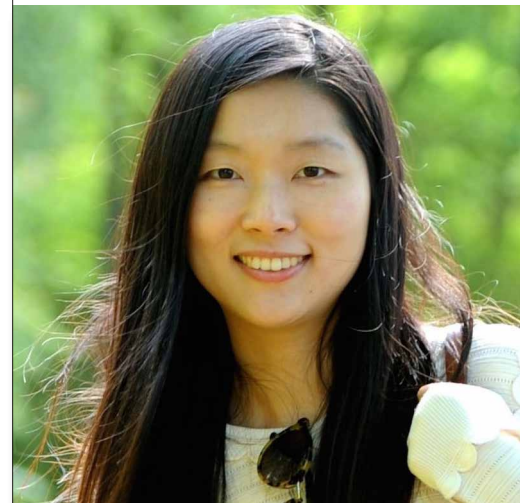
Muslim or Hispanic advocacy organizations) for the two minority groups. These findings illuminate two divergent reactions to increasing ingroup transgressions among high glorifiers: an ingroup-defensive one via moral justification, with largely negative intergroup outcomes, and a non-defensive one, via perceived moral identity threat, with positive intergroup outcomes.

National Identification and International Conflict Resolution

As a continuation of my PhD work on the role of social identity in intergroup conflicts, in this research I take a cross-national approach to examine the generalizability of a bi-dimensional model of national identification, as well as its divergent implications for international conflict resolution (with Anna Baumert and international collaborators; Li, Watkins, et al., under review). We tested whether national glorification and attachment differentially predicted support for military and diplomatic conflict resolution strategies (CRS) in response to international conflicts. Based on tests of the measurement invariance (MI) of the national identification scales in seven countries (Australia, United States, United Kingdom, France, Germany, Israel, China), we investigated whether these relationships were generalizable across countries. Our study was the first to scrutinize the cross-cultural generalizability of the bi-dimensional model of national identification.

The Psychology of Political Resistance

Recent years have witnessed unprecedented global waves of social and political unrest. The upsurge in the scale and intensity of protests has also been paralleled by the increasing diversity and creativity in how people engage in contentious politics. This global trend has attracted growing scholarly interest from social scientists and political analysts. The empirical research on political resistance, however, has thus far been conducted almost exclusively in democratic and liberal societies with an overwhelming focus on normative, non-violent actions of resistance.

In one line of research, I investigate the psychological processes underlying political resistance, with a particular focus on radical or even violent resistance in relatively repressive contexts (with Anna Baumert, Aya Adra, and international collaborators). So far, we have collected and are preparing to collect data in the contexts of three different social movements in Hong Kong, Chile, and Lebanon, respectively. This project has two main goals. First, we examined the various motivations underlying actual engagement in radical (versus non-radical) acts of resistance. We tested four different hypotheses: radical resistance might be driven by 1) demands for retributive justice as a response to police violence ("retributive violence" hypothesis); 2) perceived low efficacy of non-violent actions and loss of hope ("nothing-to-lose" hypothesis); 3) perceived efficacy of violence in achieving certain movement goals ("strategic violence" hypothesis); and 4) the perception that violence against repression is morally righteous ("moralization" hypothesis). The second goal of the research is to investigate the relationship among government repression, cognitive and emotional appraisals of risks, and political resistance. During my recent research visit at the University of Illinois at Chicago, I started a research project (with Linda Skitka) looking at how different futurist thinking influences modes of political engagement and resistance. A growing body of research has explored the role of futurist thinking on social cognition and behavior. Envisioning a desired, ideal future society, for example, has been argued to motivate actions for social change (e.g., Badaan, Jost, Fernando and Kashima, 2020). In this project, we compare the psychological and behavioral consequences of engaging in utopian versus dystopian thinking about the future of a social movement. Importantly, we again aim to distinguish between different types of actions, including normative, non-radical actions, and non-normative, radical actions.

Publications (since 2017)

Articles in Peer-Reviewed Journals

†Shared first authorship, *Supervised PhD student

Li, M., Leidner, B., Petrović, N. and Prelic, N. (2020). Close or Distant Past? The Role of Temporal Distance in Responses to Intergroup Violence from Victim and Perpetrator Perspectives. *Personality and Social Psychology Bulletin.*

Baumert, A.†, Li, M.†, Sasse, J.† and Skitka, L. (2020). Standing up Against Moral Violations: Psychological Processes of Moral Courage. *Journal of Experimental Social Psychology*, **88**, 1-3.

Adra, A.†, Li, M. and Baumert, A. (2020). What They Think of Us: Meta-Beliefs and Solidarity-Based Collective Action Among the Advantaged. *European Journal of Social Psychology*.

Li, M., Leidner, B. and Fernandez-Campos, S. (2020). Stepping into Perpetrators' Shoes: How Ingroup Transgressions and Victimization Shape Support for Retributive Justice through Perspective-Taking with Perpetrators. *Personality and Social Psychology Bulletin*, *46*(3), 424–438.

Adra, A.*, Harb, C., Li, M. and Baumert, A. (2019). Predicting Collective Action Tendencies Among Filipina Domestic Workers in Lebanon: Integrating the Social Identity Model of Collective Action and the Role of Fear. *Group Processes and Intergroup Relations*, 23, 967-978.

Li, M., Leidner, B., Petrović, N., Orazani, S. N. and Rad, M. S. (2018). The Role of Retributive Justice and the Use of International Criminal Tribunals in Post-Conflict Reconciliation. *European Journal of Social Psychology,* 48(2), O133–O151. [Winner of EJSP Early Career Best Article Award 2018]

Book

Leidner, B., Tropp, L., Lickel, B. and Li, M. (forthcoming). Political Psychology of Groups. In O. Feldman & S. Zmerli (Eds.), *Politische Psychologie: Handbuch für Studium und Wissenschaft (Political Psychology: Handbook for Study and Science).* Baden-Baden, Germany: Nomos.

Book Chapter

Li, M. and Leidner, B. (2019). Understanding Intergroup Violence and Its Aftermath from Perpetrator and Victim Perspectives. In: L. Newman (Ed.), *Confronting Humanity at its Worst: Social Psychological Perspectives on Genocide*. New York: Oxford University Press.

Edited Volume

Baumert, A., Li, M., Sasse, J. and Skitka, L. (Eds.) (2020). Standing Up Against Moral Transgressions: Psychological Processes of Moral Courage. *Journal of Experimental Social Psychology*. [special issue]

Under Review

Li, M., Watkins, M. H., Allard, A., Hirschberger, G., Kretchner, M., Leidner, B. and Baumert, A. (under review). *National Glorification and Attachment Differentially Predict Support for Intergroup Conflict Resolution: Scrutinizing Cross-Country Generalizability*.

Li, M., Sasse, J., Halmburger, A. and Baumert, A. (under review). *Standing Up Against Moral Transgressions: An Integrative Perspective on the Psychological Processes of Moral Courage.*

McLamore, Q., Leidner, B., Hirschberger, G. and Li, M. (under review). *To Defend or Not Defend? Reconciling When Low Glorifiers Are Defensive or Non-Defensive of Ingroup-Committed Violence.*

Watkins, M. H., Allard, A., Li, M. and Leidner, B. (under review). *The Effect of War Commemorations on Support for Diplomacy: A Five-Nation Study.*

In Preparation

Li, M., Leidner, B., Hirschberger, G. and Park, J. (invited submission). *From Threat to Challenge: Understanding the Impact of Historical Collective Trauma on Contemporary Intergroup Conflict.*

Li, M., Leidner, B. and Petrović, N. (in prep.). *Changes in Attitudes Toward the International Tribunal for the Former Yugoslavia from 2004 to 2011: A Case Study of Serbia Using Secondary Data.*

Li, M. and Leidner, B. (in prep.). *When Victims Demand Justice: How Perpetrator Group Members Respond to Victims' Retributive Versus Restorative Justice Demand.*

Awards (since 2017)

Early Career Best Manuscript Award 2018, European Journal of Social Psychology

Funded Research in Progress
"The Persuasiveness of Strategic Science Communication on Compliance with Scientific Recommendations across Nations during the COVID-19 Pandemic"

Collaborator (research and writing of the proposal), rapid grant from the U.S. National Science Foundation
April, 2020 – now

Lectures and Presentations (since 2017)

2018

Glorification, Collective Harm-Doing, and Emotional Well-Being from the Perspective of Perpetrator Group Members (with Leidner, B.)
Paper presented at the Annual Meeting of the European Conference on Personality, Zadar, Croatia
July 2018

Close or Distant Past? The Role of Temporal Distance in Responses to Justice and Reconciliation from Victim and Perpetrator Perspectives (with Leidner, B., Petrović and Prelic, N.)
Paper presented at the Annual Meeting of the 51st DGPs Congress, Frankfurt am Main, Germany
September 2018

Social Psychological Perspective on the Rising Attractiveness of Populist and Excluding Movements (invited talk)
Panelist in the workshop on Understanding Current Challenges to Europe and Western Societies, Heidelberg, Germany
October 2018

2019

Temporal Stability and Change in National Glorification (invited talk)
Psychology Colloquium at University of Koblenz and Landau, Landau, Germany
January 2019

When Victims Demand Justice: How Perpetrator Group Members Respond to Victims' Different Justice Demands (with Leidner, B.)
Justice and Morality Preconference of the Annual Meeting of the Society for Personality and Social Psychology, Portland, OR, USA
February 2019

State of Art Session on Moral Courage (with A. Baumert) (invited talk)
15th Conference of Personality and Psychological Assessment (DPPD), Dresden, Germany
September 2019

National Glorification and Attachment: A Multi-country Assessment of Measurement Invariance and Their Divergent Implications for Conflict Resolution (with Watkins, M. H., Allard, A., Hirschberger, G., Kretchner, M., Leidner, B. and Baumert, A.)
15th Conference of Personality and Psychological Assessment (DPPD), Dresden, Germany
September 2019

2020

National Glorification and Attachment: A Multi-country Assessment of Measurement Invariance and Their Divergent Implications for Conflict Resolution (with Watkins, M. H., Allard, A., Hirschberger, G., Kretchner, M., Leidner, B. and Baumert, A.)
Conflict and Conflict Resolution Preconference of the Annual Meeting of the Society for Personality and Social Psychology, New Orleans, LA, USA
February 2020

The Cycles of Intergroup Violence: A Social Psychological Perspective on Group-Based Violence and its Potential Remedies (invited talk)
Peace Research Institute Frankfurt, Germany
February 2020

Political Resistance and Radicalization under Repression: Evidence from the Hong Kong Anti-ELAB Movement (invited talk)
Brown Bag Talk at the Department of Psychology, University of Illinois at Chicago, IL, USA
March 2020, postponed

Understanding Violent and Non-Violent Political Resistance under Repression – Evidence from the Hong Kong Anti-ELAB movement (with Yuen, S., Adra, A., Chan, K-M. and Baumert, A.)
Annual Conference of the International Society for Justice Research, Lisbon, Portugal
July 2020, postponed

Organized Symposia

Challenges and Advances in Research on Intergroup Violence
Annual Meeting of the Society for Personality and Social Psychology, Atlanta, GA, USA
Speakers: Mina Cikara, Roger Giner-Sorolla, Mengyao Li, Rebecca Littman
March 2018

Professional Activities

Memberships

European Association of Social Psychology, Society for Personality and Social Psychology

Ad-hoc Reviewer for

Personality and Social Psychology Bulletin, *European Journal of Social Psychology*, *PLOS One*, *Group Processes and Intergroup Relations*, *Peace and Conflict: Journal of Peace Psychology*, *Journal of Social and Political Psychology*, *Psychological Reports*, *Social*

D. Research Portraits

Psychology, Personality and Individual Differences, Social Psychological and Personality Science, Routledge Handbook of Dehumanization

Nathan Maddix

Summary Report

I joined the institute in December 2017 after working and studying at Harvard University. I was a lab manager at the Harvard Business School, and I came to Max Planck because I found it to be a unique opportunity to expand my horizons while continuing research I had started on financial decisions, household finance, nudging, and preference formation, especially policy preferences. Thanks to the MPI, my research interests are now even wider and include large-scale field experiments, individual and team behavior, and behavioral and experimental modeling. In particular, I am interested in topics such as goal-setting, planning, and self-control in field and lab settings.

Lab and Online Experiments

Many experiments with convenience and representative samples were conducted to understand the relationship between choices and individual behavior with respect to policy preferences. The term "nudging" refers to a policy tool that makes subtle changes to a choice environment to improve outcomes for citizens. While many have investigated policy preferences for nudges across domains, such as health, energy, and financial domains, no one to date has conducted an in-depth analysis of one domain. In a representative sample of U.S. households, Maddix (2019) investigates the financial domain to report findings on how individuals vary with respect to their approval for public policies that make use of financial nudges, such as credit-card spending, automatic enrollments in financial programs, and financial education at the workplace. By collecting data on time and risk preferences along with risk attitudes for each policy choice, Maddix (2020) shows the relationship between individual differences and policy preferences. Impor-

tantly, while individual difference measures predict policy preferences, they may not predict behavior, which has consequences for both law and economics.

Previous research has found that humans organize financial categories by 'mental accounts' that allow them to create rules for spending and saving. In Maddix and Del Ponte (work in progress), we conduct online experimental research with an interactive savings game that simulates real-world behavior in which we randomly vary the pay structure of workers. Over multiple periods with panel data, we are now analyzing how individuals, especially low-income individuals, may smooth spending over time, and how economic shocks (e.g., low wages or windfall gains) may cause agents to learn whether or not optimally to save or spend in hard times. This has implications for financial education as well as economic downturns, such as the 2020 global pandemic.

Finally, related to financial decision-making, Maddix (2020b) conducts a large-scale online study for how choice formats influence decision-making for important life choices, conditional on domain-specific expertise. The motivating question is, which choice format leads to better decision-making for experts and non-experts in health, financial, and energy domains? What can we learn about optimal default choices? To explore this question fully, individuals make multiple choices, randomized to one of four choice formats in each domain. In each choice, they must decide whether to take up a program or benefit offered by the workplace or government, or whether instead to "switch out" of the program. They then must decide

whether or not to give this program to someone else. Findings reveal that information improves uptake for both default and active choices.

Contact

maddix@coll.mpg.de

https://www.coll.mpg.de/nathan-maddix

Field Experiments

Field experiments provide important contributions to economic science because they can identify clean causal relationships. In a field research project with the World Health Organization and colleagues at Harvard School of Public Health, Maddix and Rees (work in progress) design and implement an eight-week smoking prevention program for approximately 750 students in Montenegro. Montenegro has one of the highest rates of smoking in Europe. The study measures how implementation plans can lead to positive outcomes for students in relation to their smoking and financial habits. The link between smoking and finances for children in Montenegro is that we estimate that the average smoker spends the equivalent of one day's work (seven hours) each week on the costs of cigarettes. By using behavioral-science strategies with economic games, I identify how behavioral science can improve personal outcomes and estimate the effectiveness of known goal-setting and achievement strategies using economic measures.

Much of my research focuses on goal completion and effort. It has been argued that industrialization led to economic gains in part because the principal-agent relationship with firms eliminated self-control problems for workers who may get distracted or lose focus. As the global pandemic took hold, Maddix (work in progress) started investigating the economic and psychological effects of working from home with incentives and wellness programs. Corporations make use of wellness programs to offset employee costs related to absenteeism, turnover, and health issues such as diabetes and heart attack. In partnership with a firm that tracks endogenous behavior by means of a task manager phone application in the United States, I experimentally manipulate rewards and incentives for at-home workers to model self-control and effort under incentive regimes. This field-research study makes a contribution to both experimental and behavioral economics by focusing on how tournaments, incentives, and self-rewards can motivate task completion at home, while reporting how employees experience self-control problems.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Maddix, N. (forthcoming). Behavior by Spending More on Consumer Debt. *Harvard Law Review.*

Working Papers

Maddix, N. (2020b). Opt-out Defaults and Active Choices: Choice Format, Domain Expertise, and Projective Paternalism.

Maddix, N. (2020a). Do Individual Difference Measures Predict Policy Preferences for Financial Nudges?

Maddix, N. (2019). Financial Nudges for Savings, Bill Payment, and Repayment: Evidence from the United States.

Work in Progress

Maddix, N. (In progress). Welfare Effects of Work from Home Wellness Programs: Evidence from the Technology Sector.

Maddix, N. and Rees, V. (In progress). Using Behavioral Insights to Prevent Smoking in Adolescents Aged 13-15.

Maddix, N. and Del Ponte. (In progress). Learning in Savings Decisions: Evidence from an Online Sample.

Lectures and Presentations (since 2017)

2018

Student Smoking Preferences: Experimental Evidence from Empowerment Training Programs
BEHNET Behavioral Economics in Health Network, Summer School. University of Cologne Summer 2018

Indebted Savers: Focusing Illusions and Optimism Biases for Debt and Savings
Society for Judgment and Decision Making Annual Meeting. New Orleans, Louisiana 16–19 November 2018

Indebted Savers: Focusing Illusions and Optimism Biases for Debt and Savings
Geary Institute Behavioural Science and Public Policy Annual Workshop. Dublin, Ireland 29–30 November 2018

Sofia Monteiro

Overview

I joined the institute on 1 October 2017. Prior to joining the EEG group, I held positions at the University of Cape Town and with the Southern Africa Labour and Development Research Unit. My research in the past years has focused on two main topics: (i) cognitive biases in belief formation; (ii) behavioral interventions for healthier decision-making.

Cognitive Biases in Belief Formation

Information structures are widely characterized by correlated signals, for example news media that share information sources, such as press agencies, so that the contents of different news reports tend to be correlated. Previously, Enke and Zimmerman (2019) provided experimental evidence with students in the lab on the existence of correlation neglect by individuals when forming beliefs from information sources in a transparent setting. They provided suggestive evidence that naive beliefs are not driven by inadequate computational skills necessary to process correlated information. Instead, subjects showed conceptual problems in identifying and thinking through the correlation in the first place. The authors had limited success in debiasing beliefs. Praxmarer, Monteiro, and Sutter (work in progress) tested whether team decision-making could debias beliefs. This intervention had straightforward policy implications (i.e., when to implement team decision-making) for settings and organizations where individuals tend to exhibit correlation neglect (e.g., social network learning, forecasting, and news gathering). We also contributed to the growing literature on team decision-making (for a review, see Kocher, Praxmarer, and Sutter, 2020). We examined whether team decision-making generates more rational beliefs in settings where individuals tend to exhibit substantial correlation neglect. In our experiment at the MPI Decision Lab, team members could chat to their partner to reach an agreement. From the literature, we expected team decision-making to be closer to rational beliefs than individual decision-making. We used a single belief-formation task as a proxy for naivety of individuals to account for heterogeneity within teams. Contrary to our hypothesis, we found that teams exhibit the same pattern of correlation neglect in belief formation as individuals. This experiment is in the writing-up phase.

In news and social media, information is curated into clickbait headlines and affecting tweets that support a particular interest group. The fact that we face selected data, which is framed to tell a particular story, often one that agrees with our prior expressed beliefs, is not immediately apparent to the consumer. Enke (2019) demonstrated the existence of selection neglect in belief formation and evidence for the mechanism underlying it; a heuristic prompted by cognitive load he terms "what you see is all there is". His experimental research highlighted two distinct types which characterized a majority of participants in the lab: the full neglect type and the Bayesian updater. Practically, a means of debiasing individuals remained unclear. Representation training has been shown to be intuitive (even for children) and to improve Bayesian reasoning in basic problems of conditional probability. Previous research on this type of representation training has been limited to non-incentivized psychological studies (e.g., Hoffrage, Krauss, Martignon, and Gigerenzer, 2015). In an online experiment, Monteiro (work in progress) brings these two literatures together to test whether representation training increases the proportion of Bayesian updaters in a setting in which individuals typically exhibit selection neglect. This experiment is in the design phase.
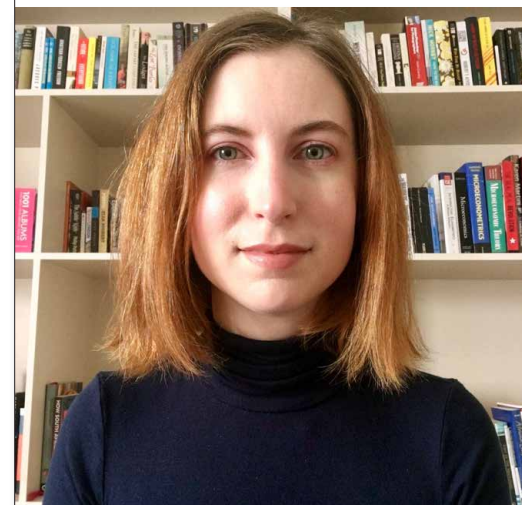
Contact

monteiro@coll.mpg.de

https://www.coll.mpg.de/sofia-monteiro

Behavioral Interventions for Healthier Decision-Making

The burden of non-communicable diseases such as diabetes is a growing global problem not only for patients and families, but also for health-insurance providers and the wider economy. These diseases are largely lifestyle-driven, for example by what we eat and drink and how little we exercise. Health-related types of behavior are difficult to shift, and measuring and tracking behavior in the field is often a challenge. My field projects examine cognitive and behavioral barriers to healthier decision-making and evaluate the impact, cost-effectiveness, and sustainability of behavior-change interventions. What level of personalized feedback and health practitioner support is most helpful for diabetes patients to achieve their diet and glucose control goals? To what extent do cognitive and behavioral barriers prevent diabetes reversal? In a field experiment, Monteiro, Sutter, Wiesen, Larmuth, and Kroff (work in progress) test the impact of a wearable technology called Continuous Glucose Monitoring (CGM) against a control group that receives the standard of care for diabetes. Real-time information on personal glucose levels allows the wearer to fine-tune their diet, but may not be sufficient to overcome cognitive barriers such as present bias. In a second treatment, we add online health coaching to help patients identify their goals, what it would mean to achieve them, the obstacles in the way, and whether they have plans to overcome them. Our randomized control trial is pre-registered and data collection will commence when ethical approval is granted.

Monteiro, Pujol-Busquets Guillen, Smith, and Larmuth (work in progress) evaluates the impact of the Eat Better South Africa (EBSA) nutrition education program in low-income communities in the Western Cape. It validates the self-report food frequency questionnaire with an ecologically valid behavioral measure of food choice at a local supermarket. I examine the potential of the nutrition education program to empower women and their families and the influence of food insecurity on household nutrition. My aim is to identify behavioral insights to help people navigate complex decision environments such as food choice. This project is in the data-collection phase. EBSA has run several community nutrition education programs to teach women how to choose healthier foods on a budget. Our previous research evaluated the program qualitatively. There is a need to assess such interventions quantitatively. Most nutrition studies use diet-assessment tools that require self-reporting, e.g., a food frequency questionnaire, food recalling, or food diaries. These measures may suffer from bias and noise due to participants' inattention to what they eat, inability to recall fully, and the lack of a pecuniary incentive to reveal their true preferences. We aim to validate this survey measure with an incentivized behavioral decision task. We will test whether the EBSA program impacts participants' food choices when a real decision is made with real food and a retail voucher. To identify the impact of the program, we use a pipeline design, since the program is rolled out to limited groups of women at a time. This allows us to compare previous participants to a control group of women with the same observable characteristics, eligible for future iterations of the program.

Working Paper

Monteiro, S, Burns, J, and Piraino, P. (2018). The Prince and the Pauper: The effect of inherited wealth status on productivity in the lab. *ERSA Working Paper 748*.

Lectures and Presentations (since 2017)

2018

A Female Health Intervention for Low-Income Girls in the Western Cape
German Development Institute and MPI Collective Goods joint meeting, Bonn, April 2018

The Prince and the Pauper: The Effect of Inherited Wealth Status on Productivity in the Lab
School of Economics Seminar, University of Cape Town, South Africa, September 2018

2020

Technology-Assisted Behavioural Interventions in Type-2 Diabetics
PANOS Seminar of the Sports Science Institute of South Africa (essm) July 2020

Professional Activities

Memberships

Member of the Nutrition Network, since 2020

Member of the BEHnet (Behavioural Experiments in Health Network), since 2018

Alexander Morell

Since May 2020, I am professor of law at the University of Mannheim. In 2019, I completed my habilitation in law at the University of Cologne. In 2015, I defended my PhD thesis in economics at the University of Jena, and in 2011 I did the same with my PhD thesis in law at the University of Bonn. I publish on legal tech, competition law, corporate law, and the law of evidence. I also pursue empirical research on the interaction of the law and social norms and on questions related to the access to justice.

1. Legal Tech: In Germany, the legal profession is highly regulated. Only registered attorneys are allowed to give unrestricted legal advice. However, other regulated professions are allowed to advise on legal questions that are immediately linked to the service they commonly provide (advice by tax advisers, planning services by architects, services of collection service providers). In recent times, AI allows firms to provide collection services in an automated manner online (think of flightright.com). These relatively cheap and yet effective services have triggered fierce opposition from both debtor and attorney interest groups. I have written three articles (Morell 2019a, 2019b, 2019c) taking an economics perspective, arguing for a liberal approach to legal tech based collection. All three articles have been cited by the Federal Court of Justice when it delivered a landmark decision in the matter in the fall of 2019.

In Morell (2020a) I argue for creating a functional equivalent of the class action in German law by using fiduciary assignments to bundle claims in one hand. I suggest that the conflicts of interest, which courts cite to void the assignments required for bundling claims, have to be considered as part of a tradeoff. On the one hand, bundling claims by assignment creates costly principal-agent conflicts. On the other hand, bundling generates economies of scale that in turn make threats of suing credible. I argue that the benefits of bundling greatly outweigh the costs.

2. Law of Evidence: In a book (my published habilitation thesis, or *Habilitationsschrift*) on the adversarial proceedings in civil law (Morell 2020c), I argue that judges can and should use the mechanism of Grossman unraveling (Grossman 1980, Milgrom 1980) to uncover facts which only the party that is not bearing the burden of proof has evidence to prove (or disprove). A case in point is the civil liability of VW in the emissions scandal under German law. To collect damages, plaintiffs have to prove that a member of the board knew about the fraud. However, plaintiffs lack evidence on this point. German law does not provide for pretrial discovery, and courts are reluctant to subpoena the submissions of documents. If the judge knows that the defendant has a piece of evidence that – depending on its content – could exonerate the defendant (in VW's case, it was a secret memo on an internal investigation), the judge can infer the document's content from the party's refusal to submit it. The condition is that, by being strategically skeptical, the judge provides an incentive to submit the document in case it has favorable content. My work shows that this line of judicial reasoning is not only legal, but even required by German procedural law. This insight reveals, for instance, that the lenient use of *prima facie* evidence in German courts is in line with proper probabilistic reasoning.

3. Access to Justice: In Spamann et al. (forthcoming), we use a realistic penal law case and a multidimensional experimental setup to study how judges reason in different legal cultures. In one dimension, we vary the strength of precedent; in the second dimension, we vary the sympathetic appeal of the defendant; and in a third dimension, we let judges from a number of different prominent jurisdictions (Argentina, Brazil, China, France, Germany, India,

Contact

amorell@mail.uni-mannheim.de

https://www.coll.mpg.de/alexander-morell

USA) handle the material. We find that precedent barely influences the judges' decisions. Document use and the reasons provided differ between jurisdictions. However, they do not differ along the lines of common-law vs. civil-law countries. If anything, precedent has a stronger influence on civil-law judges.

Research Agenda

1. Access to Justice: Morell and Oeberst (work in progress) is a project on discrimination in court. We try to identify whether and how German judges discriminate against defendants whose name indicates a family history of migration. In a pilot study, I gave 80 real judges a realistic reduced-form prosecutor's file, including an indictment, and let them decide whether to open proceedings against the accused. I varied whether the name of the accused was "Jünger" or "Yildiz". The pilot data suggests that judges assess the facts without bias. Nonetheless, they open a proceeding against the accused with the Turkish-sounding name more frequently. Also, they interpret the law more strictly if the defendant has a Turkish-sounding name. In our study, individual judges' implicit bias predicts discrimination. In a next step, I would like to test whether judges can control their bias, once the Turkish identity of the accused is made more salient.

In Morell (work in progress a), I replicate some of Rachlinski's studies on cognitive biases among U.S. judges with German judges. I am interested whether German judges fall prey to cognitive biases to a lesser or greater extent than U.S. judges. I also try to identify factors of debiasing. First results from a pilot with the same 80 judges as above seem to indicate that biases in German judges tend to be smaller than in American ones. In addition, the judges' grades in the second state exam tend to predict cognitive bias better than the cognitive reflection test (CRT). This is surprising because the state exam tests legal reasoning, which is distinct from factual or even probabilistic reasoning. However, cognitive reflection certainly is an asset in the state exam, too, and the state exam may correlate more with intelligence than the CRT.

In Morell and Traxler (work in progress), using regression analysis in real-world settings conducive to causal inference, we analyze how wage motivates judges. Our preliminary results suggest that, controlling for a host of variables and time trends, a 1% wage increase makes it 0.1% more likely that a judge will hear evidence. This, it seems, is reflected by a significant increase in the plaintiff's chance of winning after a pay rise. Furthermore, we measure the political influence of government executives on the enforcement of tax offences. In addition, we estimate the extent to which courts prevent lawyers from distorting attorney fees in their favor.

In Morell and Bechtold (work in progress), we study whether patent courts in Germany "sell" their forum by granting favors to potential claimants in patent-infringement cases.

2. Antitrust: In Morell (work in progress, b), a project on sanctions for antitrust violations, I argue that the European Commission and the German Cartel Office should not reduce fines for cartels against firms if the firm has implemented a corporate compliance program.

3. Social norms: In Bystranowski, Harel, and Morell (work in progress), we are planning an experiment on the abstract-concrete paradox, which says that people adhering to one (typically utilitarian) abstract rule will still judge a concrete case on the basis of a contradicting different (typically deontological) rule. We derive constitutional implications for a judicial review of legislative acts.

4. Corporate Law: In Morell (work in progress, c), I argue that – contrary to the law as it stands in Germany – the general law of sales should be applied to the sale of corporations. The main reason is not that the law is a particularly good fit – and thus a majoritarian default. The general law of sales can merely be excluded with greater legal certainly than today's doctrine of corporate sales. In corporate sales, the parties have no interest in seller liability by default, but instead wish to agree on specific warranties to overcome a problem of information asymmetry by precisely signaling the information they have. The resolution of the information asymmetry can only be assured with minimal court-induced noise.

Publications (Since 2017)

Articles in Peer-Reviewed Journals

Morell, A. (2020a, forthcoming), "Mietright" und die Abtretungssammelklage, *Zeitschrift für Wettbewerbsrecht*, 3.

Spamann, H., Klöhn, L, Jamin, C., Khanna, V., Liu, J. Z., Mamidi, P., Morell, A. and Reidel, I. (forthcoming), Judging Around the World: A Lab Experiment on Country Differences and Causal Determinants, *Journal of Legal Analysis*.

Morell, A. (2019d). The Short Arm of Guilt – An Experiment on Group Identity and Guilt Aversion. *Journal of Economic Behavior and Organization,* 166, 332–345.

Kurschilgen, M., Morell, A. and Weisel, O. (2017). Internal Conflict, Market Uniformity, and Transparency in Price Competition Between Teams. *Journal of Economic Behavior and Organization*, 144, 121–132.

Journal Articles (not peer-reviewed)

Morell, A. (2019a). Rage Against the Machine – Verstößt Legal-Tech-Inkasso gegen das Rechtsdienstleistungsverbot? *Wertpapier-Mitteilungen*, 73(39), 1822–1830.

Morell, A. (2019c). Keine Kooperation ohne Konflikt – Verstößt ein Inkassodienstleister durch Angebot einer Prozessversicherung gegen § 4 RDG? *Juristenzeitung*, 74(17), 809–814.

Morell, A. (2019b). Wirksamkeit der Inkassozession bei RDG-Verstoß. *Neue Juristische Wochenschrift*, (36), 2574–2579.

Morell, A. (2017). Rechtssicherheit oder Einzelfallgerechtigkeit im neuen Recht des Delistings. *Archiv für die civilistische Praxis*, 217(1), 61–106.

Book

Morell, A. (2020c, forthcoming), Der Beibringungsgrundsatz – Eine Rechtfertigung unter besonderer Berücksichtigung der Passivität der nicht beweisbelasteten Partei.

Book Chapters

Morell, A. (2020b, forthcoming), Die Ökonomik des Registers, in: M. Schmoeckel (ed.), Register.

Morell, A. (2017), § 3 – Nachfrage, Angebot und Märkte, in: Towfigh, E. et al., *Ökonomische Methoden im Recht*, 2. A, 45–82.

Work in Progress

Bystranowski, P., Harel, A. and Morell, A. (work in progress), Democratic Judicial Activism.

Morell, A. (work in progress a), Inside the German Judicial Mind – an International Replication and Comparison.

Morell, A. (work in progress b), Corporate Governance und Prävention im Kartellrecht – Sollten Compliance Programme bei der Sanktionszumessung berücksichtigt werden?

Morell, A. (work in progress c), Gewährleistungsausschluss im Anteils- und Unternehmenskauf: Ein Auslegungsproblem.

Morell, A. and Oeberst, E. (work in progress), Determinants of the Discrimination of Migrants by German Judges.

Morell, A. and Traxler, C. (work in progress), Wage Effects on Adjudication.

Morell, A. and Bechtold, S. (work in progress), Forum Selling in Germany – Some Quantitative Evidence.

Lectures and Presentations (since 2017)

2017

Verhaltenssteuerung durch Zivilprozessrecht
Habilitandenkolloquium, Max-Planck-Institut für ausländisches und internationales Privatrecht, Hamburg
May 2017

Der Anscheinsbeweis im Kartellrecht
Gesprächskreis Kartellrecht, University of Bonn
June 2017

2018

Evidence & Methodological Challenges
Law and Market Behavior Workshop: Taking Stock of Behavioral Law and Economics, University of Notre Dame, London Campus
December 2018

2019

Do Judges Make Better Decisions than Lay People – And If So, Why?
Programme in European Private Law for Postgraduates, University of Münster
November 2019

Honors

Member of the Zukunftsfakultät am Wissenschaftskolleg zu Berlin since 2018

Teaching (since 2017)

Summer term 2017
Rechtsökonomie Grundlagen

Winter term 2017
Zivilrecht und Ökonomie
Rechtsökonomisches Seminar
Rechtshistorisches Seminar zum Prozessrecht

Summer term 2018
(University of Bonn)
– Rechtsökonomisches Seminar

Winter term 2018
(Universities of Bonn and Cologne, Richterakademie Trier)
– Zivilrecht und Ökonomie
– Rechtsökonomisches Seminar
– Einführung in die ökonomische Analyse des Rechts
– "(Wann) sind Richter besser als Laien?"
– "Qualität richterlicher Arbeit aus (verhaltens)ökonomischer Sicht"

Summer term 2019
(University of Mannheim)
– Corporate Governance II
– Examensrepetitorium besonderes Vertragsrecht
– Examenskolloquium
– Examensklausurenkurs

Winter term 2019
(University of Mannheim & Richterakademie Trier)
– Rechtsökonomik
– Examensrepetitorium allgemeines Schuldrecht inkl. Kaufrecht

– Bilanzrecht
– Große Übung Zivilrecht
– "(Wann) sind Richter besser als Laien?"
– "Qualität richterlicher Arbeit aus (verhaltens)ökonomischer Sicht"

Summer term 2020
(University of Mannheim)
– Corporate Governance II
– Law and Economics
– Comparative Competition Law
– Examensklausurenkurs
– Seminar in Unternehmenssteuerrecht und Rechtsökonomik

Winter term 2020
(University of Mannheim)
– Rechtsökonomik
– Examensrepetitorium allgemeines Schuldrecht inkl. Kaufrecht
– Die Handels- und Steuerbilanz
– Interdisziplinäres Seminar in Kartellrecht und Industrieökonomik
– Quantitative Methods for Lawyers

Professional Activities (since 2017)

Member of the Editorial Board of the *German Law Journal,* since 2018

Reviewer for
American Review of Law and Economics, *German Law Journal*, *Journal of Empirical Legal Studies*, *Journal of Industrial Economics*, *Zeitschrift für Psychologie*

Ombudsperson for good scientific practice at the MPI: 2013–2019

D. Research Portraits

Laurence O'Hara

I joined Christoph Engel's research group in mid-2018 as a postdoctoral researcher. My background is largely in law (especially constitutional law and politics), though I have a second degree in quantitative/economic policy analysis. I came to the institute to work on the relationship of classic legal doctrine and theory with the behavioral sciences. Of course, many questions at that intersection concern foundational issues present in any contemporary jurisdiction. Still, I maintain a special focus on the German legal tradition and its discipline of public law. The German tradition of public law and government – which is much more driven by multidimensional value and norm systems than mere utility-aggregation approaches – leads to specific properties of the legal and political order. Its frameworks of controlled verbal reasoning produce specifically normative or juridical ways of judgment and decision-making, which are not necessarily common to other (western) jurisdictions and which the international behavioral debate is in some regards unaware of. I am interested in investigating such forms of behavior, both from a doctrinal/theoretical and from a behavioral/empirical angle. Overall, my current research can be grouped into four areas of analysis:

Doctrine and Theory: Behavioral Analysis of Public Law

First of all, I work on Behavioral Public Law in the German jurisdiction. I am especially interested in behavior-oriented analyses of the law itself: how legal institutions digest behavior, in particular what their underlying conceptions about judgment and decision-making are. Generating a clearer picture in this regard is a necessary precondition for successful behavioral design of legal institutions; at the same time, it promises to advance legal scholarship and practice, because it brings to the surface conceptions of behavior that usually have remained implicit.

My first bigger project at the institute analyzed basic categories of fundamental rights doctrine in this regard (O'Hara, 2020). The topic illustrates which steps the analysis of law with regard to findings of the social sciences requires: Certainly, one part is to conceptualize and make accessible the literature about these findings for the legal discourse. But also, the law has to be re-conceptualized. For example, in assessment of interferences with fundamental rights, notions of autonomy prove to be the pivotal aspect. I investigate to which extent differentiated notions of bounded autonomy (as opposed to bounded rationality, which is not immediately relevant for the law) can be introduced into the doctrine, which allow us to account for certain kinds of influence on uncontrolled processes of the mind.

A second project (Engel et al., work in progress) undertakes a more comprehensive account. I initiated it last year with Christoph Engel. Together with other group members, we are writing a book that systematically approaches behavioral analysis for the context of German public law and its classic sub-matters. My own part (O'Hara, work in progress, a) is about the use of state authority by administrative law and the enforcing executive in order to affect behavior. It covers classic forms of legal action and coercion, but also informal forms of influence on behavior, as long as the administration unilaterally chooses and pursues a policy goal.

Thirdly, I am working on another essay about "the mental dimension of government – categories and principles of the handling of state mental impacts in public law" (O'Hara, work in progress, b). This essay is primarily an attempt to systematize all those instances, where the law does explicitly address circumstances in the mental sphere.

Contact

ohara@coll.mpg.de

https://www.coll.mpg.de/laurence-ohara

Empirical Studies: Normative and Juridical Judgment and Decision-Making

My own empirical work looks mainly at basic categories of (public) law and the way people use its central operators when asked to judge and decide cases. I have designed my research program so that it attends to the practically most relevant levels of (legal) reasoning.

Egidy/O'Hara (work in progress) is about proportionality assessments by balancing of interests. The applicable decision-making technique is frequently described by the metaphor of weighing (*Abwägung*). One of the core foundational topics about weighing is whether it can be rationalized so that it produces predictable results. According to a prevalent view, it is mainly an arbitrary process. However, both in legal education and methodology of judicial opinion-writing, there are efforts to make the decisions more reliable by structured assessment-frameworks. With our vignette study, we investigate whether such structured procedures predictably reduce bias. Through experimental manipulations (irrelevant information inviting discrimination), we induce bias in the normative decisions for part of the group. We then test whether different degrees of structured decision-making can reduce said bias.

O'Hara/Rahal (work in progress) is again vignette-based with experimental manipulations; it also uses the COVID19 epidemic as a natural experiment. We investigate two domains of juridical operators. First, we deal with the effects of different kinds of (mainly governmental) measures, for example a prohibition by statutory law, a prohibition by an administrative agency, or a mere informal request. That includes the degree to which participants perceive a measure as binding or freedom-restricting and to which they see it fit to alter their behavior. We also elicit motivations to comply with or offend against different legal measures (especially in the context

of COVID19, as compared with other policy areas). Second, we investigate the evaluation of dangerous situations under uncertainty, as is a central concept in German public security law.

Barnes/O'Hara (work in progress) is about laypeople's knowledge of the law in areas where effectiveness and enforcement rely on their actions. We take the example of consumer law in the United Kingdom, which has received special legislation in the Consumer Rights Act tailored to be read, known, and understood by individuals without legal education. We measure the participants' knowledge and conceptions about the most important consumer rights and try to picture patterns of misconceptions.

Classic Theory and Doctrine

I also keep active in general doctrine and theory. Here, I am working on a study that builds on findings from my doctoral thesis (O'Hara, 2018) dealing with the political order and how it generates "public rationality" (O'Hara, work in progress, c). In particular, I investigate factors in the institutional order that – both from rational/public choice and behavioral theory perspectives – promise to induce rule-following, self-disciplining, and cooperative behavior in political actors. The idea is to show strategies for constitutional law to combat populist and chaotic decision-making, as has been observable in various (western) systems in recent years. Also, I finished a longer handbook article on the law of enforcement by administrative agencies (O'Hara, forthcoming, b). Further, I drafted a short paper in legal theory (O'Hara, work in progress, d), which stems from a comment I gave on a paper by W. Spohn at the Fritz Thyssen Foundation last year. I discuss to which extent Spohn's theory fits into established legal conceptions about the hierarchy of norms and the avoidance of contradictions within the legal order.

Habilitation Project (tentative): Leadership in Public Administration

Finally, I am in the process of developing a project for my habilitation thesis. I intend to write the book about the leadership of administrative agencies ("Führung durch Recht"). I mean leadership less in the formal sense (e.g., with regard to hierarchical structures or "chains of command") than in substantive terms: How the administration provides for the right policies being made and enforced, how it motivates and sanctions its personnel to promote its targets. In Germany, where through the principle of "Rechtsstaat" not just "rule of law" but "rule by law" is constitutionally prescribed, this is to a large extent a matter to be resolved within legal terms. First of all, the topic is about the handling of principal-agent problems through administrative law and about the solution of conflicts within the administrative legal order. A presently much-discussed sub-topic is the prevention of misconduct, especially in the police and armed forces. Like all fields of legal compliance research, this topic must increasingly be approached with special regard to the behavioral sciences. From that angle, it is about the behavioral design of institutions within government bodies (or behavioral organization theory of government). Further, importantly for the practice of administration in Germany, also the trends towards "reform" in the public sector (e.g., by new public management) now date back so far that the time for evaluations has come; also, the Berlin Republic is now two decades old, which allows for first theoretical accounts of potentially changed traditions. And lastly, the topic of behavior control within government relates back to the normative-juridical tradition I mention above. While administrations in other countries often have much clearer standards of policy-making – above all: the discovery and aggregation of potential costs and benefits in economic terms –, the German approach is less clearly-de-

fined. It will have certain disadvantages (especially inefficiencies), but likely also strengths. The study would allow an account of both and might also foster a better understanding of European policy-making, where different traditions of policy-making have to be reconciled.

Publications (since 2017)

Journal Articles (not peer-reviewed)

O'Hara, L. (2020). Grundrechtsschutz vor psychisch vermittelter Steuerung – Beschränkte Autonomie und verhaltenswissenschaftliche Annahmen in der Grundrechtsdogmatik, *Archiv des öffentlichen Rechts*, 145, 133-187.

Book

O'Hara, L. (2018). Konsistenz und Konsens – Die Anforderungen des Grundgesetzes an die Folgerichtigkeit der Gesetze, *Studien und Beiträge zum Öffentlichen Recht*, Tübingen: Mohr Siebeck, 38.

Book Chapter

O'Hara, L. (forthcoming b). Durchsetzung, in: Eisenmenger, S., Pfeffer, K., Eds. *Handbuch Hamburger Polizei- und Ordnungsrecht*, Stuttgart: Boorberg.

Work in Progress

Barnes, V. and O'Hara, L. (work in progress). Legal Literacy and its Driving Factors. The Case of UK Consumer Law.

Egidy, S. and O'Hara, L. (work in progress). Structured Balancing of Interests – How structured decision-frameworks affect the rationality of balancing decisions in constitutional law.

Engel, C., Egidy, S., Hermstrüwer, Y., Hoeft, L., Langenbach, P. and O'Hara, L., Eds. (work in progress). Verhaltenswissenschaftliche Analyse des öffentlichen Rechts.

O'Hara, L. (work in progress a). Autoritativ lenkendes Verwaltungsrecht und Verwaltungshandeln, in: O'Hara, L., Engel, C., Egidy, S., Hermstrüwer, Y., Hoeft, L. and Langenbach, P., Eds. (work in progress). Verhaltenswissenschaftliche Analyse des öffentlichen Rechts.

O'Hara, L. (work in progress b). Die psychische Dimension des Regierens – Kategorien und Grundsätze der Verarbeitung staatlicher mentaler Einwirkungen im öffentlichen Recht.

O'Hara, L. (work in progress c). Institutionelle Vorkehrungen gegen antirationale Politik. Institutionenanalytische Perspektiven auf die Stabilität des deutschen Staatsrechts.

O'Hara, L. (work in progress d). Zur Aussagekraft rangtheoretischer Analysen der Rechtsordnung – Kommentar zur Abhandlung von W. Spohn: Nicht-monotone Normlogik als qualitative Entscheidungstheorie.

O'Hara, L. and Rahal, R. (work in progress). Context-dependence of Normative Judgments? Patterns in Perceptions of Normative Force, Risk and Threat, and Ethical Dilemmas – Evidence From a Longitudinal Survey Study During the COVID-19 Epidemic and Beyond.

Lectures and Presentations (since 2017)

2018

Introduction to Nudging and other Types of Behavioral Interventions
Panel Discussion with Avishalom Tor and Kai Purnhagen, Bucerius Law School
12 November 2018

2019

Comment on W. Spohn: Nichtmonotone Normlogik als qualitative Entscheidungstheorie
AK Zurechnung, Fritz-Thyssen-Stiftung 10 October 2019

Mental Impacts of Government Action Categories and Principles of their Handling by Law
Schülertreffen MPI Bonn
30 November 2019

Teaching

Winter Term 2018/19
Hochschule der Akademie der Polizei Hamburg
– Lecture "Polizeirecht"

Winter Term 2018/19
Hochschule der Akademie der Polizei Hamburg
– Lecture „Allgemeines Verwaltungsrecht
– Lecture „Verwaltungsprozessrecht"

Summer Term 2018
Hochschule der Akademie der Polizei Hamburg
– Lecture "Beamtenrecht"

D. Research Portraits

Jerome Olsen

Overview

In the broadest sense, my research deals with the psychology of economic decision-making. Most of my projects investigate individuals' tax compliance behavior and how it is influenced by institutional settings as well as how it varies between individuals. In my most recent work at the institute, which I joined in October 2019, I focus on risky decision-making in neutral versus normative contexts, on the emergence of prosocial behavior, and on a meta-analysis of deontological versus utilitarian moral decision-making. Finally, I contribute to different large-scale collaborative science initiatives. I will provide short summaries for all of these areas of interest.

Tax Compliance Behavior

Arguments against taxes are often emotionally charged. However, little research has linked emotions to tax compliance decisions and perceptions of the authorities. In a mixed-methods study, we aimed to lay the ground by using focus groups to investigate which integral emotions are actually present during the process of paying taxes and in which specific situations they are elicited (Enachescu et al., 2019). In a representative survey, we then quantified these results and inspected associations with compliance intentions. The results revealed that noncompliance is influenced by specific emotional experiences.

We did not only investigate integral emotions, those that are causally linked to the choice-relevant event, but also conducted an experimental study on the role of incidental emotions, those that are unrelated to the decision setting and occur casually (Enachescu et al., resubmitted after revision). While self-reports and physiological measures confirmed a successful manipulation of specific emotions, we did not observe any compliance differences between different emotion conditions.

These results are not a contradiction, but reveal an important distinction. The emotions that most likely affect taxpayers are not those that occur randomly (i.e., incidental), but those that can be deliberately influenced by the authorities themselves (i.e., integral) (as discussed in Enachescu et al., in press). Such results should be of interest to policy makers who design services that try to make compliance easy and less frustrating.

Further work in the field of tax decisions concerned the role of mental accounting for differences in tax burden perceptions (Olsen et al., 2019), the cross-cultural generalizability of trust in the authorities along with deterrence power to predict tax behavior (Batrancea et al., 2019), perceptions of direct versus indirect taxes (Olsen et al., 2017), a replication study on whether taxes are disliked more than equivalent other costs (Olsen et al., 2019), the potential effects of anonymity breaches on tax decisions in the lab (Kogler et al., 2020), and information processing in classical tax experiments using MouselabWEB (Kogler et al., under review). Different follow-up projects in these areas are currently under development.

Risky Decision-Making in Different Contexts

Tax decisions can be viewed as a case of risky decisions in a normative context where the sure option (i.e., tax compliance) is the normatively expected response. Especially in economics, there is a debate whether such experiments should therefore deliberately use a context-rich experimental setting or rather one that is context-free. Together with Susann Fiedler, we are currently planning an eye-tracking experiment where we aim directly to compare tax decisions with monetarily equivalent gamble-like decisions. We will not only investigate individuals eye gaze to infer underlying cognitive processes, but also include individual measures of

Contact

olsen@coll.mpg.de

https://www.coll.mpg.de/jerome-olsen

norm espousal. We expect individuals to be more conflicted about choosing a risky option in a tax setting, especially if they identify as individuals who value following social norms. The results will add to the experimental design literature as well as to understanding differences that are driven by interindividual tendencies to follow rules and norms.

The Emergence of Prosocial Behavior

Prosocial behavior is often viewed from a dual-process framework perspective, where the case has been made that intuition should favor prosociality. However, the cumulative empirical evidence concerning this effect is mixed. Together with Susann Fiedler and Robert Lillig (in preparation), in this experimental study we argue that this effect could be a function of the proportion of prosocials and proselfs in a study sample (in terms of social value orientation), where prosociality is only intuitive for individuals with a prosocial personality. We do not only consider choice behavior, but utilizing eye-tracking we are able to investigate differences in cognitive decision processes between individuals. While we do not find the proposed moderation pattern, our results highlight the role of interindividual differences in the construction of decision situations, which are not overwritten by situational changes like induced time pressure or cognitive load. To simplify, prosocial behavior seems to depend more on personal factors (i.e., social value orientation) than on situational factors (induced intuition vs. deliberation).

Meta-Analysis of Deontological Versus Utilitarian Moral Decision-Making

Two commonly contrasted ethical frameworks in moral philosophy are deontology and utilitarianism. While deontological ethics judges an action based on moral standards, utilitarian ethics judges an action merely based on its consequences. For instance, when faced with a dilemma to sacrifice one person to save five others, deontology would argue not to sacrifice the single

person, whereas utilitarianism would argue the opposite. Drawing from a dual-process perspective, it has been argued that individuals are more prone to deontological judgments when they are in an intuitive cognitive mindset and that utilitarian judgements are promoted through deliberation. To date, a meta-analytic synthesis of this effect is missing. Together with Susann Fiedler, Rima-Maria Rahal, and Alina Fahrenwaldt, we aim to estimate the size of the cumulative effect of intuitive deontology and to identify potential boundary conditions. We have already identified the relevant studies and are now in the process of coding all study effect sizes.

Collaborative Science Initiatives

As a response to low replicability rates, the research culture in many fields, most prominently in psychology, is facing a constructive reform. The Psychological Science Accelerator (PSA) is a crowdsourced large-scale collaboration network that aims to overcome criticism that are often characteristic of single empirical studies, as, for instance, restricted samples, ungeneralizable settings, or not enough statistical power (Moshontz et al., 2018). As a member of this network, I contribute my available resources to support research endeavors that aim at conducting generalizable studies.

In this spirit of an open and cumulative science approach, I adhere to open science practices in my own primary research, by making materials, data, and code publicly available and preregistering hypotheses before data collection.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Anvari, F., Olsen, J., Hung, W. Y., & Feldman, G. (2021). Misprediction of affective outcomes due to different evaluation modes: Replication and extension of two distinction bias experiments by Hsee and Zhang (2004). Journal of Experimental Social Psychology, 92, 104052.

Kogler, C., Olsen, J. and Bogaers, R. (2020). Enhanced anonymity in tax experiments does not affect compliance. *Journal of Economic Behavior & Organization,* 177, 390-398.

Olsen, J., Mosen, J., Voracek, M. and Kirchler, E. (2019). Research practices and statistical reporting quality in 250 economic psychology master's theses: A meta-research investigation. *Royal Society Open Science*, 6, 190738.

Olsen, J., Kogler, C., Brandt, M. J., Dezsö, L. and Kirchler, E. (2019). Are consumption taxes really disliked more than equivalent costs? Inconclusive results in the USA and no effect in the UK. *Journal of Economic Psychology, 75,* 102145.

Enachescu, J., Olsen, J., Kogler, C., Zeelenberg, M., Breugelmans, S. M. and Kirchler, E. (2019). The role of emotions in tax compliance behavior: A mixed-methods approach. *Journal of Economic Psychology*, 74, 102194.

Batrancea, L., Nichita, A., Olsen, J., Kogler, C., Kirchler, E., Hoelzl, E., … Zukauskas, S. (2019). Trust and power as determinants of tax compliance across 44 nations. *Journal of Economic Psychology*, 74, 102191.

Olsen, J., Kasper, M., Kogler, C., Muehlbaher, S. and Kirchler, E. (2019). Mental accounting of income tax and value added tax among self-employed business owners. *Journal of Economic Psychology, 70,* 125-139.

Zehnter, M. K., Olsen, J. and Kirchler, E. (2018). Obituaries of female and male leaders from 1974 to 2016 suggest change in descriptive but stability of prescriptive gender stereotypes. *Frontiers in Psychology*, 9, 2286.

Olsen, J., Kasper, M., Enachescu, J., Benk, S., Budak, T. and Kirchler, E. (2018). Emotions and tax compliance among small business owners: An experimental survey. *International Review of Law & Economics*, 56, 42–52.

Moshontz, H., Campbell, L., Ebersole, C., Ijzerman, H., Urry, H. L., Forscher, P., ... Olsen, J., ... Chartier, C. R. (2018). The psychological science accelerator: Advancing psychology through a distributed collaborative network. *Advances in Methods and Practices in Psychological Science,* 1(4), 501-515.

Pietschnig, J., Gittler, G., Stieger, S., Forster, M., Gadek, N., Gartus, A., ... Olsen, J., ... Voracek, M., (2018). Indirect (implicit) and direct (explicit) self-esteem measures are virtually unrelated: A meta-analysis of the initial preference task. *PLoS ONE*, 13, e0202873.

Olsen, J., Kogler, C., Stark, J. and Kirchler, E. (2017). Income tax versus value added tax: A mixed-methods comparison of social representations. *Journal of Tax Administration*, 3, 87-107.

Articles Accepted for In-Principle Publication (Registered Reports) or Under Review

Bago, B., Aczel, B., Zoltan, K., Protzko, J., Kovacs, M., Nagy, T., … Olsen, J., … Chartier, C. R. (in principal stage 1 acceptance). Moral thinking across the world: Exploring the influence of personal force and intention in moral dilemma judgements. *Nature Human Behavior*.

Chen, S.-C., Szabelska, A., Chartier, C. R., Kekecs, Z., Lynott, D., Bernabeu, P., … Olsen, J., … Schmidt, K. (in principal stage 1 acceptance). Investigating object orientation effects across 14 languages. *Psychonomic Bulletin & Review*.

Jones, B. C., DeBruine, L., Flake, J. K., Aczel, B., Adamkovic, M., Alaei, R., … Olsen, J., … Chartier, C. R. (in principal stage 1 acceptance). Social perception of faces around the world: How well does the valence-dominance model generalize across world regions? *Nature Human Behavior*.

Enachescu, J., Puklavec, Z., Olsen, J. and Kirchler, E. (resubmitted after revision). Tax compliance is not fundamentally influenced by incidental emotions: An experiment. *Economics of Governance.*

van den Akker, O., Weston, S. J., Campbell, L., Chopik, W. J., Damian, R. I., Davis-Kean, P., … Olsen, J., … Bakker, M. (under review). Preregistration of secondary data analysis: A template and tutorial. *Advances in Methods and Practices in Psychological Science.*

Kogler, C., Olsen, J., Müller, M. and Kirchler, E. (under review). Information processing in tax decisions: A MouselabWEB study on the Allingham and Sandmo model of income tax evasion. *Journal of Behavioral Decision Making.*

Olsen, J., Kogler, C., Kirchler, E., Batrancia, L. and Nichita, A. (under review). Trust in authorities and power of authorities are both associated with shadow economy and corruption: A 44-nation study. *Regulation & Governance.*

Book Chapters

Enachescu, J., Puklavec, Z., Bauer, C., Olsen J., Kirchler, E. and Alm, J. (in press). Incidental emotions, integral emotions, and decisions to pay taxes. In M. M. Erdogdu, L. Batrancea and S. Cevik (Eds.), *Behavioral public finance: Individuals, society and the state.* London: Routledge.

Olsen, J., Kapferer, T. and Kirchler, E. (2020). Comparación psicológica del impuesto sobre la renta y el impuesto al valor agregado: Representaciones sociales, registro mental y cumplimiento. In C. A. Ruiz Jiménez (Ed.), *Derecho tributario y derechos humanos: Diálogo en México y el Mundo* (445-476). Cuauhtémoc, Mexico: Tirant lo blanch.

Olsen, J., Kang, M. and Kirchler, E. (2018). Tax psychology. In A. Lewis (Ed.), *The Cambridge handbook of psychology and economic behaviour* (2nd edition, 405-429). Cambridge: Cambridge University Press.

Kasper, M., Olsen, J., Kogler, C., Stark, J. and Kirchler, E. (2017). Individual attitudes and social representations about taxation, tax avoidance, and tax evasion. In Y. Epifantseva and N. Hashimzade (Eds.), *Routledge companion to tax avoidance research* (289-303). London: Routledge.

Lectures and Presentations (since 2017)

Studying Tax Behavior: An Overview of Current Research Methods (invited)
3rd International Taxpayer Rights Conference, Amsterdam, The Netherlands
3-4 May 2018

Questionable Research Practices and Statistical Reporting in Economic Psychology Master's Theses: A Meta-Research Investigation (invited)
Department Colloquium, Social Psychology, Tilburg University, Tilburg, The Netherlands
30 November 2018

Teaching

Summer term 2017
University of Vienna, Austria
Seminar zur Bachelorarbeit
[Bachelor's thesis seminar]

Summer term 2017
University of Vienna, Austria
Forschungswerkstatt
[Research workshop]

Winter term 2017/2018
Summer term 2018
Winter term 2017/2018
Summer term 2019
University of Vienna, Austria
Vertiefungsseminar Arbeit, Wirtschaft und Gesellschaft: Methoden der Wirtschaftspsychologie
[Advanced seminar work, economy, and society: Methods in economic psychology]

Winter term 2017/2018
Summer term 2019
University of Vienna, Austria
Seminar zur Masterarbeit
[Master's thesis seminar]

Professional activities

Member of the expert group for the evaluation of horizontal tax monitoring of the Austrian Ministry of Finance

D. Research Portraits

Matthias Praxmarer

Overview

I joined the institute as a Research Fellow on 1 October 2017. Since October 2018, I have been a Senior Research Fellow after completing my doctoral studies at the Economics Department of the University of Cologne. Prior to joining the Experimental Economics Group (EEG), I was a Research and Teaching Assistant at the chair of "Economics: Design & Behavior" at the University of Cologne (starting in March 2015). My research is in the fields of behavioral and experimental economics, with a focus on applied microeconomics, organizational economics, and political economy. I predominantly use laboratory and (artefactual) field experiments to address my research questions. In particular, I focus on the role of information in the contexts of intergenerational decision environments, moral decision-making, and team work.

Prosociality in Intergenerational Decision Environments

In two projects, we aim to understand the role of age in prosocial decision-making with the use of artefactual field experiments. Drawing on subjects from the Austrian population, these projects investigate whether and how age is related to prosocial decision-making, and how the interaction of subjects from different generations affects cooperation and generosity.

In Romano et al. (2020), we implement institution-free environments (dictator game and prisoner's dilemma game) to test whether decision makers condition prosocial decisions and beliefs when receiving information about the generation of the interaction partner. We find that participants cooperate more with older generations than with younger generations. This pattern is particularly strong in the youngest generation. In addition, the data reveal that age is positively correlated with generosity and that the oldest generation shows higher levels of unconditional cooperation when they are matched with the youngest cohort. Finally, we argue that prosocial choices are not associated with an in-group bias towards the own age cohort.

In Praxmarer, Rockenbach, and Sutter (work in progress), we implement a repeated prisoner's dilemma game with institutionalized third-party punishment with juniors (students) and seniors (50+ years). In this set-up, players always interact with players of the same generation, while observers belong either to the same or to the other generation. The aim of this paper is twofold. Firstly, we want to look at generational differences in cooperative attitudes. Secondly, we test whether and how the efficiency of punishment varies with the generation of the third-party punisher, i.e., the punisher as a peer versus the punisher belonging to the other generation (which allows us to look at potential intergenerational norm transmission). We find that members of the older generation achieve significantly higher cooperation rates than members of the younger generation. Moreover, members of the older generation punish norm violations more often than members of the younger generation. Interestingly, the generation of the third party has no impact on the aggregated cooperation rates in either generation.

Moral Decision-Making

A rather different point about the importance of information in a social context is addressed in Praxmarer (work in progress). This project examines whether and how relative income concerns affect the honesty of decision-makers. To test the impact of information about a peer's income (which sets a social reference point) on honesty, we confront decision-makers either with a high or a low peer income. The results show that decision-makers act dishonestly in both high and low peer-income situations. Yet, dishonest behavior is

Contact

praxmarer@coll.mpg.de

https://www.coll.mpg.de/matthias-praxmarer

significantly more frequent in the high peer-income situation than in the low peer-income situation. Consequently, relative income concerns affect the honesty of decision-makers, and thus are correlated with moral perceptions.

In Gretschko, Fugger, and Praxmarer (work in progress), we investigate favoritism in procurement auctions and aim to shed light on manipulations in procurement auctions (multi-billion dollar mechanisms used by big industrial companies and public authorities) caused by the typical principal-agent set-up. While corruption and exogenous favoritism are rather easy to detect and to "punish", this project proposes and tests another form of manipulation: endogenous favoritism (e.g., through co-working and ongoing business relationships).

Team Decision-Making

Buffat, Praxmarer, and Sutter (work in progress) contribute to the literature on the intrinsic (psychic) valuation of decision rights. In this project, we compare how decision-makers – either individuals or teams – value decision rights. In particular, we look at the instrumental (the objective and rational value of a decision right) and intrinsic (psychological benefits of holding a decision right) values of individuals and two-person teams. Our experimental results are threefold. First, we can replicate previous findings by showing that individual decision-makers do intrinsically value decision rights. Second, we find that the intrinsic value of individuals and teams are of comparable magnitude in the aggregate. Third, our results suggest that the individual acceptance and satisfaction of team members with their team decisions have a huge impact on the intrinsic valuation of a decision right. If both team members are satisfied with the decision-making process in their team, the intrinsic value is half of the value of individual decision-makers and partly consistent with the hypothesis of teams as fully rational decision-makers.

However, if there is conflict in teams, then the intrinsic value of possessing the decision right becomes very high – even higher than for individuals.

In Monteiro, Praxmarer, and Sutter (work in progress), we study correlation neglect in belief formation by individuals and teams. In this project, we contribute to the existing research showing (in very different settings) that a large number of people neglect correlations in information (e.g., signals, actions), which has a tremendous impact on the belief formation and subsequently also affects decisions. In this project, we aim to understand how such information structures affect the belief formation in teams. Furthermore, our experimental design allows us to provide more sophisticated insights on the different foundations of this phenomenon by opening the black box of the belief formation process via communication protocols of team decision-making.

A more general overview on differences between individual and team decision-making and potential benefits for organizations is presented in Kocher et al. (2020).

Outlook

Intergenerational decision-making, inequality, and redistribution. This research agenda builds on my previous work on inter- and intragenerational decision-making. In particular, we want to use our insights to examine the importance of both vertical and horizontal redistribution policies on the distributional preferences of decision-makers.

Team decision-making. I would also like to continue my research on team decision-making with an emphasis on belief formation processes in teams and individuals, and a systematic analysis of the role of the group size on decision outcomes in strategic and non-strategic decision environments.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Romano, A., Bortolotti, S., Hofmann, W., Praxmarer, M. and Sutter, M. (forthcoming). Generosity and Cooperation Across the Life Span: A Lab-in-the-Field Study. *Psychology and Aging*.

Book Chapter

Sutter, M., Kocher, M. and Praxmarer, M. (2020). Team Decision-Making. In: *Handbook of Labor, Human Resources and Population Economics*, Cham: Springer, 1–25.

Dissertation

Praxmarer, M. (2018). The role of social cues and social reference points in economic decision-making. Dissertation, Universität zu Köln.

Work in Progress

Buffat, J., Praxmarer, M., Sutter, M., The Intrinsic Value of Decision Rights: Team vs. Individual Decision-Making.

Fugger, N., Gretschko, V., Praxmarer, M., Favoritism in Procurement Auctions.

Praxmarer, M., Social Reference Points and (Dis)Honest Behavior.

Praxmarer, M., Monteiro, S., Sutter, M., Correlation Neglect in Belief Formation: Experimental Evidence From Groups.

Praxmarer, M., Rockenbach, B., Sutter, M., Cooperation under Third-Party Punishment: Experimental Evidence from Two Adult Generations.

Teaching

Summer term 2019
University of Cologne
Seminar in Behavioral Economics

Summer term 2020
University of Cologne
Seminar in Behavioral Economics

Shambhavi Priyam

Overview

I am a third-year PhD student in the Experimental Economics Group of the Max Planck Institute for Research on Collective Goods and the University of Cologne. Prior to stating my doctoral studies, I was working as a Field Research Associate at the Abdul Latif Jameel Poverty Action Lab in India. My research concentrates on behavioral development economics, where I study decision-making and behavioral change through field-based studies. It is focused primarily on two areas (i) time, risk, and other-regarding preferences, and (ii) beliefs and social norms.

Time, Risk, and Other-Regarding Preferences

This large-scale study has been taking place in rural Bangladesh since 2017, in collaboration with Matthias Sutter, Hannah Schildberg-Hörisch, Laura Breitkopf, and Shyamal Chowdhury. As part of this study, we conduct field experiments in more than 4,000 households, spanning 150 villages. In each of the households, we run tests of preferences with the male and female household heads and their children. This way we have a long-term mapping of development of preferences at the family level. Bangladesh is a crucial location for this study, as it is among the fastest-growing economies, where the poverty dropped from 31.5% in 2010 to 24.3% in 2016. We look to study, among other topics, the subjects mentioned below. Our analysis looks at the entire family, thus studying how these preferences get transmitted within these families:

Malleability of preferences: Cross-sectional studies of preferences may be limited in their approach to study how changing economic circumstances would change preferences. The most ideal method to study malleability would be to assign economic circumstances to households randomly. To tackle this issue in the most efficient way, we follow families over a long period of time, measuring their income and other household variables, and playing games measuring time preferences, risk preferences, and other-regarding preferences. This study is currently in its third wave.

Preferences affecting behavior of children: Here we try to study what effect preferences have on the behavior of children and adolescents. Using the extensive data on families, we try to measure the predictive power of preferences for members of the same family. Here, we try to explore whether it is family environments or preferences that correlate with outcomes like risky behaviors, prosociality, and externalizing behaviors.

Family affecting the behavior of children: Parenting styles can affect the labor force of the following generation, and should therefore be studied particularly for its links for human capital formation. Children's skills and attitudes evolve as a function of endowments and parental inputs. Most of the literature studying parenting uses test scores as outcomes in WEIRD populations. It often ignores non-cognitive and emotional skills, which is a focus of our work.

Beliefs and Social Norms

Social norms and belief in health: Arsenic-contaminated groundwater is consumed by approximately 100 million people worldwide and has severe health consequences. Using an RCT conducted in India (with Matthias Sutter and Daniel Salicath), we test the effectiveness of an information-based intervention, focused on spreading awareness about arsenic in the groundwater and mitigation techniques. We use this context to study how social norms and beliefs affect how people act on new information about safe water use. Despite the importance of the role of social norms and beliefs in influencing behavior, there has been little research using them to understand

Contact

priyam@coll.mpg.de

https://www.coll.mpg.de/shambhavi-priyam

information interventions better; we look to connect these strands of research. We use incentivized social-norm experiments across 150 villages to see how our intervention changes norms.

Beliefs in classrooms about risky behavior: This is a field study conducted in four schools across Germany (with Matthias Sutter and Sebastian Schneider). Here, we examine how the risky behavior of adolescent students, in particular drinking alcohol and smoking cigarettes, is dependent on beliefs about their peers. Using a measure for social perception bias about the behavior of students, depending on the size of their classroom social networks, we find that within one's classroom, their spending on these risky items is positively correlated with their beliefs about their friends' spending, and also the beliefs their friends have about their own peers. The study also finds that most students overestimate their peers' spending on these items, but are less biased as they become more central to the classroom networks.

Working Papers

Breitkopf L., Chowdhury S., Priyam S., Schildberg-Hörisch H., Sutter M. (2020). Do Economic Preferences of Children Predict Behavior? *DICE Discussion Paper* No 342.

Lectures and Presentations (since 2017)

2018

Preferences and Life Outcome of Children and Adolescents in Bangladesh
Experimental Economics Group: Inaugural Conference, Bonn
May 2018

Preferences and Life Outcome of Children and Adolescents in Bangladesh
Advances in Field Experiments, Boston
October 2018

Preferences and Life Outcome of Children and Adolescents in Bangladesh
Max Planck Forum, Bonn
November 2018

2019

Examining Social Networks in German Classrooms
BIM Workshop, Innsbruck
February 2019

Social Norms and Beliefs about Health Benefits: Experimental Evidence from Bihar, India
(with Daniel Salicath)
Spring School in Behavioral Economics, San Diego
March 2019

Rima-Maria Rahal

Summary Report

Following the completion of my PhD at the institute from 2014-2018, I remained a guest researcher in Susann Fiedler's group on cognitive processes underlying economic decision-making, otherwise working at the Department of Social Psychology at Tilburg University. My work focuses on investigating the cognitive mechanisms underlying people's decision-making via recordings of eye gaze, and on understanding the affective processes involved in decision-making via recordings of skin-surface temperature.

Although it is not always easy to understand which choices people make in many social, moral, economic, and even legal contexts, much research has been devoted to uncovering the preferences of decision-makers and studying choice outcomes. Even less straightforward is the investigation of what drives decision-makers to make the choices they opt for. Asking the decision-makers for their reasoning or emotions experienced while making a decision may perturb the decision-making process itself. Therefore, unobtrusive tools are needed to study such mechanisms underlying decision behavior. This exploration of the underlying cognitive and affective mechanisms of decision-making is my core research interest.

Eye-tracking, used mainly to study cognitive mechanisms by observing attention allocation, search patterns, and fixation-level data (for an overview, see our methods paper on the promise of using eye-tracking in social psychological research: Rahal & Fiedler, 2019), allows us – inter alia – to make visible the struggles that decision-makers face while choosing between different options. Assessing whether and how decision-makers interact with different aspects of the visual stimuli representing the choice options allows inferences about their priorities and a weighting of different parts of the choice prob-

lem. Putting this technology to use in intergroup dilemmas, we studied the decision-makers' struggles to decide between their acting according to their personal preferences for cooperating with others, and following the group norm to favor the ingroup and discriminate against the outgroup (Rahal, Fiedler, and De Dreu, 2020). For instance, our research in the context of intergroup decisions (Rahal, Fiedler, and De Dreu, 2020) suggested that, although ingroup favoritism appears pervasive in choices, only a minority of participants visually attend to group membership information and therefore drive this effect. Those who do not view information about the others' group membership subsequently can and do not discriminate. In moral dilemmas, we studied the decision-makers' choice processes while they deliberated whether to maximize welfare or adhere to overarching moral rules, such as the prohibition of harming others (Rahal, Hoeft, and Fiedler, work in progress). Our results were not in line with the currently predominant theory about processes in moral decisions, the Dual Process Theory of Moral Judgment (Greene, 2004), but rather supported the notion that decision-makers with stronger moral preferences were faster and struggled less with making their choices compared to those with mixed moral preferences (Rahal, Hoeft, and Fiedler, work in progress). In judicial dilemmas, we studied how decision-makers balance the benefits and costs of damages judgments to perpetrators, victims, and society as a whole (Engel and Rahal, work in progress). We show that decision-makers indeed engage in balancing, and that their gaze patterns can be used to predict choices even in this complicated context. In each of these projects, studying eye gaze allows a fine-grained investigation of the way decision-makers cognitively deal with a decision problem.

Thermal imaging allows continuous high-resolution recordings of skin tem-

Contact

rahal@coll.mpg.de

https://www.coll.mpg.de/rima-maria-rahal

perature (Kistler et al.,1998). In doing so, tracking affective processes underlying behavioral outcomes becomes possible in an unobtrusive manner: Unlike affective measures such as the Galvanic Skin Response, which requires participants to make physical contact with the measurement device at all times, infrared thermal imaging can be used non-invasively, i.e., without interfering with the participants' bodies. Further, infrared thermal imaging does not rely on decoding facial behavior to infer affect (for a discussion of the shortcomings of inferring emotions from facial behavior, see Barrett, Adolphs, Marsella, Martinez, and Pollak, 2019). Instead, infrared thermal imaging relies on tracing thermal responses of the skin sparked by autonomous reactions of the nervous system. This makes infrared thermal imaging a promising technology for tracking affective processes generally, and in particular for assessing autonomous responses by the nervous system. We have used thermal imaging to study affective processes in judgments of veracity (Rahal, Siebers, Sleegers, and van Beest, work in progress). People tend to be bad at explicitly detecting lies, rarely deviating in accuracy from chance levels. However, physiological responses may yield higher levels of accuracy in differentiating lies from the truth. Specifically, if facing deception induces threats in observers, the physiological responses regulated by the autonomic nervous system may respond even if no explicit detection of deception occurs. In line with this argument, fingertip temperatures decreased while observers where confronted with a lie compared to a true story, even though explicit and indirect lie detection had failed. Further, we plan to study the affective responses involved in prosocial decision-making (Rahal and van Beest, work in progress), aiming to use thermal imaging to study whether thermal patterns of joy predict generosity in line with the expectation that giving creates a warm glow in givers (Andreoni, 1989). Further, we examine whether thermal patterns of guilt can predict generosity, in line with the expectation that people give to avoid feeling guilty (Charness and Dufwenberg, 2006). To be able to use thermal imaging in investigations of economic decision-making, much methodological groundwork will need to be done, such as evaluating whether reliable thermal patterns of affect can be established through changes in the surface temperature of different facial regions.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Rahal, R.-M. and van Beest, I. (forthcoming). Conflict and Competition, *The Routledge Encyclopedia of Psychology in the Real World*.

Rahal, R.-M., Fiedler, S. and De Dreu, C.K.W. (2020). Prosocial Preferences Condition Decision Effort and Ingroup Biased Generosity in Intergroup Decision-making. *Scientific Reports*, 10(10132).

Rahal, R.-M. and Fiedler, S. (2019). Understanding Cognitive and Affective Mechanisms in Social Psychology through Eye-tracking, *Journal of Experimental Social Psychology*, 85.

Rahal, R.-M. (2018). The Fire Burns Within: Individual Motivations for Self-Sacrifice. *The Behavioral and Brain Sciences*, 41.

Bouwmeester, S., Verkoeijen, P. P. J. L., Aczel, B., Barbosa, F., Bègue, L., Brañas-Garza, P., ... Wollbrant, C. E. (2017). Registered Replication Report: Rand, Greene, and Nowak (2012). Perspectives on Psychological Science: A *Journal of the Association for Psychological Science,* 12(3), 527–542.

Working Papers

Engel, C. and Rahal, R.-M. (2020). Justice is in the Eyes of the Beholder – Eye-Tracking Evidence on Balancing Normative Concerns in Torts Cases. *MPI Discussion Paper* 2020/3.

Rahal, R.-M. and Heycke, T. (2020). Hoarding in Science, No Thanks. Openness and Transparency in Crisis Mode and Beyond. *MetaArXiv*.

Steinhardt, I., Fischer, C., Heimstädt, M., Hirsbrunner, S. D., Ikiz-Akıncı, D., Kressin, L., ... Rahal, R.-M. ... and Wünsche, H. (2020). Das Öffnen und Teilen von Daten qualitativer Forschung: eine Handreichung. (Opening up and sharing data from qualitative research: A primer) *Weizenbaum Series*, 6.

Rahal, R.-M. and Havemann, J. (2019). Science in Crisis. Is Open Science the Solution? *MetaArXiv*.

Work in Progress

O'Hara, L. and Rahal, R. (work in progress). Context-dependence of Normative Judgments? Patterns in Perceptions of Normative Force, Risk and Threat, and Ethical Dilemmas – Evidence From a Longitudinal Survey Study During the COVID-19 Epidemic and Beyond.

Rahal, R.-M., Fiedler, S. and De Dreu, C.K.W., Staying Blind to Stay Fair: Inequality-Averse Decision-Makers Avoid Group Membership Information and Ingroup Favoritism

Rahal, R.-M., Hoeft, L. and Fiedler, S., Eyes on Morals: Investigating the Cognitive Processes underlying Moral Decision-Making via Eye-Tracking.

Rahal, R.-M., Siebers, T., Sleegers, W. W. A. and van Beest, I., Your Lies Leave Me Cold: Thermal Imaging Reveals Decreased Finger Temperatures When Observing Lies – in preparation.

Rahal, R.-M. and van Beest, I., Warm Glow or Guilt Aversion? Investigating Affective Drivers of Giving via Thermal Imaging.

Awards

Commendation
Society for the Improvement of Psychological Science
2020

Conference Scholarship
OpenCon Toronto, Max Planck Society, 2018

Open Science Fellowship
Wikimedia Germany, Stifterverband, Volkswagen Foundation (5000€), 2018

Travel Award
Hermann Willkomm Foundation (140€), 2018

Dissertation Award
Associatie van Sociaal Psychologische Onderzoekers (500€), 2019

Workshop Grant
Associatie van Sociaal Psychologische Onderzoekers (1500€), 2019

Travel Award
Society for the Improvement of Psychological Science (400 AUD), 2019

Workshop Grant
International Association for Research in Economic Psychology (1200€), 2020

Workshop Grant
Fachgruppe Sozialpsychologie (250€), 2019

Lectures and Presentations (since 2017)

2017

Eyes on Morals: Investigating the Cognitive Processes Underlying Moral Decision-Making via Eye-Tracking
36th Annual Meeting of the European Group of Process Tracing Studies
Galway, Ireland
June, 2017

Using Registered Replication Reports to advance the Scientific Discourse: The Example of Intuitive Cooperation (invited)
16th Conference of the German Social Psychology Section, Ulm
September 2017

2018

Eyes on morals: Investigating the cognitive processes underlying moral decision making via eye-tracking (invited)
8th Symposium on Biology of Decision Making, Paris
May 2018

Openness and Transparency: Everyday Possibilities of Increasing Your Scientific Contribution (invited)
14th Doctoral Congress, Graz
June 2018

Eyes on Morals: Investigating the Cognitive Processes Underlying Moral Decision-Making via Eye-Tracking
51st Congress of the German Psychological Society (DGPs)
Frankfurt am Main, Germany
September, 2018

Eyes on Morals: Investigating the Cognitive Processes Underlying Moral Decision-Making via Eye-Tracking
Conference on Decision Sciences
Konstanz, Germany
September, 2018

Eyes on Morals: Investigating the Cognitive Processes Underlying Moral Decision-Making via Eye-Tracking
Associatie van Sociaal Psychologische Onderzoekers Conference
Nijmegen, The Netherlands
December, 2018

2019

Eyes on morals: Investigating the cognitive processes underlying moral decision making via eye-tracking (invited)
Amsterdam Cooperation Lab, Vrije Universiteit Amsterdam
February 2019

Justice Is in the Eyes of the Beholder – Eye-Tracking Evidence on Balancing Normative Concerns in Torts Cases
38th Annual Meeting of the European Group of Process Tracing Studies
Dresden, Germany
June, 2019

Finding, Using, and Making Open Educational Resources
Meeting of the Society for the Improvement of Psychological Science
Rotterdam, The Netherlands
July 2019

Eyes on Morals: Investigating the Cognitive Processes Underlying Moral Decision-Making via Eye-Tracking
27th Subjective Probability, Utility, and Decision-Making Conference
Amsterdam, The Netherlands
September 2019

Science in Crisis: Open Science as a Reform Movement (invited)
Wikimedia Germany, Berlin
September 2019

Advancing Openness and Transparency in Scientific Contributions (invited)
Karlsruhe Institute of Technology, Karlsruhe
September 2019

Using Economic Games to Uncover Cognitive Processes
Section Meeting Personality Psychology (DPPD)
Dresden, Germany
September 2019

A Practical Introduction to Open Science Framework Tools (invited)
Max Planck Institute for Demographic Research, Rostock
October 2019

Eyes on morals: Investigating the cognitive processes underlying moral decision making via eye-tracking (invited)
Heinrich Heine University, Düsseldorf
November 2019

Your Lies Leave Me Cold: Using Infrared Thermal Imaging to Assess Implicit Deception Detection
Associatie van Sociaal Psychologische Onderzoekers Conference
Wageningen, The Netherlands
December 2019

2020

Prosocial Preferences Condition Decision Effort and Ingroup Biased Generosity in Intergroup Decision-Making (invited)
Leiden University
February 2020

Advancing Openness and Transparency in Scientific Contributions (invited)
Leiden University
February 2020

Advancing Openness and Transparency in Scientific Contributions (invited)
Mannheim University
February 2020

From Crisis to Credibility: An Overview of the Open Science Movement
General Meeting of the European Association of Social Psychology
Krakow, Poland,
2020 (conference cancelled)

Your Lies Leave Me Cold: Using Infrared Thermal Imaging to Assess Implicit Deception Detection
52nd Congress of the German Psychological Society (DGPs) / 15th Austrian Psychological Society Congress (ÖGP)
Vienna, Austria,
2020 (conference cancelled)

Your Lies Leave Me Cold: Using Infrared Thermal Imaging to Assess Implicit Deception Detection
62nd Meeting of Experimental Psychologists (TEAP)
Jena, Germany,
2020 (conference cancelled)

Teaching

2017, & 2019
Center for Economics and Neuroscience at the University of Bonn
Introduction to Eye-Tracking (graduate lecture), Introduction to Social Decision-Making (graduate lecture), Empirical Paradigms in Morality and Prosociality Research (graduate lecture)

2018
Goethe University Frankfurt
Experimental Psychology (undergraduate course)

2019, 2020
Tilburg University
Social Cognition (undergraduate course, course coordinator)

2020
Cusanuswerk
Simulations and Experiments on Economic Decision-Making (spring school course, course coordinator)

2020 (cancelled)
German Academic National Foundation
Of Detective Work and Storytelling: Evidence in the Empirical Sciences (spring school course, course co-coordinator)

D. Research Portraits

Online Resources

Good Science is Reproducible Science
Science in the Classroom, 2017. https://www.scienceintheclassroom.org/research-papers/good-science-reproducible-science.

Next-Generation Researchers and Open Science at the University (blog post)
Rahal, R.-M., Fischer, C. and Behrens, S. (2019). Generation R. https://genr.eu/wp/next-generation-researchers-and-open-science-in-the-university/

Open for Insight (online course)
https://www.tilburguniversity.edu/research/open-science-community/open-education-lab/open-insight, 2020.

Bachelor's Thesis Supervision

Calibrating the Moral Compass between the Virtue of Many and the Wisdom of One: An Inquiry into the Informational Effects of Descriptive Norms on Moral Dilemma Resolution in Real-Life Context (Goethe University Frankfurt, 2018)

Facial Temperature as Social Cues of Trustworthiness (Tilburg University, 2019)

Norm Violation Expectations and Third-Party Punishment (Tilburg University, 2019)

Noise in Social Dilemmas (Tilburg University, 2019, 2020)

Master's Thesis Supervision

Cold Lies? A Physiological Approach to Detect Deception (Tilburg University, 2019, co-supervision)

Social Thermoregulation: A Multi-Lab Collaboration (Tilburg University, 2020)

Workshops (PhD level)

Finding, Using, and Making Open Educational Resources (SIPS, Rotterdam, 2019). https://osf.io/7t98s/

A Practical Introduction to Open Science Framework Tools (MPIDR, Rostock, 2019). https://osf.io/59tu3/

Professional Activities

Associate Editor

Collabra: Psychology

Ad hoc Reviewer

Journal of Experimental Psychology: Learning, Memory, and Cognition, *Judgment and Decision Making*, *Journal of Behavioral and Experimental Economics*, *Acta Psychologica*, *Philosophical Psychology*, *PLOS ONE*, *Collabra: Psychology*, *Social Cognition*

Grant Reviewer

National Science Center Poland. Fellowship Free Knowledge

Memberships

European Association for Decision Making, Society for Judgment and Decision Making, German Psychological Society (DGPs), Economic Science Association, Society for the Improvement of Psychological Science, Associatie van Sociaal Psychologische Onderzoekers

Sebastian Riedmiller

General statement

In October 2020, I joined the Max Planck Institute for Research on Collective Goods as a doctoral candidate within the IMPRS BeSmart, hosted together with the University of Cologne's Graduate School of Economics. Within the MPI, I became a member of the EEG led by Matthias Sutter, whose research focus aligns with my interests in behavioral and experimental economics. During my Master's studies, I worked as a research assistant at the Chair of Finance at the University of Münster, led by Thomas Langer, where I engaged in ongoing projects on behavioral economics and helped design and conduct an experiment. I hold a Bachelor and a Master's degree in economics from the University of Münster.

Master's Thesis

For my thesis, I developed a new scenario-based survey approach for tax morale, measured as individual attitudes towards private and business income-tax evasion in order to test the existence of a self-serving bias. According to this bias, tax evasion is perceived as justifiable if it is exploitable for oneself. Thus, self-employed taxpayers, employees with additional cash income, and employees without additional cash income should show differences in their tax morale, based on scenarios of private and business income tax evasion. Data from an online survey support the bias, since subjects with different opportunities to evade perceive tax evasion as justifiable only in scenarios where they can exploit in the real world themselves. Hence, employees who face tax withholding on average show significantly higher tax morale compared to self-employed individuals. In a next step, the survey approach was applied during an online experiment to validate the survey approach and to analyze the relationship between the self-serving

bias and tax-evasion behavior more closely. However, the validation of the survey scales was unsuccessful, since no distinguishing of the participants between the justifiability of private and business income-tax evasion was found. Surprisingly, when analyzing average tax morale, the findings even contradict the self-serving bias as a higher opportunity to evade based on employment status led to lower experimental tax evasion. Thus, further research in this direction is necessary, namely research on how the self-serving bias influences tax evasion to derive meaningful policy implications to reduce tax evasion by exploiting this relationship.

Research Agenda

My plan for future research is to explore the research areas of the EEG by engaging in current projects of my fellow colleagues, to begin with. In this regard, I am most interested in investigating how fairness, morale, and social norms promote efficient social interactions or lead to anti-social behavior. Furthermore, I am highly interested in continuing the most promising research of the EEG concerning the development of economic preferences of children and their influence on the children's future life.

Contact

riedmiller@coll.mpg.de

https://www.coll.mpg.de/
sebastian-riedmiller

D. Research Portraits

Angelo Romano

Overview

I joined Matthias Sutter's team at the MPI on 1 October 2017 and left the institute at the end of December 2019. Before that, I was a double PhD student at the University of Turin and the Vrije Universiteit Amsterdam. During my two years at the Max Planck institute, I worked on two main topics: (1) the cross-cultural variation of trust and cooperation within and between nations, and (2) the development of cooperation in young children and adults.

(1) The Cross-Cultural Variation of Trust and Cooperation Within and Between Nations

Individuals tend to trust – and cooperate more with – ingroup members, compared to outgroup members and strangers. This phenomenon is widely investigated across different disciplines. However, there is still much discussion in the trust and cooperation literature on why and in which circumstances this behavior occurs.

During my stay at the MPI, I finalized the revision of a project where I run a cross-cultural experiment involving 17 countries to examine questions on *why*, *who*, and *where* individuals tend to favor ingroup members, compared to outgroup members. To address these questions, I investigated the role of reputation, social preferences, gender, and cultural aspects of specific societies, in a trust game. We found people were motivated to trust and cooperate more with their ingroup than harm the outgroup. We found that reputational concerns increased cooperation with both ingroup and outgroup members. We also found that people who are dispositionally cooperative are less parochial and more universal in their cooperation. Overall, our findings suggest that in all societies there exist people whose cooperation transcends group boundaries and provides a

solution to combating parochialism, reputation-based indirect reciprocity. This project was published in a top-tier international journal (Romano, Balliet, Yamagishi and Liu, *Parochial Trust and Cooperation Across 17 Societies*, PNAS).

Secondly, together with Matthias Sutter, we conducted a large cross-societal experiment to investigate parochial cooperation in 42 societies. In this project, we observed cooperation in a prisoner's dilemma with ingroup, outgroup, and unidentified partners. In a first paper, we found national parochialism is a ubiquitous phenomenon around the globe: it is present to a similar degree across societies and cultures, is independent of distance to common ancestry, and occurs both when decisions are private or public. These findings inform existing theories of parochialism and warn us about an obstacle to the provision of global public goods. The manuscript is currently under review at *Nature Communications.* In a second project, we investigated whether individual differences in political ideology affect cooperation and national parochialism across societies. We found that liberals, compared to conservatives, cooperate more with others (independently of group membership) and discriminate less. The manuscript is currently in preparation and will be submitted as an invited paper for a special issue of *Philosophical Transactions of Royal Society B*.

(2) The Development of Cooperation in Young Children and Adults

In another line of research, I investigated the roots of cooperation in young children. This project was a collaboration with other team members (Zvonimir Bašić, Claudia Zoller, and Matthias Sutter). We successfully conducted a large-scale lab-in-the-field experiment, designed to test hypotheses on the existence, relative importance, potential development, and prerequisites of cooperation and its three fundamen-

Contact

a.romano@fsw.leidenuniv.nl

https://www.coll.mpg.de/angelo-romano

tal pillars (direct reciprocity, indirect reciprocity, and altruistic punishment) in young children. To do so, we devised a highly-controlled experimental design to study cooperation of young children from 19 kindergartens located in Tyrol, Austria. The cooperation task of the experiment was run on tablets using new animated software, designed and programmed exclusively for the purposes of this study. Cooperation was assessed by means of an iterated two-person prisoner's dilemma, which was specially adapted for children. We found that altruistic punishment was the only mechanism that promoted cooperation in young children. Although children were able to reciprocate others directly and indirectly, we did not find that reciprocity had a positive significant effect on cooperation. We are currently in the process of writing up two papers from the collected data of this project.

In a second project, in collaboration with other team members (Matthias Sutter, Stefania Bortolotti, and Matthias Praxmarer), we investigated how cooperation and generosity develop across age (18 to 90 years). To do so, we ran a lab-in-the-field experiment in Austria. We found that individuals used age as key information to condition behavior. Generosity was greater among older adults in response to younger and older partners, relative to middle-aged partners. Among younger adults, cooperation was greater in response to middle-aged and older partners relative to their own age cohort. All age groups expected less cooperation from young partners than from older and middle-aged partners. However, relative to young adults, older adults were more cooperative with young partners. The findings of these project were published in *Psychology and Aging*.

(3) Other Projects

Over the past three years, I have been involved in several other projects. These projects are still related to cooperation within and between groups, including an investigation on the effects of punishment in groups of different sizes (Wu et

al., 2020), a project where I investigate the interplay of conformity and reciprocity to promote cooperation (Romano & Balliet, 2017), and a project on the relation between reputation and group membership (Romano, Balliet and Wu, 2017).

Publications (since 2017)

Articles in Peer-Reviewed Journals

Romano, A., Bortolotti, S., Hofmann, W. Praxmarer, M. and Sutter, M. (forthcoming). Generosity and Cooperation across the Life Span: A Lab-in-the-Field Study. *Psychology and Aging*.

Romano, A., Sutter, M., Liu, J. and Balliet, D. (forthcoming). Political ideology, cooperation, and national parochialism across 42 nations. Philosophical Transactions of the Royal Society B.

Romano, A., Sutter, M., Liu, J., Yamagishi, T. and Balliet, D. (forthcoming). National parochialism is ubiquitous around the globe. Nature Communications. (conditionally accepted).

Wu, J., Balliet, D., Peperkoorn, L. S., Romano, A. and Van Lange, P. A. (2020). Cooperation in Groups of Different Sizes: The Effects of Punishment and Reputation-Based Partner Choice. *Frontiers in Psychology, 10*, 2956.

Romano, A., Balliet, D., Yamagishi, T. and Liu, J. H. (2018, online first). Reply to De Dreu: Shared Partner Nationality Promotes Ingroup Favoritism in Cooperation. *Proceedings of the National Academy of Sciences*.

Romano, A., Balliet, D., Yamagishi, T. and Liu, J. H. (2017). Parochial Trust and Cooperation Across 17 Societies. *Proceedings of the National Academy of Sciences, 114*, 12702-127707.

Romano, A. & Balliet, D. (2017). Reciprocity outperforms conformity to promote cooperation. *Psychological Science, 28*, 1490–1502.

Romano, A., Balliet, D. and Wu, J. (2017). Unbounded Indirect Reciprocity: Is Reputation-Based Cooperation Bounded by Group Membership? *Journal of Experimental Social Psychology, 71*, 59-67.

Manuscripts under Review or in Preparation

Bašić, Z., Bindra Parampreet, Glätzle-Rützler, D., Romano, A., Sutter, M, and Zoller, C. The Roots of Human Cooperation. Manuscript in preparation.

Romano, A., Bašić, Z., Zoller, C., Bindra, P.C., Glätzle-Rützler, D., Sutter, M. Altruistic Punishment in Young Children. Manuscript in preparation.

Awards

Otto Hahn Medal (Max Planck Society; 2019)

ASPO Award for Best Dissertation in the Netherlands (ASPO; 2018)

Junior Career Award (Vrije Universiteit Amsterdam; 2018)

Best Dissertation in Social Psychology in Italy (Italian Association of Psychologists - AIP; 2018)

Best Presentation Award (17th International Conference on Social Dilemmas; 2017)

Johannes Rottmann

Since October 2020, I have been at the institute as a doctoral student and a participant in the IMPRS on Behaviorally Smart Institutions. At the same time, I am affiliated with the University of Bonn as a Research Fellow at the Institute for Commercial and Economic Law. Before joining the MPI, I studied law, economics (LL.B. in law & economics), and political sciences (Certificate in Social Sciences and Humanities) at the University of Bonn and the Institut d'Études Politiques de Paris (Sciences Po). I recently graduated from the University of Bonn and passed the first state exam in law before the Cologne Higher Regional Court. During my studies, I have provided research and teaching assistance for Professors Beurskens and Zimmer in civil, corporate, and competition law.

Lately, I have been interested in the implications of digitization in contractual relationships and the application of civil law. In a recent publication, we touched on the question whether new technological opportunities that enable the self-enforcement of a party's (alleged) right regarding a connected device comply with the laws of property and possession, or whether they potentially infringe on the primacy of public law enforcement. Another focus of my current work lies in the field of competition law and economics, particularly in concentrations of undertakings and merger control. In an upcoming article, we analyze the application of the non-coordinated effects doctrine by the European Commission and the General Court, evaluating its conformity with the underlying economic theory, which also involves a minor statistical assessment.

Based on my new affiliation with the institute, I am committed to study quantitative methods to gain a deeper understanding of individual behavior as a regulatory matter of law, both from a theoretical and an empirical point of view. As for my dissertation topic, I can imagine testing (behavioral) assumptions put forward by legislative bodies, administrative authorities, or courts with an economic toolset. I also wish to continue working in fields of the law wherever the law governs the interaction of people with each other, as private or public entities, in order to maximize their well-being, such as market design and competition.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Rottmann, J. and Goehsl, J.-F. (forthcoming 2020). Nichtkoordinierte Effekte in der Europäischen Zusammenschlusskontrolle im Lichte der 'CK Telecoms'-Entscheidung des Europäischen Gerichts [The non-coordinated effects doctrine in European merger control law after the General Court's 'CK Telecoms' ruling]. *Zeitschrift für Wettbewerbsrecht*, 4.

Journal Articles (not peer-reviewed)

Rottmann, J., Goehsl, J.-F. and Schaut, M. (forthcoming 2020). Tagungsbericht 'Regulierung für Algorithmen [Conference Debriefing – 'Regulation for Algorithms'], *Juristenzeitung*.

Rottmann, J. and Schmid, J. (2020). Fortgeschrittenenhausarbeit – Zivilrecht: Besitzschutz bei Fernzugriff auf vernetzte Güter [Case Study: Remote access to connected devices as unlawful (digital) interference with possession?], *Juristische Schulung*, 849-855.

Rottmann, J., Goehsl, J.-F. and Schaut, M. (2020). Tagungsbericht zum kartellrechtlichen Themenblock der Tagung 'Regulierung für Algorithmen [Conference Debriefing – 'Regulation for Algorithms': Topics in Competition Law], *Neue Zeitschrift für Kartellrecht*, 528-530.

Rottmann, J. and Goehsl, J.-F. (2019). Zentrale Preissetzung auf Transaktionsplattformen der Sharing Economy – Der Fall Uber [Centralized price setting on matching platforms in the Sharing Economy – The case of Uber], *Wirtschaft und Wettbewerb*, 348-355.

Rottmann, J. and Beurskens, M. (2018). Das Ende der Gesellschaft bürgerlichen Rechts [The termination of a civil law partnership], *Juristenzeitung*, 272-277.

Contact

rottmann@coll.mpg.de

https://www.coll.mpg.de/johannes-rottmann

D. Research Portraits

Daniel Salicath

Overview

I joined the institute on 1 October 2017. Prior to joining the EEG group, I worked as a consultant assisting the All Children Reading (ACR) project team at School-to-School International in San Francisco. I hold a Bachelor degree in economics from the Université Toulouse 1 Capitole and a Master's Degree of Science (International and Development Economics) from the University of San Francisco. My research in the past years has focused on two main projects: (i) heterogeneity in effort provision; (ii) and social norms and beliefs about health benefits.

Heterogeneity in Effort Provision

Understanding how to motivate people to provide effort is of key importance for the success of firms and the economy at large. The idea stems from the observation that not everybody is best motivated by the same type of incentives. Some people thrive and express their best potential in competitive environments; others instead choke under such pressure. Some people are diligent and work hard regardless of the environment, while others need monetary rewards to be motivated. Scientific evidence offers surprisingly little guidance in understanding the underpinnings of this heterogeneity.

I have worked on a study where we test whether there is an interaction between incentives and traits/personal characteristics. Together with Bašić, Bortolotti, Cappelen, Gneezy, Schneider, Sutter, and Tungodden, we run a lab-in-the-field experiment with high-school students in Germany to gain a better understanding of how pupils with given traits respond to different compensation contracts. Most of the experimental evidence accumulated in the last decades critically relies on studies conducted with college students, which presents a limited variability along many important sociodemographic dimensions, such as age, economic background, education level, employment status, and ethnicity. We overcome these previous limitations and will have results ready by the end of 2020. We have so far collected data from over 1,500 students and plan to finish the data collection by the fall of 2020.

Social Norms and Beliefs about Health Benefits

Arsenic-contaminated groundwater is consumed by approximately 100 million people worldwide and has severe health consequences. Understanding how information is leading to change in behavior has long captured the attention of economists. However, there is still little evidence on how information interventions work, especially in a health context.

Using an RCT conducted with over 2,500 villagers in rural Bihar, India, we (with Priyam and Sutter) test the effectiveness of an information-based intervention, focused on spreading awareness about arsenic in the groundwater and mitigation techniques. We use this context to study how social norms and beliefs affect how people act on new information about safe water use. Data collection is completed, and the preliminary results will be ready soon.

Research Agenda 2021-2024

My research agenda for the coming years revolves around two main areas:

Scarcity and decision-making. Together with Sutter, I plan to run lab experiments in Kenya aimed at understanding biases, conflict, and behavior under scarcity among the poor. The project uses the payday of factory workers as an economic shock to identify when participants are influenced by scarcity. This project aims to contribute to an ongoing debate on why the poor often

Contact
salicath@coll.mpg.de

https://www.coll.mpg.de/daniel-salicath

engage in suboptimal behavior by providing causal evidence on how and why scarcity affects decision-making.

Heterogeneity in effort provision and career choices. We intend to extend the study on heterogeneity in effort provision to follow the students over time and career choices. The idea is to test whether choices about the different incentive schemes are predictive for life choices. We plan to recruit the participants for an online survey to investigate this research question.

Work in Progress

Bašić, Z., Bortolotti, S., Cappelen, A., Gneezy, U., Salicath, D., Schneider, S. O., Sutter, M., Tungodden, B. (ongoing) Heterogeneity in Effort Provision: Evidence from a Lab-in-the-Field Experiment.

Lectures and Presentations (since 2017)

2018

Improving Educational Outcomes Through Goal-Setting, Incentives, and Self-Help Groups: Experimental Evidence from Medellín, Colombia
Inaugural Conference of the Experimental Economics Group, Bonn
May 2018

Improving Educational Outcomes Through Goal-Setting, Incentives, and Self-Help Groups: Experimental Evidence from Medellín, Colombia
ESA World Meeting, Berlin
June 2018

2019

Social Norms and Beliefs about Health Benefits: Experimental Evidence from Bihar, India
(with Shambhavi Priyam)
Spring School in Behavioral Economics, San Diego
March 2019

Ali Seyhun Saral

Research Profile

I joined the institute as the lab manager in 2018. After receiving my PhD from the University of Trento in 2019, additionally I joined the Experimental Economics Group at the institute.

In addition to providing technical expertise in the experimental social sciences, and to following the state-of-the-art methods, I conduct research on the topics of cooperation, collective choice, social preferences, and social production. I use a variety of methods such as lab experiments, online experiments, analytical methods, and agent-based modeling.

Software for Experimental Social Sciences

I actively work with the researchers at the institute in order to provide them with technical expertise and to give them training in methods and technical topics. Based on our previous experience, we built a tool for experimenters to facilitate multi-language experiments using z-Tree, a common software for building experiments. In the adjunct paper to the software (Saral and Schröter, 2019), we describe potential technical challenges to re-using the software built for experiments, and we introduce our tool to overcome those issues.

Reciprocity and Cooperation

The research I conduct aims to understand how cooperation arises and in to what extent it is sustainable. Specifically, I investigate the role of reciprocity on human cooperation.

The paper *On the Stability of Conditional Cooperation* (Andreozzi, Ploner, Saral, 2020) investigates the robustness of reciprocal preferences using a lab experiment. It aims to disentangle the role of reciprocal preferences and the role of learning on the decline of cooperation.

The project entitled *The Evolution of Conditional Cooperation* (Saral, work in progress) examines the evolutionary success of conditionally cooperative strategies by using an agent-based evolutionary model, and it aims to link the experimental results in the literature with the evolutionary viability measures obtained by the simulations.

The project entitled *Presumptive Reciprocity in Dictator Games* (Andreozzi, Faillo, Saral, work in progress) approaches a different take on dictator games, as it questions whether reciprocal tendencies play a role in giving that is observed by us. To investigate, we use an experimental design to elicit conditional giving of participants conditioned on their opponents' giving preferences.

Social Choice and Social Production

In line with the research on cooperation, I investigate on how people aggregate preferences and how they can better cooperate using different aggregation mechanisms.

The project, entitled *Social Choice for Social Production* (Saral, Hennes, work in progress), experimentally and computationally investigates several voting procedures and their effect on the performance of individuals collaborating on a peer-production good.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Andreozzi, L., Ploner, M. and Saral, A. S. (2020). The Stability of Conditional Cooperation: Beliefs Alone Cannot Explain the Decline of Cooperation in Social Dilemmas. *Scientific Reports*, 10, 13610.

Saral, A. S. and Schröter, A. M. (2019). zBrac – A Multilanguage Tool for z-Tree, *Journal of Behavioral and Experimental Finance*, 23, 59-63.

Contact

saral@coll.mpg.de

https://www.coll.mpg.de/ali-seyhun-saral

Lectures and Presentations (since 2017)

2017

Stability of Conditional Cooperation
Economic Science Association European
Meeting, WU Wien
September 2017

Evolution of Conditional Cooperation
Venice Doctoral Workshop on Economics and
Management, Ca' Foscari University of Venice
September 2017

z-Tree Crash Course
Ca' Foscari University of Venice
October 2017

Reciprocity in Dictator Games
Florence-Constance join Workshop on
Behavioral and Experimental Social Sciences,
University of Florence
November 2017

2019

Data visualization in R Workshop
JDMx Meeting 2019, University of Trento
June 2019

Stability of Conditional Cooperation
Center for Empirical Research in Behavioral
Sciences, University of Erfurt, Seminar
November 2019

Stability of Conditional Cooperation
Economic Science Association European
Meeting, Burgundy School of Business, Dijon
September 2019

Julia Sasse

Summary Report

I have been a Senior Research Fellow in the "Moral Courage" research unit since May 2017. Broadly speaking, our work centers around investigating when, why, and how uninvolved bystanders intervene against witnessed moral transgressions, despite potential costs to themselves. Within this group, I investigate the functions of emotions in moral courage, with a focus on anger. In order to obtain a comprehensive understanding of these functions, I argue that it is necessary to differentiate between experienced and expressed emotions and to investigate their effects not only within a person, but within social interaction, as situations affording moral courage are social by nature. In my research, I rely on and aim to advance concepts and theories from social and personality psychology. I use various formats of investigation, such as online surveys, experiments, and behavioral observations in the lab, and I apply different methods to study emotions, ranging from self-reported experience to video-rated expression and experimental emotion induction to enable causal inferences.

While most theoretical models of moral courage assume a key role of emotions, this role is not well understood to date. In a behavioral observation study, my collaborators and I investigated various theoretically relevant emotions in response to a witnessed norm violation in the laboratory (Sasse et al., in press). We could show that witnesses first and foremost responded by experiencing anger, which in turn motivated behavioral intervention. Moreover, we found evidence that witnesses also expressed anger to communicate disapproval. These findings constitute the basis for my further investigations into the motivational and the communicative function of anger in moral courage.

Together with Anna Baumert, I am currently investigating how anger motivates intervention in a series of experiments (work in progress-a). Utilizing the context of a third-party punishment game and different techniques of anger induction, we test whether anger leads to intervention by affecting the perception or weighting of costs and benefits of intervening.

Two other projects are dedicated to gaining a better understanding of the communicative function of anger expression. In Sasse and Baumert (work in progress-b), we test whether witnesses to norm transgressions use anger expression as a substitute or complement of behavioral intervention and investigate situational and dispositional factors that may impact this decision. This project is financially supported by an EASP Seedcorn Grant. If we assume a communicative function of anger expression, it is pivotal not to limit its investigation to the expresser, but to consider its effect on the perceiver. Hence, in a second project, together with Benning, Heerdink, and Baumert (work in progress), I investigate how observers judge the norm transgression and evaluate the intervener, depending on whether intervention is carried out in a neutral or angry manner.

Apart from my research program on emotions in moral courage, I have been involved in several collaborations. I am a co-PI on a large, interdisciplinary project titled "Personalized AI-based Interventions Against Online Norm Violations: Behavioral Effects and Ethical Implications", funded by the Institute for Ethics in Artificial Intelligence at the Technical University Munich. Within this project, I serve as the day-to-day PhD supervisor to Niklas Cypris, whose work is dedicated to designing effective interventions against online hate speech, informed by insights from social psychology. As the day-to-day PhD supervisor to Daniel Toribio-Flórez, I have been involved in a project on the effects of situational ambiguity on intervention against norm

Contact

sasse@coll.mpg.de

https://www.coll.mpg.de/julia-sasse

transgressions (Toribio-Flórez et al., 2020) and a recent study on the effects of governmental physical distancing rules in response to the COVID-19 pandemic on social norms (Fahrenwaldt, Toribio-Flórez, et al., 2020). Also in the context of the COVID-19 pandemic, Küchler, Niesta Kayser, Baumert, and I (work in progress) are investigating situation and dispositional predictors of high-risk prosocial behavior.

I have further contributed to two noteworthy advancements in the understanding of moral courage. Together with Anna Baumert, Mengyao Li, and Linda Skitka, we edited the special issue "Standing Up Against Moral Violations" in the *Journal of Experimental Social Psychology* (Baumert, Li, Sasse, Skitka, 2020). Under the lead of Mengyao Li, we have further engaged in theoretical work on the concept of moral courage. We recently finalized an extensive review paper which brings together insights from a broad range of research areas. Based on the synthesis of the various literatures, we developed a parsimonious model of moral courage.

Scholarships and Honors

2019
Best Poster Award, DGPs Fachgruppentagung Sozialpsychologie, Cologne, Germany

2019-2022
"Personalized AI-based Interventions Against Online Norm Violations: Behavioral Effects and Ethical Implications", funded by the Institute for Ethics in Artificial Intelligence, Co-PI; principal investigators: A. Baumert, J. Grossklags (500,000 Euro)

2020
"It Doesn't Have to be Action: Anger Expression as Intervention Against Moral Transgressions" EASP Seedcorn Grant (3,000 Euro)

Publications (since 2017)

Articles in Peer-Reviewed Journals

Sasse, J., Halmburger, A. and Baumert, A. (forthcoming). The Functions of Anger in Moral Courage – Insights from a Behavioral Study. *Emotion*.

Baumert, A., Li, M., Sasse, J. and Skitka, L. (2020). Standing Up Against Moral Transgressions: Psychological Processes of Moral Courage. *Journal of Experimental Social Psychology*, 88, 103951, 1-3.

Ackerman, R. A., Chmielewski, M., Adler, J. M., Bach, B., Kongerslev, M. T., Baumert, A., … and Hopwood, C. J. (2018). Open Peer Commentary and Author's Response. *European Journal of Personality*, 32(5), 525–624.

Baumert, A. and Sasse, J. (2018). Personality as Interpersonal Dynamics: Understanding Within-Situation Processes and Their Recurrence Across Situations and Time. Invited Commentary. *European Journal of Personality*, 32, 525-624.

Sasse, J., Spears, R. and Gordijn, E. H. (2018). When to Reveal What You Feel: How Emotions Towards Antagonistic Out-Group and Third Party Audiences Are Expressed Strategically. *PLOS ONE*, 13(9).

Edited Volume

Baumert, A., Li, M., Sasse, J. and Skitka, L. (Eds.) (2020). Standing Up Against Moral Transgressions: Psychological Processes of Moral Courage. *Journal of Experimental Social Psychology*. [special issue]

Under Review

Li, M., Sasse, J., Halmburger, A. and Baumert, A. (2020). Standing Up Against Moral Transgressions: An Integrative Perspective on the Socio-Psychological Antecedents and Barriers to Moral Courage.

Sasse, J., Nazlic, T., Alrich, K., Frey, D. and Baumert, A. (2020). Mitigation of Justice Conflicts: Effectiveness of Qualifying Subjective Justice Views as an Intervention Technique in Comparison to Empathy Induction.

Working Papers

Sasse, J., van Breen, J., Spears, R. and Gordijn, E. (2020). When Do Women Show Their Anger at Sexism? The Rocky Road from Experience to Expression.

Toribio-Flórez, D., Sasse, J. and Baumert, A. (2020). Third-Party Punishment under Situational Uncertainty: The Moderating Role of Justice Sensitivity.

Fahrenwaldt*, A., Toribio-Flórez*, D., Sasse, J. and Baumert, A. (2020). The Effect of Governmental COVID-19 Measures on Physical Distancing Norms and Intervention against Deviations: A Case Study in Germany. (*shared first authorship)

Work in Progress

Baumert, A., Halmburger, A., Küchler, G., Sasse, J. and Wagner, J., Personality Characteristics of Moral Courage: An Extreme Groups Approach.

Sasse, J., and Baumert, A. (Work in progress-a). The Causal Effects of Anger in Moral Courage.

Sasse, J. and Baumert, A. (work in progress-b). It Does Not Have to Be Action: Anger Expression as Moral Courage.

Sasse, J., Benning, V., Heerdink, M. and Baumert, A. (Work in progress). Objecting to Norm Violation With Emotions – Fire or Backfire on Intervention Intentions?

Lectures and Presentations (since 2017)

2019

Zivilcourage Verstehen – Einblicke in Erkenntnisse und Herausforderungen Psychologischer Forschung
Courage!Congress 2019, Meißen, Germany
November 2019

2018

The Role of Anger in Moral Courage (with Halmburger, A., & Baumert, A.)
Consortium of European Research on Emotion conference, Glasgow, United Kingdom
April 2018

Why Do People Act Morally Courageous? Exploring the Role of Anger
University of Groningen, Department of Psychology, Groningen, The Netherlands
June 2018

A Social Identity Approach to (Multiple) Identities
Workshop on Multiple Identities, Weimar, Germany
July 2018

Why do People Act Morally Courageous? Exploring the Role of Anger
(with Halmburger, A., & Baumert, A.)
European Conference on Personality, Zadar, Croatia
July 2018

Fueling Moral Courage: The Role of Experienced and Expressed Anger (with Halmburger, A., & Baumert, A.)
DGPs Conference Frankfurt, Germany
September 2018

2017

Caught in the Middle? Exploring the Role of Collective Benefits and Individual Costs in Women's Willingness to Express Anger about Sexism (with van Breen, J., Spears, R., & Gordijn, E.)
Meeting "Understanding the Winds of Change: Psychological Processes that change Individuals in Intergroup Conflict"
Appingedam, The Netherlands
June 2017

Better Quiet than a Complainer? Exploring Women's (Un-)Willingness to Express Anger about Sexism (with van Breen, J., Spears, R., & Gordijn, E.)
Fachgruppentagung Sozialpsychologie, Ulm, Germany
September 2017

Teaching

Winter Term 2018
Pädagogische und Entwicklungspsychologie [Educational and Developmental Psychology]
Technical University Munich

Summer Term 2019
Development and Culture
University of Osnabrück, Germany

Public Service

Since May 2019
– Researcher Representative of the MPI for Research on Collective Goods
– Ombudsperson of the MPI for Research on Collective Goods

Professional Activities

Memberships

European Association of Social Psychology (EASP)

Deutsche Gesellschaft für Psychologie (DGPs)

Guest Editor

Journal of Experimental Social Psychology

Reviewer

Journal of Experimental Social Psychology
European Journal of Social Psychology
Frontiers in Psychology
Comparative Political Studies
Europe's Journal of Psychology

D. Research Portraits

Stefan Schmidt

Overview

In October 2019, I started as a PhD student at the University of Cologne and joined the Max Planck Institute for Research on Collective Goods as a member of the EEG led by Matthias Sutter. Already during my Master's studies, I had worked as a research assistant for the EEG, where I engaged in ongoing research projects, and for the IZA, where I supported the publications department. I hold a Bachelor and a Master's degree in Economics from the University of Bonn. My main research interests are in the areas of behavioral and experimental economics.

Master's Thesis

My thesis focused on an international dataset of children who grew up in alternative care. It reports on international experiences made in SOS Children's Villages and aims at fostering the creation of empirically supported policy measures that promote children's short-term and long-term outcomes. The data analysis isolated numerous factors that are associated with educational attainment levels, the financial situation, and the resilience outcomes of care leavers during and after the care-leaving process. Major results show that education levels particularly depend on financial restrictions in the short term. Entering parenthood during the care-leaving process and stopping the financial support too early diminish the chances of accessing higher education and lower the expected future employment outcomes. Also, a stable and supportive social environment is shown to be extremely helpful in achieving higher outcomes over the course of life, in addition to fostering resilience. This encompasses stable relationships in, e.g., marriages, the support received from natural mentors, and frequent contact to the former SOS mother.

Research Agenda

My plan for future research is to build on seminal papers by Matthias Sutter on group decision- making and inter-group behavior. I am very interested in scrutinizing the underlying mechanisms and determinants that lead individuals to alter their behavior depending on the social context. Also, I am heavily interested in collaborating with my colleagues in current projects on the origins of effort provision and competitiveness in childhood. Both avenues will add to the overall question of how, why, and when humans behave competitively and antisocially instead of cooperatively.
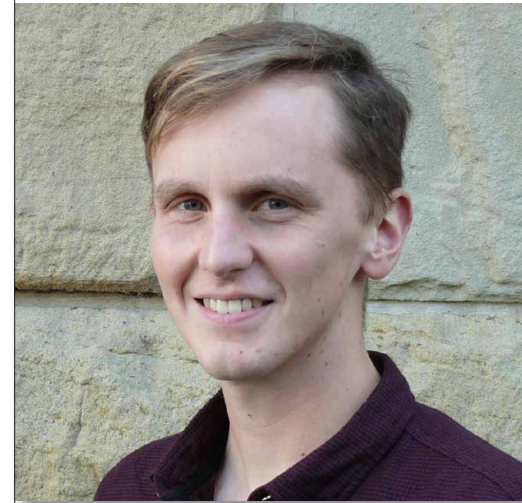
Contact

stschmidt@coll.mpg.de

https://www.coll.mpg.de/stefan-schmidt

D. Research Portraits

Alexander Schneeberger

Summary Report

The main goal of my research is to understand better the individual and contextual factors that cause individuals to comply with the social norms of a specific social group. In recent times, social identity theory has received significant attention in economics. The reason for this new interest in social identity theory is that it helps us understand behavior that cannot be fully explained by standard economic theories. The idea that individuals are members of specific social groups and gain utility from complying with (or disutility from violating) the associated social norms provides a parsimonious explanation for many seemingly anomalous phenomena. Experimental evidence suggests that, among others, such a model might provide the micro-foundations for social preferences, peer effects, framing, and promise-keeping. In each of those studies, the researchers showed that the behavior was consistent with the social norms of the salient social identity and that the treatment variations induced behavior by changing the applicable social norms. While it became clear that people, on average, respond to changes in the applicable social norms, it is less clear under which precise circumstances individuals respond to such changes. This is an important research question, since it sheds light on when social identities are likely to impact behavior and how they are acquired in the first place. In my PhD thesis, I contribute to a better understanding of this question by examining how three factors influence norm compliance. In particular, I examine how group identification, the own past behavior, and social cues influence compliance with particular social norms.

In Krupka and Schneeberger (work in progress), we examine how compliance with group norms is affected by group identification. In our online experiments, we exogenously manipulate group identification by varying the moral similarity between subjects and an artificial social group, while keeping all other factors, including the applicable social norms, fixed. Our experimental design allows us to test how group identification affects compliance with group norms in an otherwise decontextualized setting. Furthermore, we are able to investigate how moral similarity between an individual and a social group affects group identification.

In Irlenbusch, Krupka, and Schneeberger (work in progress), we examine how past behavior influences present decision-making. Moral cleansing describes a behavioral pattern according to which individuals are more likely to behave morally after acting in an immoral way. While this behavior pattern is well-established, it is less clear why individuals act in such a way. Models in economics, in general, argue that this pattern is the result of self-image concerns. The role of social-image concerns has been neglected. In our online experiments, we evaluate the role of both self-image and social-image concerns. To study the role of self-image concerns, we exogenously vary the number of available excuses for immoral behavior. To study the role of social-image concerns, we analyze how norm compliance and the applicable social norms change in response to their own prior behavior. Our experimental design allows us to identify the behavioral channels that lead to the moral cleansing pattern.

In Schneeberger and Schubert (work in progress), we examine whether word embeddings can be used to extract the social cues contained in words. Previous research showed that framing can be explained by changes in the applicable social norms. However, it is less clear which words activate which social norms. In our study, we use word embeddings to identify words that either make a certain social identity more salient or a social norm more restrictive. We subsequently use online

Contact

schneeberger@coll.mpg.de

https://www.coll.mpg.de/
person/alexander-schneeberger

experiments, in which we measure the behavior of primed individuals and the applicable social norms to test our method of extracting social cues.

Work in Progress

Krupka, E. and Schneeberger, A., The Effect of Moral Similarity on Group Formation and Norm Compliance

Irlenbusch, B., Krupka, E. and Schneeberger, A., The Effect of Self and Social Image on Conscience Accounting

Schneeberger, A. and Schubert, M., Vectorizing Social Cues

Lectures and Presentations (since 2017)

2017

The Impact of Personal and Social Norms on Sharing in Dictator Games
10th IMPRS Uncertainty Thesis Workshop, Gut Gremmelin

2018

Choosing the Right Social Norm: General Versus Group-Specific Social Norms
11th IMPRS Uncertainty Thesis Workshop, Ringberg

2019

The Effect of Moral Similarity on Group Formation and Norm Compliance
12th IMPRS Uncertainty Thesis Workshop, Lutherstadt-Wittenberg

Professional Activities

Reviewer for

Journal of Judgment and Decision Making

Cornelius Schneider

Overview

After studying economics and public policy at the Humboldt University and the Hertie School of Governance in Berlin, I finished my Master's degree with a focus on public economics. Since 2016, I have been a Research Fellow at the Max Planck Institute on Research for Collective Goods in a joint PhD program with the University of Cologne (supervised by Felix Bierbrauer and Christoph Engel). Mainly applying experimental methods, my research interests center around questions of optimal taxation and public finance in general. Specifically, I am currently working on preferences for wealth taxation, as well as exploring potentially positive implications of evasion opportunities in tax regimes. Since I am approaching the end of my PhD, I plan on entering the job market for economists in December 2020 in order to pursue my academic career.

The Role of Personal Preferences and Perceptions for Public Economics
A first line of my research addresses how personal preferences, (mis)perceptions and norms can inform optimal (tax) policies. In recent research, the strong normative assumptions imposed by standard models of optimal taxation became subject to empirical investigations. Thus far, objective functions mostly follow either purely utilitarian or Rawlsian rationales. If normative criteria (i.e., for redistribution) are considered, this is usually based on philosophical reasoning or aims for Pareto efficiency. Furthermore, the utilitarian approach understates the view that an economic system might not only be judged by its allocative achievements, but also by the procedures under which it operates. Therefore, more current research aims to consider multiple dimensions of normative criteria from surveys, experiments, and existing robust policies, in order to develop objective functions that incorporate prevailing public views.

Along these lines, my first PhD project, **"Preferences for Wealth Taxation – Design, Framing, and the Role of Partisanship"** (Chirvi and Schneider, work in progress) investigates how personal preferences and political perceptions shape the support for wealth taxation. The taxation of wealth is of growing importance in both the academic as well as the political debate. However, the empirical literature on preferences for wealth taxation almost exclusively focused on either the emotionally loaded estate tax or rather general redistributive preferences. This project presents a new investigation of *how* individuals want to tax wealth – particularly exploring drivers beyond the well-documented misinformation. For this, we conducted a large-scale survey experiment, which particularly tests for the presence of framing effects, incidence concentration, and the role of wealth characteristics. We find that the exceptional opposition towards the estate tax is not applicable to other instruments of net wealth taxation and only valid for certain subgroups. Moreover, we present evidence for opposition stemming from an emotional load triggered by political framing strategies: the mere name "estate tax" leads to a significantly higher rejection in comparison to other equivalent wealth tax instruments absent of this frame.

Within the same realm of research, two ongoing projects are worth mentioning. **"Labor Supply Implications of a Negative Income Tax: The Role of Egoistic Beliefs and Rational Preferences"** (Schneider and Vogel, work in progress) explores, both theoretically and experimentally, the specific role of beliefs and social preferences on the chances of success of a negative income tax (also known as "universal basic income"). If individual labor supply depends strongly on the beliefs about another's labor supply, then the discussion about a negative income tax should not exclusively focus on bud-

Contact

cschneider@coll.mpg.de

https://www.coll.mpg.de/cornelius-schneider

getary constraints, but should also take beliefs and social norms into account.

In a more interdisciplinary attempt within Law and Economics, the project **"Public Opinion and Courts"** (Langenbach and Schneider, work in progress) studies the effect court rulings can have on shaping public opinion. Whereas the literature has so far focused on the U.S. Supreme Court, this study accounts for the multi-level European court system. The study particularly aims to answer the question whether it matters that cases can have different origins in the European court system, and whether this also matters for the authority of a ruling.

Tax Evasion and Its Hidden Economic Benefits

My second research interest centers on the potentially hidden benefits of tax evasion. Tax evasion is a very global and pervasive issue. Governments constantly try to reduce tax evasion and to raise public awareness of its negative consequences. Many reports and surveys have documented the vast expected loss due to tax evasion. Hence, the question of how to tackle tax evasion is of considerable relevance for society. In the economic literature, the issue of tax evasion has already been investigated very intensively. The common objective in this strand of literature is quite straightforward: how to increase tax compliance in order to reduce undesirable tax evasion. However, since most of the academic research has been focusing solely on perfect enforcement, the effects of tax evasion on labor supply and – eventually most crucial for policy-makers – the overall tax return have been omitted thus far.

Inspired by a theoretical work of Weiss (1976), my coauthor and I aim to explore this implication of potentially increased labor supply in our project **"The Bright Side of Tax Evasion"** (Mill and Schneider, work in progress). According to standard economic reasoning, tax evasion reduces the effective tax rate – i.e., the rate at which the earned income is taxed – as one factually pays fewer taxes.

This, in turn, increases labor supply (due to increased marginal costs of leisure). This increased labor supply might even offset the negative returns from the evaded taxes and consequently might increase the overall tax revenue. Therefore, this research agenda wants to challenge the long-standing assumption that tax evasion leads to a reduced overall tax return and aims to adopt a broader scope on the question of tax evasion and social costs. To what extent does an opportunity to evade increase labor supply and thus counteract revenue losses?

In an initial experiment, we implemented an original real-effort experiment in an online labor market with over 1,000 participants. Our findings not only show significant positive labor supply responses to the opportunity to evade (increased labor supply by on average 37%); the expected tax revenue also significantly and substantially increased by more than 50%. Strikingly, this effect persists when comparing effective tax rates: Lowering effective tax rates through the opportunity to evade is more efficient than simply lowering statutory tax rates. Since this revenue-increasing effect is strongest for low productive individuals, our work also contributes to the literature on optimal tax administration: Given the restricted financial resources governments can allocate to fighting tax evasion, the question is *which* tax evasion should be targeted most, as governments cannot deter all tax evasion. This project suggests that tax enforcement should focus on high productive individuals.

Further Steps

Given the promising results of the initial experiment, subsequent studies are planned. The first experiment is deliberately kept very clean, however, at the cost of external validity. A follow-up analysis will investigate the research question in a natural setting. Specifically, I plan to use regional and temporal variation in the number of tax auditors on the German county level to study

how this variation impacts taxable labor income. Further, I want use exogenous variation in the timing of the Panama and Paradise papers, in order to study causally the impact of increased perception of tax audits on labor supply and tax revenue. Finally, I will use exogenous variation in the German *Länder* fiscal equalization scheme (*Länderfinanzausgleich*), which has shown to reduce tax enforcement (i.e., the number of tax auditors), as an instrument to extract causally the effect of audit probability on labor supply and tax revenue.

Work in Progress

Chirvi, M. and Schneider, C., Preferences for Wealth Taxation – Design, Framing and the Role of Partisanship.

Schneider, C. and Vogel, M., Labor Supply Implications of a Negative Income Tax: The Role of Egoistic Beliefs and Rational Preferences.

Langenbach, P. and Schneider, C., Courts Shaping Public Opinion. An Experiment on the European Court of Human Rights.

Mill, W. and Schneider, C., The Bright Side of Tax Evasion.

Lectures and Presentations (since 2017)

2019

Revealed Preferences for Capital Taxation: (Periodical) Wealth Tax versus Estate Tax
14th Winter School on Inequality and Social Welfare Theory
Alba di Canazei, Italy
January 2020

The Bright Side of Tax Evasion
6th Shadow Economy Conference
University of Trento, Italy
July 2019

The Desirability of Cheating in Optimal Income Taxation
Economic Science Association (ESA) European Meeting
Burgundy School of Business Dijon, France
September 2019

Desired Cheating in Income Taxation
6th Annual Mannheim Taxation (MaTax) Conference
ZEW, Mannheim, Germany
September 2019

The Bright Side of Tax Evasion
15th Winter School on Inequality and Social
Welfare Theory
Alba di Canazei, Italy
January 2020

The Bright Side of Tax Evasion
35th EEA Congress
Erasmus University Rotterdam, Netherlands
August 2020

D. Research Portraits

Sebastian O. Schneider

Overview

I joined Matthias Sutter's Experimental Economics Group as a Senior Research Fellow in December 2017, after graduating in (Development) Economics from the University of Göttingen. I hold an MSc and a BSc in Mathematics in Business and Economics, from the University of Mannheim. My research in the past few years has focused on three main areas: (i) economic preferences; (ii) development economics; and (iii) statistical aspects of experiments.

Economic Preferences, Their Determinants, and Their Consequences

Most of my work has circled around economic preferences: risk and time preferences, as well as social preferences. My focus lies on understanding their determinants and their role in decision-making outside controlled laboratory settings.

For example, in Ibáñez and Schneider (2020), and Schneider et al. (work in progress), my co-authors and I analyze the economic preferences, risk and loss aversion, prudence, and patience among the urban poor in Bogotá, Colombia, and their relevance for household saving. We use a lab-in-the-field approach to elicit economic preferences, and combine it with household data from an extensive survey on socioeconomic characteristics. Besides theoretical contributions to the literature that these papers make, we empirically confirm the relevance of prudence and loss aversion for household saving.

In the context of Schneider et al. (work in progress), we develop a new, simple, and cost-efficient method to elicit experimentally (higher-order) risk preferences (e.g., prudence). In Schneider and Baldini (work in progress), we provide ready-made apps for other researchers for the experimental framework 'oTree' to elicit higher-order risk preferences, including the method my co-authors and I developed.

In Schneider and Sutter (2020), we have applied this method to study field behavior outside the financial domain, with a particular focus on addictive behavior. With our sample of adolescents, we find that health-related behavior, in particular abusive smartphone behavior, can be predicted by prudence, and that failing to account for prudence might lead to wrong conclusions about the relation of risk preferences and health behavior.

Finally, in Barron et al. (2020), we study the integration of Syrian refugees in Jordanian society by means of social preferences; and in Bašić et al. (work in progress), we study how economic preferences and other personal characteristics determine effort provision and the effectiveness of incentives.

Development Economics

The results of Ibáñez and Schneider (2020), and Schneider et al. (work in progress) suggest that the poor lack alternative options to smooth consumption and indicate that preferences predict household saving. Both insights may inform policy-making in development contexts, as a failure in accumulating capital can result in poverty when income shocks cannot be smoothed.

In Chowdhury et al. (2020), we investigate whether an information campaign (with or without additional monetary payment) via telephone can help to contain the coronavirus in remote villages in Bangladesh, and whether economic preferences have an influence on the effectiveness of this measure.

Statistical Aspects of Experiments

In Schlather and Schneider (2017), we develop a method to assign subjects or clusters optimally to possibly multiple treatment and control groups in (field)

Contact

sschneider@coll.mpg.de

https://www.coll.mpg.de/sebastian-schneider

experiments, using a theoretically derived decision statistic. The method creates comparable experimental groups and increases the validity and efficiency of estimation. Additionally, I provide a software implementation as an R and Stata ado package (Schneider and Baldini, 2019, and Schneider, 2017). The method has been applied in various field settings, among them in Bangladesh, Indonesia, and Egypt.

In Riener, Wagner, and Schneider (2020), my co-authors and I applied the method in a field experiment with more than 3,000 schools in Germany. We test the effectiveness of different treatment assignment mechanisms in establishing the conditions needed for valid experimental results: for example, both treatment and control groups containing all relevant subgroups to be studied. We thus present a way of already addressing validity conditions at the design stage of an experiment. Moreover, in a typical public-policy setting, we document the absence of self-selection of partner institutions.

In addition to these contributions on the validity of experimental results, the method for elicitation of (higher-order) risk preferences (Schneider et al. work in progress) builds on a statistical approach named P-spline regression, which I have extended to fit the needs of working with utility functions. We provide a software implementation as an R package (Schneider and Baldini, 2020).

Research Agenda 2021–2023

I mainly plan to continue investigating economic preferences, in particular decision-making under risk and uncertainty. For example, after our proposal for elicitation of higher-order risk preferences has been accepted by the administration of the German Socioeconomic Panel (SOEP) for the 2020 wave, I plan to extend the work by Schneider and Sutter (2020) to the general German population and additional domains of behavior. Moreover, I plan to investigate

how individual environments, for example peers, infrastructure, and culture, affect economic preferences. Theoretically, I am interested in combining the literature on salience with the literature on higher-order risk preferences.

Moreover, I wish to extend the work I have done on the statistical aspects of experiments, and contribute to improving the lives of the poor.

Publications (since 2017)

Revise & Resubmit

Barron, K., Harmgart, H., Huck, S., Schneider, S. O. and Sutter, M. (2020). Discrimination, Narratives and Family History: An Experiment with Jordanian Host and Syrian Refugee Children. IZA Discussion Paper 13337 and MPI Discussion Paper 2020/13, R & R: *Review of Economics and Statistics.*

Working Papers

Chowdhury, S., Schildberg-Hörisch, H., Schneider, S. O. and Sutter, M. (2020). Are Nudges Effective to Contain Covid-19? An RCT in Rural Bangladesh. *MPI Working Paper.*

Ibáñez M. and Schneider S. O. (2020). Income Risk, Precautionary Saving, and Loss Aversion – An Empirical Test. *MPI Working Paper.*

Riener, G., Schneider, S. O. and Wagner, V. (2020). Addressing Validity and Generalizability Concerns in Field Experiments. *MPI Discussion Paper* 2020/16.

Schneider, S. O. and Sutter, M. (2020). Higher Order Risk Preferences: New Experimental Measures, Determinants and Field Behavior. *IZA Discussion Paper* 13646 and *MPI Discussion Paper* 2020/22.

Schneider, S. O. and Schlather, M. (2017). A New Approach to Treatment Assignment for One and Multiple Treatment Groups, *Courant Research Centre* Discussion Paper No. 228.

Software

Schneider, S. O. (2017). minMSE: Implementation the minMSE Treatment Assignment Method for One And Multiple Treatment Groups. Stata ado-Package.

Schneider, S. O. and Baldini, G. (2019). minMSE: Implementation the minMSE Treatment Assignment Method for One And Multiple Treatment Groups. R Package.

Schneider, S. O. and Baldini, G. (2020). utilityFunctionTools: Implementation of Penalized Spline Regression for Utility Functions with

Computation Tools for Higher-Order Risk Preferences. R Package.

Work in Progress

Schneider S. O., Ibáñez M. and Riener G. Measuring Utility – An Application to Higher-Order Risk and Saving in Bogota. Draft in preparation.

Schneider, S. O. and Baldini, G. oTree: Ready-made Apps for Elicitation of Higher-Order Risk Preferences due to Eeckhoudt & Schlesinger, Ebert & Wiesen, and Schneider et al. Draft in preparation.

Bašić, Z., Bortolotti, S., Cappelen, A., Gneezy, D., Salicath, D., Schmidt, S., Schneider, S. O., Sutter, M. and Tungodden, B. Heterogeneity in Effort Provision: Evidence from a Lab-in-the-field Experiment. Data collection ongoing.

Lectures and Presentations (since 2017)

2017

A New Approach to Treatment Assignment for One and Multiple Treatment Groups
Verein für Socialpolitik, Annual International Conference of the Research Group on Development Economics, Göttingen
June 2017

Measuring Utility – An Application to Higher-Order Risk and Saving in Bogotá
Doctoral workshop of the Development Economics Committee of the German Economic Association, Hanover
July 2017

A New Approach to Treatment Assignment for One and Multiple Treatment Groups
Annual Meeting of the Verein für Socialpolitik, Vienna
September 2017

A New Approach to Treatment Assignment for One and Multiple Treatment Groups
Economic Science Association (ESA) European meeting 2017, Vienna
September 2017

A New Approach to Treatment Assignment for One and Multiple Treatment Groups & Measuring Utility – An Application to Higher-Order Risk and Saving in Bogotá
Economic Science Association (ESA) North American meeting 2017, Richmond (VA)
October 2017

A New Approach to Treatment Assignment for One and Multiple Treatment Groups
Seminar Presentation, UC Berkeley
October 2017

2018

A New Approach to Treatment Assignment for One and Multiple Treatment Groups & Measuring Utility – An Application to Higher-Order Risk and Saving in Bogotá
13th German Probability and Statistics Days 2018, Freiburg im Breisgau
March 2018

Measuring Utility – An Application to Higher-Order Risk and Saving in Bogotá
2018 Symposium on Economic Experiments in Developing Countries (SEEDEC), Wageningen
April 2018

Measuring Utility – An Application to Higher-Order Risk and Saving in Bogotá
2nd International Conference on Globalization and Development, Göttingen
May 2018

Measuring Utility – An Application to Higher-Order Risk and Saving in Bogotá
11th Maastricht Behavioral and Experimental Economics Symposium (M-BEES 2018), Maastricht
June 2018

Measuring Utility – An Application to Higher-Order Risk and Saving in Bogotá
9th annual meeting of the Society for Experimental Finance/EF Conference 2018, Heidelberg
June 2018

Measuring Utility – An Application to Higher-Order Risk and Saving in Bogotá
Foundations of Utility and Risk Conference, York
June 2018

2019

Higher-Order Risk Preferences: New Experimental Measures, Determinants, and Related Field Behavior
Sixth International Meeting on Experimental and Behavioral Social Sciences (IMEBESS), Utrecht
May 2019

Higher-Order Risk Preferences: New Experimental Measures, Determinants, and Related Field Behavior
5th Maastricht Behavioral Economic Policy Symposium (M-BEPS 2019), Maastricht
June 2019

Higher-Order Risk Preferences: New Experimental Measures, Determinants, and Related Field Behavior
Seminar Presentation, Johannes Gutenberg University, Mainz
July 2019

Higher-Order Risk Preferences: New Experimental Measures, Determinants, and Related Field Behavior
TIBER 2019 Symposium on Psychology and Economics, Tilburg
August 2019

Discrimination, Narratives and Family History: An Experiment with Jordanian Host and Syrian Refugee Children
Workshop on Behavioral Insights in Development and Peace Building, Göttingen
August 2019

Higher-Order Risk Preferences: New Experimental Measures, Determinants and Related Field Behavior
Economic Science Association (ESA) European meeting 2019, Dijon
September 2019

Higher-Order Risk Preferences: New Experimental Measures, Determinants and Related Field Behavior
14th Nordic Conference on Behavioral and Experimental Economics
September 2019

Higher-Order Risk Preferences: New Experimental Measures, Determinants and Related Field Behavior
Economic Science Association (ESA) North American meeting 2019, Los Angeles
October 2019

Higher-Order Risk Preferences: New Experimental Measures, Determinants, and Related Field Behavior
Experiments with Children and Non-Standard Subjects Workshop of the ESA, Los Angeles
October 2019

Higher-Order Risk Preferences: New Experimental Measures, Determinants, and Related Field Behavior
Seminar Presentation, UC Santa Barbara
October 2019

2020

Higher-Order Risk Preferences: New Experimental Measures, Determinants, and Related Field Behavior
7th Workshop in Behavioral and Experimental Health Economics, Innsbruck
February 2020

Higher-Order Risk Preferences: New Experimental Measures, Determinants, and Related Field Behavior
World Congress of the Econometric Society, Bologna (virtual event)
August 2020

Higher-Order Risk Preferences: New Experimental Measures, Determinants, and Related Field Behavior
Annual Meeting of the Verein für Socialpolitik, Cologne (virtual event)
September 2020

Professional Activities

Memberships

European Economic Association (EEA), The Econometric Society (ES), Verein für Socialpolitik (VfS), Deutsche Mathematiker-Vereinigung (DMV)

Referee for

European Economic Review, *Games and Economic Behavior*, *Journal of Behavioral and Experimental Finance*, *Management Science*

D. Research Portraits

Marcel Schubert

Summary Report

My research is part of the intersection of computer science and behavioral economics. The core idea is to exploit the advent of machine-learning technology and methods in order to generate new insights for the field of behavioral economics.

In principle, these new technologies allow for two new contributions. On the one hand, there is the model. Here, machine-learning algorithms allow for the sensible mapping of complex, non-linear relationships between variables that are suspected to influence an outcome. One the other hand, it offers the chance to use and quantify information that, up until this point, was mostly disregarded. The most prominent example for such information is text. In the past, text was only used sparsely and required effort in coding as well as subjective expert opinions. Here, new methods in natural language processing reduce the cost of using text as data by eliminating the need for hand-coding. By using models allowing for a large, multi-dimensional input, as is the case with text, we can operationalize such data for answering questions in the field of behavioral economics and human behavior as a whole.

Thus, on the data side, my work as a PhD student for the institute mostly focuses on how text and language influence human behavior and tries to disentangle what a written text tells about individuals and their values.

In **"The Effect of Grammatical Variation on Economic Behavior"**, we investigate whether an effect of grammar on savings decisions, as first proposed in Chen (2013), holds true in an incentivized environment. When it comes to grammatical necessities on how to refer to future events within a language, languages may be divided into two categories. One is comprised of the languages that necessitate a grammatical marker for the future, whereas the other covers those that do not. In his research and some follow-up studies, Chen (2013) finds that these differences can be mapped to a difference in savings behavior. However, all studies use either observational data or test for behavioral effects between two languages. For our design, we leverage a peculiarity of the German language, namely that one may – but does not have to – use a future marker in a future reference context. Consequently, we can exclude any cultural influence on the outcome. In our study, we find no stable relationship between grammatical references to the future and changes in time preferences or risk preferences.

The project **"Text Classification of Ideological Direction in Judicial Opinions"** leverages machine-learning algorithms in the legal context. Here, we make use of the new advances in machine learning by training a model predicting the ideology of the court decision. Research so far used the Songer Project, which comprises 5% of all available Appellate Court opinions. While a significant resource for research, a database for which all opinions are labelled would offer much richer insights. Until recently, however, the cost of extension was prohibitive. Exploiting the fact that the information encoded within text is now easily extractable, and leveraging the fact that machine learning can model complex high-dimensional relationships between input factors, we construct a supervised classifier for the prediction of political ideology. Our findings show how to construct a classifier for such a task and allows researchers to expand upon the limited hand-coded database, making future research more comprehensive.

We take advantage of the fact that text can be projected into a high-dimensional space and re-projected into an ultra-dense subspace, thus placing every word of a corpus on a one-dimensional scale. In our work in progress, **"Vectorizing Social Cues"**, Alexander

Contact

schubert@coll.mpg.de

https://www.coll.mpg.de/
marcel-schubert

Schneeberger and I employ this technique to change the framing of a topic. The idea is to show that the framing effect of words can be placed on an objective scale and that one can find new words for a desired framing effect with only a small pre-labelled dictionary.

Apart from text, another type of data that lends itself to machine learning is time series. Such data have many multi-round interdependencies within and between individuals. A prime example for such data is the one from public-goods games, perhaps one of the most widely studied game in behavioral economics. However, up until now, the type space is mainly explored by using simple linear models as well as expert-interpretation. In our work in progress, **"Identifying Theories about the Composition of the Type Space through Cluster Analysis of Linear Public Good Experiments"**, Engel, Hausladen, and Schubert expand upon this by systematically using unsupervised machine learning to form clusters of similar players. Consequently, we aim to offer a much more complete exploration of the type space and help to find and understand previously overlooked patterns in the data.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Hausladen, C. I., Schubert, M. H., Ash, E. (2020). Text Classification of Ideological Direction in Judicial Opinions. *International Review of Law and Economics*, 62, 105903.

Work in Progress

Albrecht, F., Schubert, M. H., The Effect of Grammatical Variation on Economic Behavior

Engel, C., Hausladen, C. I., Schubert, M. H., Identifying Theories about the Composition of the Type Space through Cluster Analysis of Linear Public Good Experiments

Schneeberger, A., Schubert, M. H., Vectorizing Social Cues

Scholarships and Honors

2019
IPAK Travel Grant, DAAD University of Cologne, Germany

2019
Travel Grant, Empirical Legal Studies Replication Conference, Claremont, California

2014–2017
Konrad Adenauer Scholarship

Lectures and Presentations (since 2017)

2017

The Effects of Language and Grammar on Behavior in Terms of Risk and Time
2. Konferenz für studentische Forschung
Humboldt University Berlin
September 2017

2018

How Different Parts of a Language Play Disparate Roles in Preferences Regarding Risk and Time
11th IMPRS Uncertainty Thesis Workshop, Ringberg, Germany
March 2019

2019

Text Classification of Ideological Direction in Judicial Opinions
PELS Replication Conference, Claremont McKenna College, Claremont, California
April 2019

Using Natural Language Processing to Replicate Hand-Coded Political Ideology Labels of Jurisdictional Decisions
12th IMPRS Uncertainty Thesis Workshop, Wittenberg, Germany
March 2019

Armin Steinbach

Representative Research Since 2017

My research interest largely rests on two pillars: legal analysis surrounding EU law, international law, and constitutional law, as well as topics lying at the intersection of law and economics. In the latter field, my recent work focused on the economic rationale of legal rules governing the European and Monetary Union. As this subject blends legal and economic normativity, my interest is directed at whether lawyers and economists coincide in the design and interpretation of rules. Typically, my research interest concerns the interaction of fiscal and monetary policies.

In one study (Janeba/Steinbach 2019), we explore the economic plausibility of the legal regime, with the applicable legal standard capturing the impact of debt restructuring on the debtor's expected compliance with fiscal rules. Our theory shows that the effect of debt cuts on fiscal compliance depends on three effects, the direction of which determines the overall effect on expected fiscal compliance. We empirically review the plausibility of our theoretical results by exploiting survey data from members of state parliaments in Germany.

Another project deals with fiscal rules from a different angle. We identify the circumstances under which the positive budgetary long-term effect of structural reforms materialize in such a way that the legal rules should be applied with a degree of leniency, allowing for a short-term deterioration of the fiscal position (Sajedi/Steinbach 2019). To that end, we quantify the short-term fiscal costs and long-term fiscal benefits of reforms, and investigate how the design of reforms can affect this trade-off. The results suggest that, as short-term output losses of reforms are alleviated by fiscal stimulus, long-term output gains from the reforms imply that fiscal viability can be reached within a reasonable period of time.

In a more public-policy-oriented publication, I question a common view according to which economic governance in the European Union has undergone an undemocratic shift as part of the crisis, with accountability moving from parliamentary to executive powers (Steinbach 2019). The paper challenges this view, arguing that the crisis has led to a shift from economic to political accountability. I define economic accountability as the market-led accountability regime enshrined in EU treaties and contrast it with the current political accountability regime, by which creditor states and monetary institutions have supplanted markets as a forum for rewarding and disciplining market actors. This 'substitution effect' has been sustained by European Court of Justice (CJEU) jurisprudence, with the CJEU positing a functional equivalence between market-driven pressures and political conditionality.

Finally, one project undertakes an empirical test of conventional legal doctrine, according to which sovereign bond spreads only depend on the country's debt position, largely ignoring other causal factors including liquidity (De Grauwe et al. 2017). We find evidence that a significant part of the surge in the spreads of the peripheral Eurozone countries was disconnected from underlying fundamentals, and particularly from a country's debt position, and was associated rather strongly with market sentiments and liquidity concerns. We apply our empirical findings to the legal principles as interpreted by recent jurisprudence, arguing that application of the no-bailout principle and the ban on monetary financing should be extended to capture non-debt-related factors.

More recently, I have also extended my interest in law and economics to the area of international law, particularly to the proportionality principle, which includes a necessity and a proportionality test, both of which rest on empirical premises. The necessity test involves an
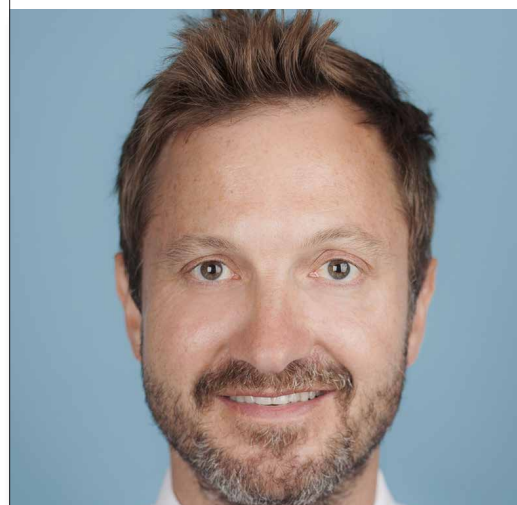
Contact

steinbach@coll.mpg.de

https://www.coll.mpg.de/armin-steinbach

assessment of whether a legal sanction is well-suited to achieve its objective. The proportionality test questions the causal link between the sanction and the human rights situation in the country against which the sanction is aimed. In one study, we analyze the empirical basis of the proportionality principle by examining the consequences of economic sanctions for the target country's human-rights situation. We use endogenous treatment-regression models to test the empirical basis of the proportionality principle by estimating the causal average treatment effect of U.S. economic sanctions on different types of human rights within a uniform empirical framework. On a general note, our study underscores the empirical contingencies of a core legal principle under international and national law.

On the more traditional pillar of my legal work, I have lately been dealing with doctrinal issues under international trade law, as well as national constitutional law (Apaza/Steinbach 2018). One project explored the role of systemic integration as a method of interpretation under public international law allowing adjudicating bodies to deal with possible tensions and to promote coherence within international trade law. It traces the various approaches to systemic integration pertaining to international trade rules, as employed under both WTO and preferential trade agreements adjudication. While systemic integration offers a public international law tool for reducing fragmentation of substantial law, there is heterogeneity in adjudicative practice regarding the readiness to employ systemic integration for the purpose of interpretation. The article identifies possible avenues through which future dispute settlement can exploit the potential for coherence through systemic integration, as well as elements that could be taken into consideration when integrating multilateral and preferential rules.

My research is often inspired by observations that I make in my capacity as public civil servant or by topical developments in jurisprudence or policy-making.

In this regard, I would like to mention a publication in which I explore the constitutional status of political civil servants and how this interacts with the 'core principles' notion of civil service – neutrality and political bipartisanship (Steinbach 2018). In another piece, I address a recent judgement of the European Court of Justice, in which the Court held that companies may require their employees to wear neutral clothes, that is, to prohibit religiously motivated clothing – a judgment that I review in light of conflicting fundamental rights (Steinbach 2017).

Finally, energy law and policy remains a further subject of my research interest. In light of recent legislative action, I discuss legal aspects of an imminent topic of economic policy – the implementation of CO_2-pricing elements into the production and consumption of energy in Germany. The article discusses the legal implications, at national and European level, of stronger CO_2 orientation (Steinbach/Valta 2019).

Publications (since 2017)

Articles in Peer-Reviewed Journals

Janeba, E. and Steinbach, A. (2019). Compliance Effects of Sovereign Debt Cuts. *International Review of Law and Economics*, 60.

Steinbach, A. and Sajedi, R. (2019). Fiscal Rules and Structural Reforms, *International Review of Law and Economics*, 58, 34–42.

Steinbach, A. (2019). EU Economic Governance after the Crisis: Revisiting the Accountability Shift in EU Economic Governance, *Journal of European Public Policy*, 26, 1354–1372.

Steinbach, A. (2017). Insurance-type Coordination under EU Law. *Swiss Review of International and European Law*, 28, 19–40.

De Grauwe, P., Ji, Y. and Steinbach, A. (2017). The EU Debt Crisis: Testing and Revisiting Conventional Legal Doctrine. *International Review of Law and Economics*, 51, 29–37.

Steinbach, A. (2017). All's Well That Ends Well? Crisis Policy After the German Constitutional Court's Ruling in Gauweiler. Maastricht *Journal of European and Comparative Law*, 24, 140–149.

Steinbach, A. and Apaza, P. (2017). Promoting Coherence Between PTAs and the WTO Through Systemic Integration, *Journal of International Economic Law*, 20, 61–85.

Steinbach, A. (2017). Effect-based Analysis in the Jurisprudence on the Euro Crisis. *European Law Review*, 42, 255–270.

Journal Articles (not peer-reviewed)

Steinbach, A. and Valta, M. (2019). Ein CO_2-Preis für Energieträger [Pricing CO_2], *Juristen-Zeitung,* 84, 1139–1149.

Steinbach, A. (2018). Der politische Beamte als verfassungsrechtliches Problem [The Political Civil Servant under Constitutional Law]. *Verwaltungsarchiv,* 109, 1–32.

Steinbach, A. (2017). Religion und Neutralität im privaten Arbeitsverhältnis [Religion and Neutrality in Private Employment]. *Der Staat*, 56, 621–651.

Steinbach, A. (2017). Das behördliche Unabhängigkeitsparadigma im Wirtschafts-verwaltungsrecht – eine funktionell-rechtliche Betrachtung [The Independence of Government Agencies]. *Die Verwaltung*, 50(4), 507–536.

Steinbach, A. (2017). Die Versetzung in den einstweiligen Ruhestand – materielle und formelle Fragen zum politischen Beamten [The Rules Governing the Dismissal of Political Civil Servants]. 10 *Zeitschrift für Beamtenrecht*, 10, 335–340.

Steinbach, A. (2017). Meinungsfreiheit im postfaktischen Umfeld [Freedom of Opinion in a Post-Truth World]. *JuristenZeitung*, 13, 653–661.

Steinbach, A. (2017). Social Bots im Wahlkampf [Social Bots and Election Campaigns]. *Zeitschrift für Rechtspolitik*, 50, 101–105.

Books

Steinbach, A. and van Aaken, A. (2019). Ökonomische Analyse des Völker- und Europarechts [Law and Economics of International Law and European Law]. Tübingen: Mohr Siebeck.

Steinbach, A. (2017). EU Liability and International Economic Law. Oxford: Hart Publishing.

Steinbach, A. (2017). Rationale Gesetzgebung [Rational Legislation]. Tübingen: Mohr Siebeck.

Steinbach, A. and Weise, M. (eds.) (2017). Messstellenbetriebsgesetz [The Digitization of Energiewende]. Commentary. Berlin/Boston: De Gruyter.

Steinbach, A. (ed.) (2017). Verwaltungsrechtsprechung [Case Law in Administrative Law]. Tübingen: Mohr Siebeck.

Awards / Honors

2018
Offer of chair for public law at the University of Braunschweig

2019
Science Prize of the German Society of Legislation

2020
Offer of tenured professorship at HEC Paris

Public Service

Since 2017
German Federal Ministry of Economic Affairs, Berlin
Head of Division "General Economic Policy"

Teaching

Winter term 2017
University of Mannheim, PhD seminar, "Economic and Financial Policy"

Winter term 2018
University of Mannheim, PhD seminar, "Economic and Financial Policy"
University of Bonn, seminar, "Current legal issues in European and German Politics"

Summer term 2019
University of Bonn, seminar, "Digitalization and Law"

Winter term 2019
University of Bonn, seminar, "Current Legal Issues in European and German Politics"

Professional Activities

since 2017
Listed on WTO Indicative List as Panelist for WTO Dispute Settlement

2019
Sounding Board Member of "The Hague Rules on Business and Human Rights Arbitration" (The Hague Rules)

D. Research Portraits

Maj-Britt Sterba

Summary Report

I am a PhD candidate in economics at the Friedrich Schiller University in Jena and became a Research Fellow at the Max Planck Institute for Research on Collective Goods in January 2017.

Work in Progress

In my PhD thesis, I investigate people's attitudes towards inequality. My interest is twofold: One the one hand, my motivation is to bridge the gap and inspire the debate between normative theories on distributive justice and empirical findings. In two projects I test to what degree people's individual fairness conceptions are in line with normative philosophical theories. On the other hand, I want to contribute to the literature that tries to understand what personal factors are at play when it comes to the question of how such attitudes actually develop.

In the first project, **"Large-scale cooperation and moral obligations"**, together with Aya Adra, Oliver Kirchkamp, and Lamé Ungwang, we investigate whether large-scale economic cooperation for mutual benefit triggers special moral obligations in the perception of laypeople. While there are a number of elaborate normative theories on the role of the individual with regard to global justice and responsibility, there seems to be a lack of research considering the individual's perception of the assumptions and conclusions postulated in these theories. As individuals are globally more and more connected, the question to which extent our moral intuitions have adapted to these facts is of prime interest. A trigger of moral obligations that has been discussed prominently in political philosophy is cooperation for mutual benefit. In the project, we look at differences in moral obligation depending on the level of help that people are asked to provide, reflecting the idea that some obligations

might be relationship-specific, while others are not. Our main finding is that having been in a cooperative relationship significantly increases the moral relevance assigned only for distributions that go beyond providing for basic needs, as reflected in voting behavior, moral responsibility of the donor, and moral rights of the receiver. This effect is partly mediated by a lower social distance induced by the cooperation.

In a second project, **"Fairness views on inequality due to differential risk and effort choices"**, I add to the literature investigating the role we give to individual achievements and choice versus luck when evaluating the fairness of an inequality. It has been shown that how unjust an inequality is perceived depends, inter alia, on the factors that generated the inequality. While most research until now has focused on differentiating between factors that are within and factors that are out of the individual's control, in this project I investigate fairness views in a new situation where both factors that determine the outcome are self-chosen by the individual: in a first choice, people decide on the effort level they want to provide; in a second choice, they decide on the risk associated with the return to effort. Using a third-party spectator design, I investigate how people's redistribution behavior is influenced by the fact that people can be held accountable for both their choices, but that the choices are in different domains with potentially different moral values attached to them. I find that, while a majority of the choices is in line with the accountability norm, around 10 % of the choices are classified as effort proportional, which is similar in frequency of occurrence to the egalitarian norm (13%).

In a third project, **"Lost Control – Personal Experiences during the COVID-19 Pandemic and Preferences for Redistribution"**, together with Sören Harrs from the University of Cologne, we investigate

Contact

sterba@coll.mpg.de

https://www.coll.mpg.de/maj-britt-sterba

how attitudes towards redistribution are shaped by personal (traumatic) experiences with data collected during the current COVID-19 crisis. The outbreak of the COVID-19 virus has plunged the world into a global health and economic crisis. The long-term impact of the crisis on society is still unclear, but heavily discussed. A key driver in the debate on social change as well as in a person's ideology is the question of acceptable inequality and the demand for redistribution. Important factors that are receiving more and more interest in the economic literature are normative views on just distribution principles and – given that they are an important input factor for some distribution principles – beliefs on the sources of success and failure. The project aims at providing an early assessment of the impact of COVID-19 on meritocratic beliefs and fairness views as measured in experimental games. We focus on loss of control as a behavioral channel that is activated in times of personal and societal crisis.

Research Agenda

In my future research, I want to investigate further what factors in a person's personality and environment shape her attitudes towards redistribution and inequality. While the traditional perspective of economists on attitudes towards inequality has been mostly driven by the consideration of self-interest, in the recent literature fairness and other non-monetary considerations have become more and more prominent. As inequality is one of the main cleavages in the political spectrum, this question is also linked to the origin of ideology, which makes the fruitfulness of an interdisciplinary approach to the question even more prevalent.

Lectures and Presentations (since 2017)

2018

The Scope of Justice: Attitudes on Morally Relevant Group Characteristics
ESA World Meeting, Berlin, Germany
July 2018

2019

Fairness Views on Risk-Taking Given Different Effort Provision
Sixth International Meeting on Experimental and Behavioral Social Sciences (IMEBESS), Utrecht, Netherlands
May 2019

Divergent Choices – Fairness Views on Inequality rough Endogenous Effort and Risk
14th Nordic Conference on Behavioral and Experimental Economics, Kiel, Germany
September 2019

Teaching

Winter semester 2019/2020
The Economics of Fairness
(together with Svenja Hippel)
Bachelor seminar, University of Bayreuth

Martin Sternberg

Summary Report

I am a lawyer by training and became a Research Fellow at the Max Planck Institute for Research on Collective Goods in April 2018. The research for my PhD thesis concentrates on pricing algorithms in the light of anti-trust law. Therefore, I combine legal analysis with empirical research.

Work in Progress

At the moment, I am investigating collusive pricing in laboratory markets when human players may face computer algorithms. Many companies in digital markets use automatic software programmes that adjust their own prices based on the observed prices of their competitors. This practice can result in prices above the competitive level, and thus also in welfare losses for society. However, tacit collusion is generally beyond the reach of the competition laws of most jurisdictions. For this reason, several academic conferences have been organized, dealing with algorithms and collusion, papers have been published, and many scholars have considered proposals for a possible regulation in the area of antitrust law. Although the harmful effects of tacit collusion are undisputed, some question the likelihood of its occurrence, both in brick-and-mortar markets and in the digital economy. Among other things, they criticize that legal scholars in particular believe that algorithmic collusion is indeed very easy to achieve, although experimental economics shows the opposite, with collusion being unlikely to sustain in markets with three or more firms.

Collusion in general is difficult to detect, and this is particularly true for tacit collusion in the absence of an agreement. Therefore, the effect that algorithms might have on the likelihood of collusion in real markets is not easy to determine. For this purpose, experimental economics can be useful, as this discipline has produced a rich body of experimental evidence on factors that facilitate collusion. Although laboratory experiments are not intended to map the full reality by isolating the most important factors, they are tools to identify causal effects and can help to understand phenomena.

Together with Professor Normann from the Düsseldorf Institute for Competition Economics (DICE), we analyze laboratory markets with three or four subjects, where one of the subjects may or may not be equipped with a pricing algorithm. Our goal is to find out what influence an algorithm can have on the outcome of a laboratory market. In addition, we vary whether participants know about the presence of the algorithm or not. Contributions in the literature suggest that people tend to make different decisions, depending on whether they face a human or a computer algorithm. With our second manipulation, we want to find out whether expectations about the presence of an algorithm matter.

With this work, I want to make a contribution to the current debate in competition law and economics. I will use the economic tools to support the legal analysis in my doctoral thesis.

Research Agenda

Together with researchers on machine learning, we plan to train machine-learning algorithms and compare their pricing with the experimental findings on collusive algorithmic markets in the literature. In its 2009 fuel sector inquiry, the *Bundeskartellamt* (Federal Cartel Office of Germany) carried out a detailed price analysis of fuel prices in the German petrol-station market. It found out that five companies form a dominant oligopoly in regional petrol-station markets. Because of this, the German fuel market is suitable for comparing theoretical and experimental results on self-learning

Contact

sternberg@coll.mpg.de

https://www.coll.mpg.de/martin-sternberg

pricing algorithms and collusion with the data of a real and collusive market. Because laboratory experiments have a lack of external validity, this project could extend my work by the analysis of a real market, and would be a good addition to the experimental work.

Lectures and Presentations (since 2017)

Algorithms and Collusion
IMPRS Uncertainty Thesis Workshop, Kreuth
March 2018

Algorithmic Pricing and Collusion in Hybrid Laboratory Markets
IMPRS Uncertainty Thesis Workshop, Wittenberg
March 2019

Absprachen zwischen Algorithmen und das Wettbewerbsrecht
3. Offenes Doktorandenseminar, Institut für Kartellrecht, Düsseldorf
September 2019

Matthias Sutter

In August 2017, I took over the position of (co)director at the MPI in Bonn and then founded the Experimental Economics Group (EEG). The group's main research areas have been described in a separate section about the EEG. Naturally, there is a very strong overlap of the EEG's main research areas with my own research interests. Since founding it, I have been very pleased with the development of the EEG. Since the majority of the group is now working in the field (often in developing countries), which often requires considerable time investments to get access to interesting subject pools, we have only started to harvest the returns from our investments in 2020. At that time, however, COVID-19 hit many of our projects by bringing data collection to a halt. Nevertheless, many of our projects can be brought to an end (or resumed) in the near future. Actually, COVID-19 has not only hit us in the field, but also in the laboratory, which is still the main place for data collection for some EEG members. From mid-March 2020, our MPI laboratory was closed until the end of September, and data collection has only slowly picked up ever since.

Needless to say, my own work has also been affected by COVID-19 for the reasons mentioned above. Nevertheless, while I have perceived the years 2018 and 2019 as investment years for building up a strong group and setting up good data-collection facilities – our MPI lab became fully functional only in late 2018, and the field sites had to be set up as well –, I have considered the year 2020 as the first one since my arrival at the MPI in which very high-potential projects have been written down and submitted.

My highest hopes revolve around the projects from Bangladesh, where I currently see three major contributions. The paper by Chowdhury et al. (2020) – which currently has the status "revise and resubmit" with the *Journal of Political Economy* – is the first to classify whole families into two different clusters with respect to the economic preferences of all family members. We can show that clusters are determined by demographic background data. By simultaneously looking at time, risk, and social preferences, this is the most encompassing 360-degree view of economic preferences within families that is available today.

The paper by Kiessling et al. (2020) is the first to quantify the willingness of parents to pay to interfere with their children's decisions in a paternalistic way. Moreover, it contributes a completely novel aspect to the literature on the intergenerational transmission of preferences, namely that this transmission is not significant in families with paternalistic parents who are willing to interfere with their children's decisions. This means that paternalism breaks the intergenerational transmission channel, an insight so far not available in the literature.

The paper by Breitkopf et al. (2020) is the first to use a very large set of siblings (over 4,000 persons, aged 6 to 16, from more than 2,000 pairs of siblings) to apply household fixed effects regressions to estimate how children's preferences relate to their field behavior. Contrary to the common wisdom in the literature, the predictive power of preferences largely vanishes when household fixed effects are applied (which has not been possible due to data limitations in earlier work). This observation sheds new light on the existing literature, but also reveals that household characteristics that are hardly measurable seem to have strong impacts on children's economic preferences. In a sense, our paper opens up many new questions for the whole literature on the intergenerational transmission of economic preferences.

In addition to these projects from Bangladesh, I would like to highlight a few

© Lisa Beller

Contact

matthias.sutter@coll.mpg.de

https://www.coll.mpg.de/matthias-sutter

other projects that I consider as most promising.

Schneider and Sutter (2020) is the first paper to elicit higher-order risk preferences in a very simple way with children and teenagers, while at the same time allowing, by means of our method, for estimations of utility functions that permit taking derivatives and thus measure the strengths of higher-order risk preferences. While the method development is impressive in itself, the relation of the experimentally elicited higher-order risk preferences to students' field behavior reveals new and important insights. In particular, prudence (the third-order derivative) is a key determinant of financial decision-making and health-related behavior. Most importantly, however, by adding prudence and temperance in the risk elicitation, it becomes clear that risk aversion, if measured by itself without higher-order risk preferences, yields terribly misleading results. Thus, this paper is able to put previous results into a completely new perspective.

Gill et al. (2020) is a paper that studies self-selection of business and economics students (from the University of Frankfurt) into the financial industry. For this project, we followed students from the time of participating as university students in an experimental trust game over many years (up to seven) into their first placement in a permanent job. We find that the least trustworthy students select into the financial industry (controlling for gender and cognitive abilities). Our data set is the first to allow linking trustworthiness and self-selection into the financial industry, and our results shed light on one potentially crucial factor for continued mistrust in the financial industry, namely negative self-selection with respect to social preferences.

Fang et al. (2020) studies ways to reduce energy consumption in an energy-intensive daily activity, i.e., showering. The main contribution of this paper to the literature on environmentally friendly behavior is the modelling and testing of

multiple barriers to behavioral change. When behavioral change is avoided due to a combination of lack of attention and lack of information, such multiple barriers make it difficult to unfold the full potential of single interventions, like giving information or real-time feedback. Using data from German student-dorm occupants, we can show that barrier multiplicity is a real problem for single interventions, but that applying multiple interventions at the same time can help unfold the full savings potentials of such interventions (by finally reducing energy consumption by about 30% on average).

In conclusion, let me briefly reflect on the publications since 2018. Two papers – Balafoutas et al. (2018) and Romano et al. (2020) – failed only marginally at even higher-ranked general-science journals, but made it smoothly into *Nature Communications*, which we consider a prestigious outlet. Similarly, Karlsson Linnér et al. (2019) in *Nature Genetics* is one of my favourite publications recently, and it is very well cited. Heinz et al. (2020) in the *Economic Journal* would have deserved an even better outlet, in my opinion, but it got wide media attention on TV and radio and in print, which suggests it had public impact.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Dertwinkel-Kalt, M., Köster, M. and Sutter, M. (2020). To buy or not to buy? Price salience in an online shopping field experiment. *European Economic Review*, 103, no. 103593.

Heinz, M., Jeworrek, S., Mertins, V., Schumacher, H. and Sutter, M. (2020). Measuring indirect effects of unfair employer behavior on worker productivity – A field experiment. *Economic Journal,* 23, 2546-2568.

Romano, A., Bortolotti, S., Hofmann, W., Praxmarer, M. and Sutter, M. (2020). Generosity and cooperation across the life span: A lab-in-the-field study. *Psychology and Aging.* (forthcoming).

Romano, A., Sutter, M., Liu, J. and Balliet, D. (2020c). Political ideology, cooperation, and national parochialism across 42 nations. *Philosophical Transactions of the Royal Society B* (forthcoming).

Romano, A., Sutter, M., Liu, J., Yamagishi, T. and Balliet, D. (2020b). National parochialism is ubiquitous around the globe. *Nature Communications.* (conditionally accepted).

Sutter, M., Huber, J., Kirchler, M., Stefan, M. and Walzl, M. (2020). Where to look for the morals in markets. *Experimental Economics*, 23, 30–52.

Sutter, M. and Untertrifaller, A. (2020). Children's heterogeneity in cooperation and parental background. An experimental study. *Journal of Economic Behavior and Organization,* 171, 286–296.

Sutter, C., Rosenberger, W. and Sutter, M. (2020). Nudging with your child's education. A field experiment on collecting municipal dues when enforcement is scant. *Economics Letters,* 119, 109116, 1–3.

Balafoutas, L. and Sutter, M. (2019). How uncertainty and ambiguity in tournaments affect gender differences in competitive behavior. *European Economic Review,* 118, 1–13.

Fehr, D. and Sutter, M. (2019). Gossip and the efficiency of interactions. *Games and Economic Behavior,* 113, 448–460.

Karlsson Linner, R. K., Biroli, P., …, Sutter, M., …, Beauchamp, J. (2019). Genome-wide association analyses of risk tolerance and risky behaviors in over 1 million individuals identify hundreds of loci and shared genetic influences. *Nature Genetics,* 51(2). 245–257.

Sutter, M., Zoller, C. and Glätzle-Rützler, D. (2019). Economic behavior of children and adolescents – A first survey of experimental economics results. *European Economic Review*, 111, 98–121.

Ahn, T.K., Balafoutas, L., Batsaikhan, M., Campos-Ortiz, F., Putterman, L. and Sutter, M. (2018). Trust and communication in a property rights dilemma. *Journal of Economic Behavior and Organization,* 149, 413–433.

Balafoutas, L., Fornwagner, H. and Sutter, M. (2018). Closing the gender gap in competitiveness through priming. *Nature Communications*, 9, 4359.

Cooper, D. J. and Sutter, M. (2018). Endogenous role assignment and team performance. *International Economic Review,* 59(3). 1547–1569.

Sutter, M., Angerer, S., Glätzle-Rützler, D. and Lergetporer, P. (2018). Language group differences in time preferences: Evidence from primary school children in a bilingual city. *European Economic Review*, 106, 21–34.

Sutter, M., Feri, F., Glätzle-Rützler, D., Kocher, M., Martinsson, P. and Nordblom, K. (2018). Social preferences in childhood and adolescence. A large-scale experiment to estimate primary and secondary motivations. *Journal of Economic Behavior and Organization,* 146, 16–30.

Balafoutas, L. and Sutter, M. (2017). On the nature of guilt aversion: Insights from a new methodology in the dictator game. *Journal of Behavioral and Experimental Finance*, 13, 9–15.

Balafoutas, L., Kerschbamer, R. and Sutter, M. (2017). Second-degree moral hazard in a real-world credence goods market. *Economic Journal*, 127 (599). 1–18.

Huber, J., Kirchler, M., Kleinlercher, D. & Sutter, M. (2017). Market versus residence principle: Experimental evidence on the effects of a financial transaction Tax. *Economic Journal*, 127(605). F610–F631.

Kerschbamer, R. and Sutter, M. (2017). The economics of credence goods – A survey of recent lab and field experiments. *CESifo Economic Studies*, 63(1). 1–23.

Kerschbamer, R., Sutter, M. and Dulleck, U. (2017). How social preferences shape incentives in (experimental) markets for credence goods. *Economic Journal,* 127(600). 393–416.

Revise & Resubmit

Barron, K., Harmgart, H., Huck, S., Schneider, S. O. and Sutter, M. (2020). Discrimination, narratives and family history: An experiment with Jordanian host and Syrian refugee children. IZA Discussion Paper 13337 and MPI Discussion Paper 2020/13, R & R: *Review of Economics and Statistics.*

Chowdhury, S., Sutter M. and Zimmermann, K. (2020b). Economic preferences across generations and family clusters: A large-scale experiment. IZA Discussion Paper 13451. R & R: *Journal of Political Economy.*

Kassis, M., Schmidt, S., Schreyer, D. and Sutter, M. (2020). Measuring the value of managerial decisions in dynamic team tournaments – Evidence from a natural field experiment. *IZA Discussion Paper 13628*, R & R: *Games and Economic Behavior.*

Glätzle-Rützler, D., Lergetporer, P. and Sutter, M. (2019). Collective intertemporal decisions and heterogeneity in groups. CESifo Working Paper Series 7716. R & R: *Games and Economic Behavior*.

Book Chapter

Kocher, M., Praxmarer, M. and Sutter, M. (2020). Team decision-making. In: Zimmermann, K. F. (Ed.): *Handbook of Labor, Human Resources and Population Economics*. Springer: Heidelberg.

Book

Sutter, M. (2017). *Die Entdeckung der Geduld. Ausdauer schlägt Talent. (in Turkish: Sabrın Keşfi – Yetenek Karşısında Sebatın Zaferi). Kaknus.*

Working Papers

Angerer, S., Dutcher, G., Glätzle-Rützler, D., Lergetporer, P., Sutter, M. (2020). Outcomes versus memories and the formation of risk preferences. *MPI Working Paper*.

Balafoutas, L., Fornwagner, H., Kerschbamer, R., Sutter, M., Tverdostup, M. (2020). Diagnostic uncertainty and insurance in credence goods markets. *Working Papers in Economics and Statistics* 2020-21, University of Innsbruck and *MPI Discussion Paper* 2020/26.

Bašić, Z., Bindra, C., Glätzle-Rützler, D., Romano, A., Sutter, M. and Zoller, C. (2020). The roots of human cooperation. *MPI Working Paper*.

Bindra. C., Kerschbamer, R., Neururer, D. and Sutter, M. (2020). Reveal it or conceal it: On the value of second opinions in low-entry-barrier credence goods market. *IZA Discussion Paper* 13344 and *MPI Discussion Paper* 2020/11.

Breitkopf, L., Chowdhury, S., Priyam, S., Schildberg-Hörisch, H. and Sutter, M. (2020a). Do economic preferences of children predict behavior? Evidence from siblings comparisons. *DICE Discussion Paper* 342, University of Duesseldorf.

Breitkopf, L., Chowdhury, S., Priyam, S., Schildberg-Hörisch, H. and Sutter, M. (2020b). Parenting styles and life outcomes of children. *MPI Working Paper*.

Buffat, J., Praxmarer, M. and Sutter, M. (2019). The intrinsic value of decision rights: A note on team versus individual decision-making. *MPI Working Paper*.

Charness, G., Cobo-Reyes, R., Eyster, E., Katz, G., Sanchez, A. and Sutter, M. (2020). Improving healthy eating in children: Experimental evidence. *Working Paper University of California*, Santa Barbara.

Chowdhury, S., Schildberg-Hörisch, H., Schneider, S. O. and Sutter, M. (2020a). Are nudges effective to contain Covid-19? An RCT in rural Bangladesh. *MPI Working Paper*.

Fang, X., Goette, L., Rockenbach, B., Sutter, M., Tiefenbeck, V., Schoeb, S. and Staake, T. (2020). Complementarities in behavioral interventions: Evidence from a field experiment on energy conservations. *Discussion Paper Series CRC TR 224*, University of Bonn.

Gill, A., Heinz, M., Schumacher, H. and Sutter, M. (2020). Trustworthiness in the financial industry. *IZA Discussion Paper* 13583, *MPI Discussion Paper* 2020/19.

Kiessling, L., Chowdhury, S., Schildberg-Hörisch, H. and Sutter, M. (2020c). Parental paternalism. *MPI Working Paper*.

Schildberg-Hörisch, H., Breitkopf, L., Chowdhury, S., Kamhöfer, D. and Sutter, M. (2020). Sensitive periods in the formation of socio-emotional skills: Evidence from a randomized controlled trial. *Working Paper*, University of Duesseldorf.

Schneider, S. O. and Sutter, M. (2020). Higher order risk preferences: New experimental measures, determinants and field behavior. *IZA Discussion Paper* 13646 and *MPI Discussion Paper* 2020/22.

Sutter, M., Weyland, M., Untertrifaller, A. and Froitzheim, M. (2020). Financial literacy, risk and time preferences – Results from a randomized educational intervention. *IZA Discussion Paper* 13566 and *MPI Discussion Paper* 2020/17.

Charness, G., Feri, F., Melendez-Jimenez, M. and Sutter, M. (2019). An experimental study on the effects of communication, credibility, and clustering in network games. *IZA Discussion Paper* 12347 and *MPI Discussion Paper* 2019/8.

Czermak, S., Feri, F. and Sutter, M. (2019). Strategic sophistication under external time constraints.

Kerschbamer, R., Neururer, D. and Sutter, M. (2019). Credence goods markets and the informational value of new media: A natural field experiment. *IZA Discussion Paper* 12184 and *MPI Discussion Paper* 2019/3.

Chowdhury, S., Sutter, M. and Zimmermann, K. (2018). Evaluating intergenerational persistence of economic preferences: A large scale experiment with mothers, fathers, families and children in Bangladesh. *MPI Discussion Paper* 2018/4.

Detlefsen, L., Friedl, A., Lima de Miranda, K., Schmidt, U. and Sutter, M. (2018). Are economic preferences shaped by the family context? The impact of birth order and siblings' sex composition on economic preferences. *MPI Discussion Paper* 2018/12.

Bortolotti, S., Soraperra, I., Sutter, M. and Zoller, C., (2017). Too lucky to be true: Fairness views under the shadow of cheating. *IZA Discussion Paper* 10877.

Work in Progress

Bortolotti, S., Kölle, F., Soraperra, I. and Sutter, M. (in preparation). Betrayal, risk taking, and redistribution.

Bašić, Z., Bortolotti, S., Cappelen, A., Gneezy, U., Salicath, D., Schneider, S. O., Sutter, M. and Tungodden, B. (ongoing). Heterogeneity in effort provision: evidence from a lab-in-the-field experiment.

Grants

2019 – 2025
German Science Foundation (DFG): Excellence Cluster "ECONtribute: Markets & Public Policy" (Co-PI)

2019 – 2020
Diligentia-Foundation Cologne: Project on Arsenic water poisoning in India (PI)

Lectures and Presentations (since 2017)

2017

Einführung in Behavioral Economics
Gottlieb Duttweiler Institut, Behavioral Economics Academy, Rüschlikon
26 January 2017

Where to look for the morals in markets?
University of Amsterdam, Research seminar
10 February 2017

Entscheiden
Montforter Zwischentöne, Konzert mit Interview, Feldkirch
24 February 2017

Costly customers' mistakes in credence goods markets
University of California Riverside, Economics research seminar, Riverside
7 March 2017

The economics of credence goods: Evidence from the field (Keynote speaker)
Spring School at University of California at San Diego, La Jolla
9 March 2017

Too lucky to be true. Fairness views under the shadow of cheating
Loyola Marymount University, Research seminar, Los Angeles
13 March 2017

What determines children's economic preferences? Evidence from a large-scale experiment
University of California at Berkeley, Applied Microeconomics Seminar, Berkeley
14 March 2017

Self-selection into the finance industry (Keynote speaker)
G20-summit in Baden-Baden, Presentation in front of deputies of G20-central bank governors, Baden Baden
16 March 2017

What determines children's economic preferences? Evidence from a large-scale experiment
Cambridge IBSEN workshop on large-scale experiments, University of Cambridge
21 March 2017

What determines children's economic preferences? Evidence from a large-scale experiment
University of Essex, Research seminar, Essex
23 March 2017

The economics of credence goods: Evidence from the field
University of Tübingen, Forschungsseminar
26 April 2017

Deception in strategic interaction
Compliance training, International Anti-Corruption Academy, Laxenburg
28 April 2017

The economics of credence goods: Evidence from the field
Workshop x-hub (GESIS), Cologne
11 May 2017

Costly customers' mistakes in credence goods markets
Experimental Advances in Organizational Behavior, Burgundy School of Business, Dijon
24 May 2017

Too lucky to be true. Fairness views under the shadow of cheating
EWEBE-Meeting, University of Bologna, Bertinoro
26 May 2017

Too lucky to be true. Fairness views under the shadow of cheating (Keynote speaker)
Society for Experimental Finance, Annual Meeting, Nice
14–15 June 2017

Self-selection into the finance industry (Keynote speaker)
Society for Experimental Finance, Annual Meeting, Nice
14–15 June 2017

Ehrlich währt am längsten. Ein verhaltensökonomischer Blick auf Delinquenz und unmoralisches Verhalten (Keynote speaker)
26. Forum der österreichischen Staatsanwältinnen und Staatsanwälte, Walchsee
19 June 2017

What determines children's economic preferences? Evidence from a large-scale experiment
University of Düsseldorf, Research seminar, Düsseldorf
20 June 2017

Costly customers' mistakes in credence goods markets
ZEW Mannheim, Research seminar, Mannheim
22 June 2017

You are fired! Productivity shocks from work-norm violations in a field experiment
68° conference, Svolvaer, Lofoten
5 August 2017

The economics of credence goods: Evidence from the field
IMPRS Summerschool, Jena
9 August 2017

Hat der homo oeconomicus ausgedient? Erkenntnisse der experimentellen Wirtschaftsforschung und Verhaltensökonomie
Roman Herzog Institut, Munich
17 October 2017

Too lucky to be true. Fairness views under the shadow of cheating
CESifo Conference on Behavioural Economics, Munich
28 October 2017

Die Entdeckung der Geduld (Keynote speaker)
Bundesfinanzakademie Österreich, Bundesministerium für Finanzen, Trainertag, Vienna
15 November 2017

Einkommensverteilung, Betrug und Gerechtigkeit: Wohin driftet der gesellschaftliche Grundkonsens? (Keynote speaker)
11. Mediengipfel in Lech am Arlberg, Lech am Arlberg
1 December 2017

Gerechtes Wirtschaften und Vertrauen. Vom Sinn ökonomischer Beziehungen (Keynote speaker)
Caritasgespräche Vorarlberg, Feldkirch
11 December 2017

2018

Die Entdeckung der Geduld
University of Bonn
16 January 2018

Kooperation versus Egoismus? Wirtschaftliche Grundlagen unseres Wohlstandes. (Keynote Speaker)
Rheintaler Wirtschaftsforum, Widnau
19 January 2018

What determines children's economic preferences? Evidence from a large-scale experiment.
University of Southern California, Research Seminar
05 March 2018

You are fired! Productivity shocks from work-norm violations in a field experiment
Chapman University, Orange, CA. Research Seminar
06 March 2018

Driving to the beat – Reputation vs. selection in credence goods markets.
Universtiy of California at San Diego, Spring School
08 March 2018

Die Entdeckung der Geduld
PK-Rück Versicherung, Zürich
23 March 2018

Driving to the beat – Reputation vs. selection in credence goods markets.
GATE Lyon, Research Seminar
11 April 2018

Financial literacy and economic preferences – An intervention study in schools.
Deutsche Bundesbank, Research seminar, Frankfurt
13 April 2018

Financial literacy and economic preferences – An intervention study in schools.
Ifo-Institut, München
17 April 2018

Die Entdeckung der Geduld
Raiffeisenbank Schwaz, Kundenmeeting, Fügen im Zillertal
26 April 2018

Nudging – How to affect human behavior with simple interventions
Deutsches Diabetes-Zentrum Düsseldorf, Research Seminar
08 May 2018

Financial literacy and economic preferences – An intervention study in schools.
University of Tilburg, EWEBE-Meeting, Tilburg
17 May 2018

Nudging – How to affect human behavior with simple interventions.
Rotary Club, Innsbruck
22 May 2018

Driving to the beat – Reputation vs. selection in credence goods markets
Inaugural conference of EEG at Max Planck Institute Bonn, Bonn
28 May 2018

Führung und Geduld
Rheinische Fachhochschule Köln, Köln
20 June 2018

Bedeutung der Erkenntnisse der Verhaltensökonomie für die Mobilitätsthematik
Verhaltensökonomie und Mobilität, Avenir Suisse, Bern
27 June 2018

Die Entdeckung der Geduld
IKAS Schulleitertreffen, Lenk
08 September 2018

Mit Geduld zum Erfolg
11. Interkantonale Schulleitertagung IKAS, Lenk
08 September 2018

Financial literacy and economic preferences – An intervention study in schools
Schulleitertreffen, Bestwig
25 September 2018

Verhaltensökonomie und wie man Verhalten beeinflussen kann
Rotary Club, Köln
01 October 2018

Field experimental evidence how (not) to tackle asymmetric information on credence goods markets
University of Gothenburg, Research Seminar, Göteborg
23 October 2018

Field experimental evidence how (not) to tackle asymmetric information on credence goods markets
Universität Göttingen, Forschungsseminar, Göttingen
24 October 2018

Economic preferences within families: Large-scale experimental evidence from Bangladesh
CESifo Area Conference Behavioural Economics, Munich
26 October 2018

Die Entdeckung der Geduld
VBEN – Vienna Behavioral Economics Network, Wien
07 November 2018

Field experimental evidence how (not) to tackle asymmetric information on credence goods markets
Burgundy School of Business, Workshop, Dijon
09 November 2018

Mit Ausdauer zum (Unternehmens)Erfolg – Was uns die Verhaltensökonomie dazu sagen kann
PRO Fachkräfte Kongress, Nürnberg
15 November 2018

To buy or not to buy? Shrouding and partitioning of prices in an online shopping field experiment
University of Cologne, C-SEB Workshop, Cologne
22 November 2018

Are economic preferences shaped by the family context?
Briq, Workshop on Skills, Preferences and Educational Inequality, Bonn
23 November 2018

Die ökonomische Vermessung der Welt
Europäischer Mediengipfel, Lech am Arlberg
30 November 2018

2019

Alles sharing oder was? Fundamentales zur neuen Gesellschaft
Group of Fifteen, Zürich
30 January 2019

Credence goods markets and the informational value of new media: A natural field experiment
Workshop in honor of Werner Güth's 75th birthday, Wissenschaftszentrum Berlin, Berlin
2 February 2019

Credence goods markets and the informational value of new media: A natural field experiment
Innsbruck Winter School, Innsbruck
21 March 2019

Wie und warum Kooperation gelingen kann – Einsichten aus der Verhaltensökonomie
Schau! Dornbirner Frühjahrsmesse, Dornbirn
4 April 2019

Einkommensverteilung, Betrug und Gerechtigkeit
4. Kongress christlicher Frührungskräfte, Stift Göttweig
3 May 2019

Die Entdeckung der Geduld
Max Planck Stiftung, München
9 May 2019

Wie und warum Kooperation gelingen kann – Einsichten aus der Verhaltensökonomie
Dies Academicus, Freie Universität Bozen, Bozen
29 May 2019

Deception in strategic interaction
Compliance seminar IACA, Laxenburg
6 June 2019

Die Entdeckung der Geduld
Rechtsanwälte Greiter, Pegger, Kofler & Partner, Innsbruck
13 June 2019

What shapes children's decisions? Experience or (selective) memory
EWEBE-Meeting, GATE Lyon, Lyon
18 June 2019

Roots of human cooperation
Research Seminar, NHH Bergen, Bergen
23 September 2019

Credence goods markets and the informational value of new media: A natural field experiment
CESifo Area Conference Behavioural Economics, München
25 October 2019

Roots of human cooperation
Institute for the World Economy, Kiel
5 November 2019

Verhalten, Ökonomik und Recht. Einsichten aus der Verhaltensökonomik
Wirtschaft und Recht-Symposium, Salzburg
14 November 2019

Die Wurzeln menschlicher Kooperation – Ein Projekt in Tiroler Kindergärten
Research Seminar Centrum für Chemie und Biomedizin, Medizinische Universität Innsbruck, Innsbruck
22 November 2019

Erfolgreich in der Businessclass
Europäischer Mediengipfel, Lech am Arlberg
29 November 2019

Heute? Morgen? Vielleicht? Verhaltensökonomische Einsichten in menschliches Entscheidungsverhalten
Universitätsklinikum Bonn, Bonn
20 December 2019

2020

Wie und warum Kooperation gelingen kann – Einsichten aus der Verhaltensökonomie
Musik und Wissenschaft – Themenkonzerte, Hamburg
14 January 2020

Die Entdeckung der Geduld
Caesarium, Bonn
16 January 2020

Die Kraft der Kooperation
56. Informationstagung des ÖRV, Bregenz
24 January 2020

Verhaltensökonomik – und wie man Verhalten beeinflussen kann
Bezauer Kreis, Bludenz
27 January 2020

Geduld und Unsicherheit
Behavioral Economics Academy, Gottlieg Duttweiler Institut, Rüschlikon
29 January 2020

Credence goods markets and the informational value of new media: A natural field experiment
Research Seminar Carnegie Mellon University, Pittsburgh
13 February 2020

(Higher order) risk preferences and patience predict addictive behavior among adolescents
Research Seminar George Mason University, Washington
14 February 2020

What shapes children's decisions? Experience or (selective) memory?
Research Seminar Princeton University, Princeton
18 February 2020

Social preferences and selection into the financial industry
Research Seminar, University of Chicago, Chicago
20 February 2020

Diploma Theses, Dissertations, and Habilitations

Dissertations

September 2018
Claudia Zoller, University of Cologne: Essays on Fairness, Coordination, and Diligence: Experimental Evidence from Children and Young Adults

September 2018
Matthias Praxmarer, University of Cologne: The Role of Social Cues and Social Reference Points in Economic Decision-Making

September 2018
Anna Untertrifaller, University of Cologne: Essays on Fairness, Coordination, and Diligence-Experimental Evidence from Children and Young Adults

March 2019
Sebastian Soung-Un Tonke, University of Cologne: Using Behavioral Interventions to Foster Resource Sustainability

September 2020
Parampreet Christopher Bindra, University of Innsbruck: Essays in Experimental Economics: Credence Goods & Other (field) Experiments

October 2020
Patrick Bernau, University of Cologne: Learning. Giving. Teaming Up. – Essays in Economic Decision Experiments

Teaching

Winter term 2018/2019
University of Cologne
PhD-Course "Advanced Experimental Economics" (2 SWS)
Executive MBA-Course "Social and Economic Behavior" (2 SWS)

Summer term 2019
University of Cologne
Bachelor Course "Microeconomics – Industrial Organization" (2 SWS)

Winter term 2019/2020
University of Cologne
Executive MBA-Course "Social and Economic Behavior" (2 SWS)

Summer term 2020
University of Cologne
Bachelor Course "Microeconomics – Industrial Organization" (2 SWS)

Public service

Since 2020
Member of the Vorarlberg government's group of experts on COVID-19

Since 2018
Board member of the foundation "Diligentia – Stiftung für empirische Forschung" in Cologne.

2015-2018
Member of the scientific advisory group for the Austrian government's project "Motivierender Staat" (hosted by the Austrian Federal Ministry for Family and Youth and by the Austrian Federal Ministry for Economics, Science and Technology).

Professional Activities

Referee for (only journals for which I have refereed at least once from 2018 to 2020)

American Economic Journal: Economic Policy
American Economic Review
Bulletin of Economic Research
Economic Journal
Economics Letters
Experimental Economics
Games and Economic Behavior
German Science Foundation
Journal of Economic Behavior and Organization
Journal of Economic Psychology
Journal of Finance
Journal of Political Economy
Journal of Population Economics
Journal of Public Economics
Journal of the Economic Science Association
Journal of the European Economic Association
Nature Human Behavior
PNAS – Proceedings of the National Academy of Sciences
Psychology and Aging
Quarterly Journal of Economics
Review of Economic Studies
Review of Economics and Statistics
Scandinavian Journal of Economics
Science Advances

Editorial boards

Journal of the European Economic Association – Associate Editor (since 10/2016)

Economics Letters – Associate Editor (since 09/2014)

European Economic Review – Associate Editor (since 10/2012)

Management Science – Associate Editor (since 07/2011)

Journal of the Economic Science Association – Member of editorial board (since 07/2014)

Experimental Economics – Member of editorial board (07/2009-10/2018)

Memberships

Since 2019
Member of the Academia Europaea

Since 2018
Member of the scientific advisory board of the Kiel Institute for the World Economy

Since 2017
Member of the scientific advisory board of the Institute for Advanced Studies (IHS) Vienna

D. Research Portraits

Fiona tho Pesch

Summary Report

I joined the institute in October 2018 as a PhD student in Anna Baumert's research group on moral courage. I held a teaching position for the academic year of 2018/2019 at the FernUniversität in Hagen. I also received a scholarship from the Studienstiftung des deutschen Volkes in 2019. I spent one semester at Yale University in New Haven, working together with Jason Dana. In my PhD, I am mainly concentrating on situational factors influencing prosocial behavior. With several experiments, I am looking at the role of ignorance in prosocial decision-making. I am also working on a meta-analysis on the topic of moral wiggle room. Together with a colleague at UC Berkeley, I received a research grant to investigate the tunneling effect in decision-making under scarcity.

Ignorance in Prosocial Decision-Making

As the centerpiece of my PhD, I am investigating ignorance as a form of moral wiggle room. Prior research has shown that people choose not to reveal certain pieces of information in order to behave selfishly (e.g., Dana et al., 2007). In a line of studies, we show that people do not act either on a norm violation in their environment when they have a secondary task they can engage in. This tendency to exploit moral wiggle room is connected to people's social preferences: it is mainly prosocial people, as measured by SVO, who are supposedly ignoring the norm violation when a secondary task is introduced to the design. In a follow-up online study, we are planning to investigate whether this ignorance is strategic such that people want to avoid the costs associated with intervening against a norm violation. In an eye-tracking study, furthermore, we will investigate whether people actually engage in information avoidance, or whether they merely use the plausible deniability that the situation offers to defend non-intervention behavior.

Meta-Analysis of Moral Wiggle Room

The concept of moral wiggle room has attracted a lot of attention both in economics and psychology; since its introduction in 2007 by Dana and colleagues, there have been over 1,000 papers on Google Scholar that mention the term. To our knowledge, the concept has not been thoroughly defined in any of these papers. The first step of our meta-analysis on moral wiggle room is to define the concept. Subsequently, we will investigate whether introducing moral wiggle room to a situation consistently decreases prosocial behavior, or whether it depends on the type of moral wiggle room. We will also test whether there is a stable proportion of people exploiting moral wiggle room, and whether people are more or less likely to exploit moral wiggle room depending on the stakes.

The Tunneling Effect in Decision-Making under Scarcity

In a side project on decision-making under scarcity, we will use eye-tracking technology to investigate tunneling as an effect of scarcity on information processing. In the literature on scarcity, and more precisely on poverty, it has been argued that people experiencing acute scarcity also experience a narrowing of their cognitive space, whereby they excel at tasks that fall within the narrow tunnel defined by their scarcity, but neglect tasks and information that fall outside of that tunnel (Mullainathan & Shafir, 2013). We will investigate this effect by tracking people's information search patterns while manipulating their experience of scarcity, to see whether the behavioral effects observed in the literature can be traced back to differences in information processing.

References

Dana, J., Weber, R. A. and Kuang, J. X. (2007). Exploiting moral wiggle room: Experiments demonstrating an illusory preference for fairness. *Economic Theory*, 33(1), 67–80.

Contact

thopesch@coll.mpg.de

https://www.coll.mpg.de/fiona-tho-pesch

Mullainathan, S. and Shafir, E. (2013). Scarcity: The true cost of not having enough. Penguin Books.

Publications (since 2017)

Revise & Resubmit

Tho Pesch, F., Fiedler, S. and Baumert, A. (R & R). Seeing moral transgressions: Moral wiggle room in costly punishment. *Economic Psychology.*

Scholarships and Grants

2019
PhD scholarship, including financial and conceptual support, Studienstiftung des deutschen Volkes

2020
Research Grant, Psychology and Economics of Poverty Initiative & Center for Effective Global Action, UC Berkeley

Teaching

Winter term 2018/2019
Department of Psychology, Chair for General Psychology: Judgement and Decision-Making [Bachelor thesis supervision]
FernUniversität in Hagen

Summer term 2019
Department of Psychology, Chair for General Psychology: Judgement and Decision-Making [Bachelor thesis supervision]
FernUniversität in Hagen

Lectures and Presentations (since 2017)

2019

Seeing Moral Transgressions – Information Avoidance in Costly Punishment (invited)
Yale University (School of Management): Dana Lab
February 2019

Seeing Moral Transgressions – Information Avoidance in Costly Punishment (invited)
Yale University (Department of Psychology): Crockett Lab
February 2019

Seeing Moral Transgressions – Information Avoidance in Costly Punishment.
The Society for Personality and Social Psychology's Annual Convention (SPSP) Portland, OR
February 2019

Seeing Moral Transgressions – Information Avoidance in Costly Punishment
Subjective Probability, Utility, and Decision Making (SPUDM)
Amsterdam, The Netherlands
August 2019

Ignorance as Moral Wiggle Room – Some Online Studies (invited)
Yale University (Department of Philosophy): Knobe Lab
December 2019

Professional Activities

Memberships

Member of the Society for Judgement and Decision Making

Member of the European Association of Social Psychology

Sebastian Tonke

I joined the Max Planck institute in May 2019. Prior to joining the EEG group, I completed my PhD at the University of Cologne. My research focuses on behavioral public policy, development, and environmental economics. I conduct field experiments to study how social norms, information provision, identity concerns, and self-control shape human behavior. A focus of my work has been the water sector in Namibia and Kosovo, where I use large-scale, low-cost interventions to address the non-payment of utility bills and to curb water consumption during a drought (projects 1-3). I have also conducted a lab-in-the-field experiment in Namibia to study the role of social norm violations on the sharing behavior of others (project 4).

Growing Water Scarcity Affects the Health and Wealth of Individuals Across the Globe

The lack of access to purified water sources leads to waterborne diseases like diarrhea and typhoid fever, infant mortality, and inferior educational attainment. Affordable and dependable access to water is also crucial input factor for industrial and agricultural productivity. Two thirds of the world's population already experience severe water scarcity for at least one month a year, and water demand has been increasing by 1% per year over the past decades. Threats to sustainable water management from the consumer side are the non-payment of water utility bills, which complicates cost recovery, and overconsumption. Finding effective interventions to address non-payment and overconsumption is a global challenge.

From Diagnosis to Treatment: An Experiment to Reduce Non-Payments for Water (Rockenbach, Weiss, and Tonke, 2020a)

In a large-scale field experiment in cooperation with the public water utility of Namibia, we implement interventions to reduce non-payments. We find that a large fraction of customers seems willing to pay, but neither receives their invoice properly nor understands its content. We address these informational frictions using simplified text messages and apply psychological commitment techniques to narrow the gap between customers' willingness to pay and actual payments. Payments increase by 30% to 61%, making the interventions highly cost-effective. While removing informational frictions has a lasting impact, the commitment techniques produce only short-term effects.

Imperfect Procedural Knowledge: Evidence from a Field Experiment to Encourage Water Conservation (Tonke, 2020)

In this study, I provide causal evidence that imperfect procedural knowledge is a severe obstacle to efficient behavior, but can be overcome by providing low-cost information. I conduct a large-scale field experiment with the public water utility in Namibia to encourage water conservation during a drought. Providing mass-targeted conservation strategies via text message decreases consumption by 5.3 percent. Additional treatments encouraging individuals to develop their own strategies are ineffective and rule out alternative explanations, such as reminders, awareness of water scarcity, or being asked to reduce consumption.

Using Identity Appeals to Decrease Non-Payment for Water in Kosovo (Tonke, work in progress)

In cooperation with the public water provider in Kosovo, I conduct a large-scale field experiment to decrease non-payment for water. Customers receive messages appealing to their identity as citizens. Positively framed identity appeals include the messages "Please be a responsible citizen" or "You are a responsible citizen". Negatively framed identity appeals include the messages "Please don't be an irresponsible citizen" or "You are not an irresponsible citizen". Negatively framed identity appeals in-

Contact

tonke@coll.mpg.de

https://www.coll.mpg.de/sebastian-tonke

crease the collection efficiency (fraction of the bill paid) by 26 percentage points, in comparison to an untreated group, and are about twice as effective as positively framed identity appeals. Survey evidence suggests that these effects are caused by changes in customers' self-perception and rules out alternative mechanisms like social norms, sanctioning, monitoring, or reminder effects.

Self-serving Behavior of the Rich Causes Contagion Effects Among the Poor (Rockenbach, Tonke and Weiss, 2020b)

In a lab-in-the-field experiment, we study how the prosocial behavior of inhabitants of an impoverished neighborhood in Namibia is influenced after being informed about the prosocial or egoistic behavior of either a rich or a poor comparison group. We find that the poor behave significantly less prosocially when they learn about the egoistic behavior of the rich. Yet, neither the prosocial behavior of the rich nor information on how other poor individuals behaved affects the behavior of the poor. Our data suggest that the drop in prosocial behavior on the part of the poor is caused by the violation of a social justice norm: The poor expect the rich to be prosocial, and they are surprised if they act differently.

Research Agenda

My research agenda for the coming years revolves around two main tasks. First, my work at the institute builds on prior work done during my time as a PhD student. In the context of projects 1-3, I analyze and collect new datasets providing new insights with respect to the persistence of treatment effects, the benchmarking of price and non-price interventions to curb water demand, and exploring heterogeneous treatment effects among subgroups of water users. Second, I am developing new partnerships and exploring research opportunities with existing partners to conduct field experiments with high policy relevance. For example, we study how to improve plastic bottle recycling in

Lima (D'Exelle, Fuhrman, Lopez Vargas, Tonke, and Verschoor, work in progress). While data collection should have been completed by now, the experiment was halted because of the COVID-19 pandemic. Further, I am discussing further interventions to reduce water demand in Namibia using low-cost text messages.

Working Papers

Rockenbach, B., Tonke, S. and Weiß, A. (2020a). From Diagnosis to Treatment: An Experiment to Reduce Non-Payments for Water. *Working paper*.

Rockenbach, B., Tonke, S. and Weiß, A. (2020b). Self-Serving Behavior of the Rich Causes Contagion Effects among the Poor. *Revise and resubmit at the Journal of Economic Behavior and Organization*.

Tonke, S. (2020). Imperfect Procedural Knowledge: Evidence from a Field Experiment to Encourage Water Conservation. *Working paper*.

Work in Progress

D'Exelle, B., Fuhrman, H., Lopez Vargas, K., Tonke, S. and Verschoor, A., Boosting Participation in Recycling Programs: A Field Experiment in Lima.

Tonke, S., Using Identity Appeals to Decrease Non-Payment for Water in Kosovo.

Prizes

2020

1st Prize for excellence in applied development research (Dissertation Prize) awarded by the German Economic Association and KfW Development Bank

Lectures and Presentations (since 2017)

2017

From Diagnosis to Treatment: An Experiment to Reduce Non-Payments for Water
KfW Development Bank Water Sector Seminar, Königstein
February 2017

From Diagnosis to Treatment: An Experiment to Reduce Non-Payments for Water
2nd Coller Conference in Behavioral Economics, Tel Aviv University
July 2017

2018

Using Identity Appeals to Decrease Non-Payment for Water in Kosovo
Natural Experiments and Controlled Field Studies, LMU Munich, Ohlstadt
June 2018

Using Identity Appeals to Decrease Non-Payment for Water in Kosovo
2018 Economic Science Association World Meeting, HU Berlin
June 2018

Using Identity Appeals to Decrease Non-Payment for Water in Kosovo
4th Maastricht Behavioral Economic Policy Symposium, Maastricht University
June 2018

From Diagnosis to Treatment: An Experiment to Reduce Non-Payments for Water
33rd Annual Congress of the European Economic Association, University of Cologne
August 2018

2019

Imperfect Procedural Knowledge: Evidence from a Field Experiment to Encourage Water Conservation
Natural Experiments and Controlled Field Studies, LMU Munich, Ohlstadt
June 2019

Imperfect Procedural Knowledge: Evidence from a Field Experiment to Encourage Water Conservation
Environmental and Development Economics Research Seminar, University of Hamburg
November 2019

2020

Imperfect Procedural Knowledge: Evidence from a Field Experiment to Encourage Water Conservation
35th Annual Congress of the European Economic Association (Virtual)
August 2020

Imperfect Procedural Knowledge: Evidence from a Field Experiment to Encourage Water Conservation
Verein für Socialpolitik (VfS) Annual Conference (Virtual)
September 2020

Using Identity Appeals to Decrease Non-Payment for Water in Kosovo
Research Seminar (scheduled), University of Economics, Prague
October 2020

Teaching

Summer term 2018
Experimental Methods (Lecture and Exercise)
University of Cologne

Summer term 2019
Experimental Methods (Lecture)
University of Cologne

Professional Activities

Referee for

Experimental Economics, *Journal of Economic Behavior & Organization*, *World Development*

D. Research Portraits

Daniel Toribio-Flórez

Summary Report

In October 2017, I joined the Moral Courage Research Group at the Max Planck Institute for Research on Collective Goods as a doctoral candidate. Before that, I completed a research Master's degree in social psychology at VU Amsterdam, where I started to conduct my first research projects. Since then, my research has broadly been in the domain of social and moral judgment and its impact on behavior. In particular, I focused my work on how social and moral judgment occurs under conditions of limited (i.e., uncertainty) or conflicting (i.e., ambivalent) situational information, and how it translates into behavior under such circumstances.

Since the beginning of my PhD, I have investigated a specific phenomenon within the overarching framework of moral courage, namely, costly third-party punishment. This kind of behavior refers to the costly reaction of a third party against the violator of a moral or social norm. My focus has been whether the ambiguity, often affecting the interpretation of a behavior as a norm violation, has affected the reaction of the third party. In three different studies, we observe that, under ambiguity of the norm violation, third parties are more reluctant to engage into costly punishment, and especially those who experience higher dispositional concerns for justice. While this individual justice sensitivity positively predicts punitive reactions against perpetrators, this does not seem to be the case in a situation where the norm violation is ambiguous. Given that an ambiguous norm violation entails the possibility of punishing unfairly, our assumption is that third parties with dispositional justice concerns do not exert punishment in order to avoid creating unfairness themselves. This set of findings is the basis of a manuscript (Toribio-Flórez, Sasse and Baumert, R & R) which recently received revisions, with the possibility of resubmission,

from the *Personality and Social Psychology Bulletin*. Furthermore, it has established the baseline for a set of follow-up studies that aim to dig into the motivational mechanisms of the effect of ambiguity on costly third-party punishment.

Related to the previous project, we developed a second investigation within the frame of the current coronavirus pandemic (Toribio-Flórez, Fahrenwaldt, Baumert and Sasse, work in progress). Under the assumption that the irruption of this new, unexpected global health emergency implied substantial ambiguity about the social appropriateness of certain behavior (e.g., use of public spaces), we questioned whether the governmental measures regarding physical distancing would help ameliorate this ambiguity. To address this issue, we used the case of Germany as a natural experiment. Specifically, we assessed whether the introduction of regulatory measures of physical distancing by the German government exerted any influence on people's perception of social norms about this kind of behavior, as well as on people's willingness to intervene against the transgression of these norms. Although we did not observe a change in the perceived ambiguity of social norms, the governmental measures seemed to affect the perception of social norms of physical distancing. Moreover, I observed an undoubtedly robust relationship between people's personal norms and their willingness to intervene against their transgression, which highlights the importance of personal attitudes towards social norms in the explanation of intervention behavior. We are currently working on a report of the results of this project, which we will submit as a manuscript to a special issue of *Social Psychology and Personality Science* on COVID-19-related research.

Besides these two main projects, my research has been related to the construct of attitudinal ambivalence from two different ends. First, I investigated the

Contact

toribio-florez@coll.mpg.de

https://www.coll.mpg.de/
daniel-toribio-florez

strategic expression of ambivalence for the enhancement of interpersonal liking. This project started as my Master's thesis, but has evolved into a manuscript, which was recently published in *Frontiers in Psychology* (Toribio-Flórez, van Harreveld and Schneider, 2020). Moreover, I applied my background in the study of ambivalence to the context of moral courage and intervention behavior. Specifically, I developed the conceptual framework of a research line, focused on how the ambivalent evaluation of a norm transgression could potentially hinder third-party reactions against it. I conducted several pilot studies to establish an optimal experimental paradigm to test this idea. Although more piloting is necessary, I plan to develop this third complementary research line during my PhD.

Last, but not least, I have a genuine interest in the big challenges that have affected science in recent years, and perhaps more pronouncedly the social sciences (e.g., reproducibility crisis, fraud). Thus, during my PhD, I have been actively involved in different Open Science-related projects. For example, I participated in a multilab registered replication project on hostility priming effects, which was in principle accepted for publication in *Collabra: Psychology* (McCarthy, Gervais et al., 2018). Furthermore, I was an active member of the Open Science working group of the Max Planck Society PhDnet, whose goal is the promotion of Open Science standards within the Max Planck Society. Within this working group, I coordinated the elaboration of a large-scale survey, which assessed the stance and implementation of Open Science practices by early-career researchers of the Max Planck Society. The results of this survey will be published as an internal report of the Max Planck Society, and The main results of this survey were summarized in a manuscript, which was recently accepted for publication in a special issue of *Frontiers in Research Metrics and Analytics* (Toribio-Flórez, Anneser, deOliveira-Lopes, et al., forthcoming). Further findings from the sur-vey will be shared in the form of an internal report within the Max Planck Society.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Toribio-Flórez, D., van Harreveld, F. and Schneider, I.K. (2020). Ambivalence and Interpersonal Liking: The Expression of Ambivalence as Social Validation of Attitudinal Conflict. *Frontiers in Psychology*. 11:525301.

Toribio-Florez, D., Anneser, L., deOliveira-Lopes, F. N., Pallandt, M., Tunn, I. and Windel, H. (forthcoming). Where Do Early-Career Researchers Stand on Open Science Practices? A Survey within the Max Planck Society. *Frontiers in Research Metrics and Analytics.*

Revise & Resubmit

Toribio-Florez, D., Baumert, A. and Sasse, J. (R & R). "Proof under reasonable doubt": Ambiguity of the Norm Violation as Boundary Condition of Third-Party Punishment. *Personality and Social Psychology Bulletin.*

Work in Progress

Toribio-Flórez*, D., Fahrenwaldt*, A., Sasse, J. and Baumert, A. (2020). The Effect of Governmental COVID-19 Measures on Physical Distancing Norms and Intervention against Deviations: A Case Study in Germany. (*shared first authorship)

Multilab Replication Projects

McCarthy, R. J., Gervais, W., Baumert, A. Toribio-Flórez, D., et al. (in-principle acceptance), A Multi-Site Collaborative Study of Hostile Priming Effects. *Collabra: Psychology.*

Grants

EASP Travel Grant, awarded to support a research visit at Brown University, to work with Prof. Oriel FeldmanHall (January 2020 – April 2020)

Lectures and Presentations (since 2017)

2018

Moral Courage under Ambiguity: The Moderating Role of Justice Sensitivity. (Invited Talk) (with Baumert, A., Halmburger, A. and Sasse, J.)

19th European Conference on Personality. Zadar, Croatia
July 2018

Moral Courage under Ambiguity: The Moderating Role of Justice Sensitivity. (Invited Talk) (with Baumert, A., Halmburger, A. and Sasse, J.)
Symposium on "Moral Courage" in the Annual Congress of the German Association of Psychology (DGPs). Frankfurt, Germany
September 2018

Moral Courage under Ambiguity: The Moderating Role of Justice Sensitivity. (Invited Talk) (with Baumert, A., Halmburger, A. and Sasse, J.)
Conference of Dutch Association of Social Psychologists (ASPO). Nijmegen, Netherlands
December 2018

Ambivalence for Ambivalents: The Role of Attitudinal Ambivalence in Interpersonal Liking. (Invited Talk) (with van Harreveld, F. and Schneider, I. K.)
Seminar, "The Psychology of Ambivalence: Causes and Consequences of Mixed Feelings", University of Cologne, Germany
December 2018

2019

Moral Courage under Ambiguity: The Moderating Role of Justice Sensitivity. (Poster) (with Baumert, A., Halmburger, A. and Sasse, J.)
Pre-conference on "Justice and Morality" at SPSP Convention 2019. Portland, OR, United States
February 2019

Ambivalence for Ambivalents: The Role of Attitudinal Ambivalence in Interpersonal Liking. (Invited Talk) (with van Harreveld, F. and Schneider, I. K.)
Pre-conference on "Attitudes and Social Influence" at SPSP Convention 2019. Portland, OR, United States
February 2019

2020

Third-Party Punishment under Ambiguity: The Moderating Role of Justice Sensitivity. (Poster) (with Sasse, J. and Baumert, A.)
SPSP Convention 2020. New Orleans, LA, United States
February 2020

Where Do Early-Career Researchers Stand on Open Science Practices? Survey Data from the Max Planck Society. (Invited talk) (with Anneser, L., deOliveira-Lopes, F. N., Pallandt, M., Tunn, I. and Windel, H.)
SIPS Pre-Conference at SPSP Convention 2020. New Orleans, LA, United States
February 2020

Professional Activities

Ad-hoc reviewer

Journal of Economic Psychology
Journal of Personality and Social Psychology: Personality Processes and Individual Differences
European Journal of Social Psychology

Memberships

Postgraduate Member of the European Association of Social Psychology (EASP)

Society for the Improvement of Psychological Science (SIPS)

Society of Personality and Social Psychology (SPSP)

Matthew Trail

I joined the institute in October 2020. Before coming to the institute, I was a practicing attorney in the United States working for legal aid law firms in Florida and Texas. My expertise is in representing children in the foster care system, especially those with disabilities and mental health issues.

My first year at the institute will primarily be taking graduate courses in preparation for my research project. I will be researching bias and decision-making in the foster care system. I will be focusing on best-interest decision-making, which is the legal framework for how judges, attorneys, and caseworkers are supposed to make decisions that affect foster children. Best-interest decisions are made for all aspects of the life of a foster child from the small to the life-altering. Whether a child is allowed to participate in after-school activities, if they are allowed to visit a family member, or even if they are sent to live in a residential treatment facility are all under the best-interest rubric.

It has been my observation as a practitioner that this decision-making framework is hampered by a number of cognitive and racial biases that negatively affect the lives of foster children. It is my hypothesis as a researcher that these biases can be identified and possibly reduced through the use of a different type of decision-making framework.

I intend to test how foster-care caseworkers make best-interest decisions, which criteria they use for different types of decisions, and how they rank the best-interest factors set out in the law. If possible, I would also like to do these same tests with attorneys and judges to see if there is any difference in how the different professions make best-interest decisions.

This is all novel research as best-interest decision-making has not been specifically tested.

Contact

trail@coll.mpg.de

https://www.coll.mpg.de/matthew-trail

D. Research Portraits

Anna Untertrifaller

Research Statement

I worked at the Max Planck Institute for Research on Collective Goods from 1 June 2017 until 30 April 2019. During my time at the institute – where I did part of my PhD studies – I belonged to Matthias Sutter's Experimental Economics Group. My research focused on two broad areas of interest: (i) behavior in children and adolescents, and (ii) moral behavior. I investigated these concepts by running experiments both in the field (kindergarten, school) and in the lab.

Behavior in Children and Adolescents

Studying the behavior of children has received a growing interest in economics over the last years. One reason for this is that studies with children contribute to a better understanding regarding the source of heterogeneity in human preferences and outcomes we observe later on in life. This was also the aim of a joint research project undertaken by Matthias Sutter and me, where we proposed family background as one explanatory variable for differing levels of cooperation (Sutter & Untertrifaller, 2020). While we found that parents with higher education levels had children who were more likely to cooperate, we saw that the likelihood of both parents and children to cooperate was positively, albeit insignificantly, aligned. Moreover, we observed that the parents' subjective perception of their child to be superior to peers was related to higher cooperation rates in children.

Studies with children also shed light on the development of people's preferences and skills as they generate insights on whether economic preferences and behavioral patterns remain stable from early on in life, or are shaped with time. In this regard, a research project with Matthias Sutter and Claudia Zoller wanted to make a contribution by investigating diligence and its development during early childhood (Sutter, Untertrifaller, Zoller, work in progress). We found that

younger children not only displayed lower levels of diligence, but were also more likely to procrastinate an effortful task.

In a third project in this line of research, together with Matthias Sutter, Michael Weyland (Pädagogische Hochschule Ludwigsburg), and Manuel Froitzheim (PhD student at the University of Siegen), we studied the malleability of human preferences in a non-adult subject pool. In particular, we investigated how a school intervention on Financial Literacy affected the time and risk preferences of adolescents (Sutter, Weyland, Untertrifaller, Froitzheim, in progress). We found that teaching financial literacy made adolescents more patient, less present-biased, and slightly more risk-averse.

Moral Behavior

The second line of research concerns people's behavior in situations where they face a trade-off between following the principle of adhering to stated rules or circumventing them for the maximization of their own payoff. Experimental evidence shows that – in contrast to standard economic predictions – people not only maximize their own earnings, but are sensitive to the way this maximization is achieved. In this regard, for instance, people decide not to lie even if lying in monetary terms would be beneficial to them. On the other hand, fraudulent employee behavior – including cases in which employees inflate their expenses, working hours, or efforts – costs industries and countries all over the world billions of dollars and shows that unethical behavior is widespread in business interactions.

In this regard, together with Thomas Lauer (University of Cologne), we studied how the dishonesty of other group members affects individual lying behavior (Lauer & Untertrifaller, working paper, 2019). We found that a considerable number of people did condition their dishonesty on the dishonesty of the other

Contact

a.untertrifaller@verw.uni-koeln.de

https://www.coll.mpg.de/anna-untertrifaller

members in their group. This happened independently of whether or not the group members' dishonesty had mutual monetary effects on each another.

In another project, together with Caroline Stein (University of Cologne), we investigated how assuming responsibility for an ethical or unethical work environment affected subsequent performance (Stein & Untertrifaller, in progress). We found that workers who were forced to work in an environment that violated their own ethical standards performed worse than workers whose own ethical standards were not violated by an imposed environment.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Sutter, M. and Untertrifaller, A. (2020). Children's Heterogeneity in Cooperation and Parental Background: An Experimental Study, *Journal of Economic Behavior & Organization*, 171, 286-296.

Working Paper

Lauer, T. and Untertrifaller, A. (2019). Conditional Dishonesty.

Lecturs and Presentations (since 2017)

Financial Literacy and Economic Preferences
MPI Inaugural Conference, Bonn
May 2018

Eugenio Verrina

Summary Report

Since I wrote my last report contribution, quite a few things have changed, and I am happy to say that most developments were extremely good. I joined the Max Planck Institute for Research on Collective Goods in October 2016 within a PhD program in economics in collaboration with the Cologne Graduate School of the University of Cologne. My supervisors are Christoph Engel at the MPI and Bettina Rockenbach at the University of Cologne. During my PhD, I had the opportunity to work with Roberto Weber during a research stay at the University of Zurich, one of the most important hubs in behavioral and experimental economics. In the end of May 2020, I handed in my dissertation on "Essays on Moral and Ethical Behavior in Experimental Economics" and successfully defended it on 14 July. In September 2020, I will join the Groupe d'Analyse et de Théorie Economique (GATE) in Lyon (France) as a postdoc after having participated in the 2019 European job market.

My dissertation reflects my main research interests. In the four chapters that constitute my dissertation, I have investigated the role of moral, ethical, and normative motives in economic behavior. Despite the neglect of such motives in "standard" economic models, their role is pervasive and often builds the very foundation of what makes market and non-market interactions work in the real world. I tackle different aspects of this very broad topic and, in particular, focus on recently developed theoretical frameworks that see individuals as motivated thinkers (Bénabou and Tirole, 2016; Gino et al., 2016), who try to feel or appear moral and often trick themselves by manipulating their beliefs about others and their perceptions of the world.

The Differential Effect of Narratives on Prosocial Behavior (Hillenbrand and Verrina, 2020)
In this paper, which is also the first chapter of my dissertation, we study how positive narratives (stories in favor of a prosocial action) and negative narratives (stories in favor of a selfish action) influence prosocial behavior. Our main findings are that positive narratives increase giving of selfish types substantially, compared to a baseline with no narratives. Negative narratives, on the other hand, have a differential effect. Prosocial types decrease their giving, while selfish types give more than in the baseline. We argue and provide evidence in favor of the following interpretation of our results: narratives offer a benchmark for social comparison, on top of influencing perceptions of deservingness and appropriateness. Subjects are swayed by narratives and, at the same time, they compare themselves with the narrator.

Upset, But (Almost) Correct: A Robustness Check of di Tella, Perez-Truglia, Babino, and Sigman (2015) (work in progress)
This paper is the second chapter of my dissertation and deals with an essential mechanism of motivated reasoning: self-serving beliefs. In a recent paper, di Tella et al. (2015) investigate the formation of self-serving beliefs justifying unfair behavior in a ``corruption game''. In some I replicate their study with few changes in the design, but fail to reproduce their findings. In fact, my results point, if anything, in the opposite direction. An accurate analysis reveals that the very mechanism the authors claim to be at work does not find support either in their own or in my data.
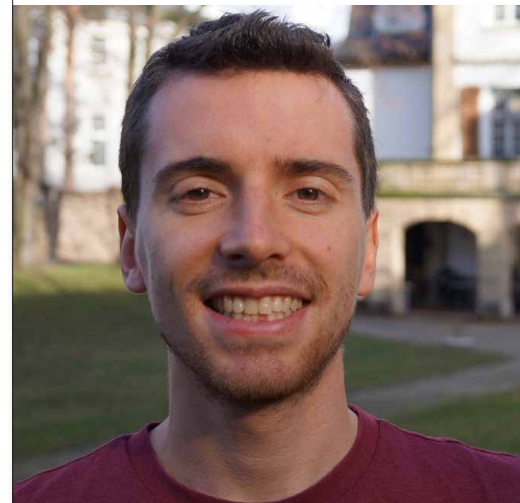
Contact

verrina@coll.mpg.de

https://www.coll.mpg.de/eugenio-verrina

This paper uncovers the sensitivity of self-serving beliefs and exposes some of the challenges for the formal modeling of these constructs.

Personal norms — and not only social norms — shape economic behavior (with Zvonimir Bašić)
In this paper, which also constitutes the third chapter of my dissertation, we look at social and personal norms and their relation with image concerns. While social norms have received a lot of attention within economics, personal norms have been largely neglected. In this paper, we propose a simple utility framework according to which people care about their monetary payoff, social norms, and personal norms. We then design a new two-part experiment to investigate the predictive value of personal norms across four different games. We show that personal norms – together with social norms and monetary payoff – are highly predictive of individuals' behavior. Personal norms are: i) inherently distinct from social norms across a series of economic contexts; ii) robust to an exogenous increase in social-image concerns, which strengthens the predictiveness of social norms, but does not weaken that of personal norms; and iii) complementary to social norms in predicting behavior, as a model with both personal and social norms outperforms a model with only one of the two norms. Our results support personal norms as a key driver of economic behavior, relevant in a wide array of economic settings.

The Dark Side of Experts: Ethical Decision-Making under Asymmetric Information in Teams (work in progress)
This paper is the last chapter of my dissertation and my job-market paper. I here investigate the effects of asymmetric information on unethical choices taken by teams. Two team members with perfectly aligned incentives can choose between a profitable option, with potential negative externalities, and a less profitable option, which has no negative externality. One team member has better information about the presence of the externality, i.e., she is

the ``expert''. I find that experts do not behave more unethically when the decision is delegated to them and do not initiate more unethical behavior either. However, they do not intervene to avoid unethical outcomes, thereby ignoring their private information. This hints at an omission-commission asymmetry in the behavior of experts. Overall, this leads to high negative externalities despite the presence of experts.

Working Papers

Bašić, Z. and Verrina, E. (2020). Personal norms — and not only social norms — shape economic behavior. *MPI Discussion Paper* 2020/25.

Hillenbrand, A. and Verrina, E. (2018). The Differential Effect of Narratives on Prosocial Behavior, *MPI Discussion Paper* 2018/16.

Mittone, L., Ploner, M. and Verrina, E., When the State Doesn't Play Dice: Aggressive Audit Strategies Foster Tax Compliance, *CEEL Working Paper*, 2–17.

Work in Progress

Verrina, E., The Bright and the Dark Side of Experts: Ethical Decision-Making under Asymmetric Information in Teams.

Lectures and Presentations (since 2017)

2017

When the state doesn't play dice
The Shadow Economy, Tax Evasion and Informal Labor, University of Warsaw
July 2017

2018

When the state doesn't play dice
International Meeting on Experimental and Behavioral Social Sciences, Utrecht
May 2018

Stories we tell
ESA World Meeting, Berlin
July 2018

2019

The differential effect of narratives
Seminar, University of Innsbruck
February 2019

The differential effect of narratives
Thurgau experimental economics meeting, Konstanz
April 2019

The differential effect of narratives
International Meeting on Experimental and Behavioral Social Sciences, Utrecht
May 2019

The dark side of experts
ESA European Meeting, Dijon
September 2019

The dark side of experts
Winter Experimental Social Sciences Institute, Florence
September 2019

2020

The dark side of experts
Job market seminar, ZEW – Leibniz Center for European Economic Research
January 2020

The dark side of experts
Job market seminar, Erasmus University Rotterdam
January 2020

The dark side of experts
Seminar, University of Innsbruck
October 2019

The dark side of experts
Seminar, University of Innsbruck
November 2019

Teaching

Summer term 2018 & 2019
Experimental Methods, Tutorials (Master level)
University of Cologne

Winter term 2019/2020
Experimental Methods, Tutorials (Master level)
University of Cologne

Professional Activities

Referee for

Management Science, International Tax and Public Finance, Rationality & Society

Yuqi Wang

Overview

I joined the institute on 1 October 2020. Before joining, I completed a BSc in mathematics and economics and an MSc in economics and business administration. Afterwards, I worked as a consultant for several years. One area around which my research agenda will revolve in the coming years is about group intertemporal decision-making theory.

Intertemporal Decisions in the Group Context

Previous literature on intertemporal choice mainly assesses decisions made by individuals. However, the relatively unexplored research on the mechanism of group intertemporal decision-making is of great importance. In many real-life cases, not only a seemingly individual intertemporal decision is actually made in a group context, but it is always a group rather than an individual who makes intertemporal decisions for projects with a long-term horizon nature, such as the ones to control climate change and to combat COVID-19. Therefore, I plan to run experiments to verify the role of a series of factors empirically, such as group size, prosocial traits, and the competitive context in determining a group-discounting rate.

Contact

wang@coll.mpg.de

https://www.coll.mpg.de/yuqi-wang

D. Research Portraits

Carl Christian von Weizsäcker

Macroeconomics and Capital Theory. Starting in 2009, the main focus of my research was macroeconomics of the financial crisis and capital theory. I developed the hypothesis of "the end of capital scarcity". From then on, I gave a large number of presentations and lectures on that topic. A list of my presentations from July 2017 till June 2020 is attached. A first printed publication was a full-page newspaper article in Frankfurter Allgemeine Zeitung on 4 June 2010. Many other printed publications followed. (See my list of academic publications 2017–2020).

As opposed to the majority of German academic economists, my forecast already in 2009 was that interest rates would remain quite low for a very long time. I based this forecast on my analysis of the end of capital scarcity.

At the annual IMF meeting in November 2013, Larry Summers, the former U.S. Secretary of the Treasury and a highly regarded academic economist, put forward the hypothesis of "secular stagnation". It overlaps strongly with my theory of the end of capital scarcity. Following on this, I initiated a German-language e-mail discussion group on macroeconomics (Makrorunde). Ever since, many lively discussions have been going on in this group. I have devoted quite a bit of time to running this group and participating in the discussions. Repeatedly people have told me that the Makrorunde has contributed quite productively to the thinking and debating of macroeconomic policy issues in the German-speaking part of the world.

Capital theory is at the core of my proposition that capital is no longer a scarce resource in the 21st century. In recent years, I have written a large manuscript with the title "Capital Theory of the Steady State". It is based on a modernization of Böhm-Bawerk´s theory of capital, which was originally published in 1889. I want to complete this manuscript in the following direction: A mathematical formalization of the idea of the division of labor enables us to understand the Böhm-Bawerk idea of "roundaboutness of production" as a particular form of the more general idea of the division of labor, as originally pronounced by Adam Smith in 1776. We can then understand modernity (since roughly 1800) as a time of an ever-increasing division of labor. And thus, in the 21st century, the standstill of roundaboutness of production (= end of capital scarcity) means a new phase of modernity, in all likelihood with a new mode of the division of labor. "Digitalization" and "CRISPR CAS9" are buzzwords of an evolving new mode of the "Vergesellschaftung der Arbeit", to quote the description under which Karl Marx investigated the division of labor.

What are the empirics of this theoretical approach? Here I joined forces with Hagen Krämer of the University of Applied Sciences in Karlsruhe. In 2019, we published a 335-page book in German, "Sparen und Investieren im 21. Jahrhundert – Die Grosse Divergenz". There, we show the following for the OECD countries and China, together with almost 3 billion inhabitants: In the year 2015, private wealth was almost double private real capital plus land value, because almost half of it consists of net public debt. And this at a zero real rate of interest! This is ample empirical proof of the end of capital scarcity. The economics of COVID-19, in the meantime, have reinforced the upward trend in public debt. The book, somewhat amended, is scheduled for publication in English next year.

Adaptive Preferences. My earlier work on the theory of endogenously formed preferences has continued – albeit very sparsely, due to lack of time. I was invited to give a few lectures on topics related to this theory. A large, rather mathematical, manuscript, written in 2013, awaits revision and publication as a book.

Contact

weizsaecker@coll.mpg.de

https://www.coll.mpg.de/von-weizsaecker

Mixed Items. I am a member of the Academic Advisory Board of the German Minister of Economic Affairs. In the period between July 2017 and June 2020, the board had 15 two-day meetings. I attended most of them. I therefore had to familiarize myself with quite a few policy topics that were on the agenda of the Board.

Publicatons (since 2017)

Articles in Peer-Reviewed Journals

von Weizsäcker, C. C. (2020). Böhm-Bawerk and Hicks modernized, *European Journal of Economics and Economic Policies: Intervention*, 17(2), 208-219.

von Weizsäcker, C. C. (2020). Ende der Kapitalknappheit und neuer Protektionismus, *Wirtschaftsdienst*, 100(1), 25-28.

von Weizsäcker, C. C. (2019). Capital Abundance and Its Consequences for Trade Policy, *Intereconomics*, 54(5), 275-279.

Journal Articles (not peer-reviewed)

von Weizsäcker, C. C. (2017). Global-Soziale Markwirtschaft und die Flüchtlingsfrage, *Journal for Markets and Ethics*, 54(5), 1-11.

Books

von Weizsäcker, C. C. and Krämer, H. (2019). Sparen und Investieren im 21. Jahrhundert – die Große Divergenz, Wiesbaden: Springer-Gabler. XXII + 335 p.

Book Chapters

von Weizsäcker, C. C. (2020). Böhm-Bawerks temporale Kapitaltheorie: Ihre Modernisierung und ihre heutige Aktualität, in: H.-M. Trautwein (Ed.), Studien zur Entwicklung der ökonomischen Theorie, Berlin: Duncker und Humblot, 19-40.

von Weizsäcker, C. C. (2019). Der Neo-Ricardianismus: Eine Fortsetzung klassischer Theorie: Kommentar zum Beitrag von Bertram Schefold, in: List Forum, Spezialheft: M. Erlei und J. Haucap (Eds.), Mainstream vs heterodoxe Ökonomik: Forschungsprogramme im Vergleich, 44(4) 707-716.

von Weizsäcker, C. C. (2019). Recommends "Trills Instead of T-Bills: It's Time to Replace Part of Government Debt with Shares in GDP" by M. J. Kamstra and R. J. Shiller, in: Bruno S. Frey and C. Schaltegger (Eds.) 21st Century Economics – Economic Ideas You Should Read and Remember, Springer Nature Switzerland, 141-142.

von Weizsäcker, C. C. (2018). Leviathan – zum Gewaltmonopol des Staates – Die ökonomische Perspektive, in: H. J. Thieme, J. Haucap (Eds.), Wirtschaftspolitik im Wandel, Berlin/Boston, 133-151.

von Weizsäcker, C. C. (2017). Die gesamtwirtschaftlichen Perspektiven und deren Verhältnis zur Mikroökonomie, in: E. Kempf, K. Lüderssen, K. Volk, M. Jahn, C. Prittwitz, R. Schmitt (Eds.), Unbestimmtes Wirtschaftsstrafrecht und gesamtwirtschaftliche Perspektiven, Berlin, 9, 22-34.

Honors

Doctor honoris causa rerum politicarum, University of Freiburg

Lectures and Presentations (since 2017)

2017

Discussion about European Macroeconomic Policy
Max Planck Institute for the Study of Societies, Cologne
31 January 2017

Leviathan: The Power of the State – The Economic Perspective
50th Radein Seminar, Radein, Italy
17 February 2017

Leviathan: The Power of the State – The Economic Perspective
North Rhine-Westphalian Academy of Sciences, Humanities and the Arts, Düsseldorf
22 February 2017

The Co-Evolution of Democracy and the Market System
Conference on Political Economy of Democracy and Dictatorship, University of Münster,
23 February 2017

The Abhorrence against Delimitation in Economic Theory
Staufen-Faust Conference, Staufen
5 May 2017

Trump, Brexit, Protectionism – Challenges for the European Economy
Hochschule Karlsruhe
10 May 2017

Global Social Market Economy
Casino-Gesellschaft Berlin
17 May 2017

A Break for the Balance of Trade Surplus
Friedrich Ebert Foundation, Kocheler Kreis, Berlin
16 June 2017

Fiscal Policy in Crisis Times
Humboldt-Viadrina Platform, Berlin
3 July 2017

Leviathan: The State Monopoly on Violence and the Fight against Protectionism
Annual Meeting of the Verein für Socialpolitik, Vienna
6 September 2017

Lectures on Capital Theory
University of Zurich
7-8 November 2017

Secular Stagnation? A View from the Theory of Capital
Technical University Darmstadt
28 November 2017

2018

Population Growth and the Rate of Interest
51st Radein Conference, Radein, Italy
22 February 2018

Distributional Effects of Public Debt
Verein für Socialpolitik, Committee on Economic Policy, University of Witten-Herdecke
8 March 2018

Comment on Terzi Paper: In Defense of the Loanable Funds Theory
OENB (Austrian National Bank), Economics Conference, Vienna
14 March 2018

What Does Neoclassical Welfare Economics Want to Achieve?
Conference on Reshaping Economics, Evangelische Akademie Tutzing
27 April 2018

Interview on my Research through my Life
University of Leipzig, Leipzig Colloquium
7 June 2018

Saving and Investing in the 21st Century
Ifo Institute, Munich
2 July 2018

Energy and Capital
Vierzig Jahre Energieforschung – Farewell Meeting for Georg Erdmann, Technical University Berlin
30 September 2018

Capital and Time: Hicks and Böhm-Bawerk Modernized
Annual FFM Conference, Session on The Cambridge-Cambridge Controversy After 50 Years, Berlin
26 October 2018

Decline of Liberalism due to Market Concentration?
University of Tübingen, NOUS Conference on the Lippman Colloquium Eighty Years Ago
8 November 2018

2019

Remembrances of Academic Economists I Met in the United Kingdom: Joan Robinson, Nicholas Kaldor, Richard Kahn, Richard Stone, Frank Hahn, James Meade, David Champernowne, James Mirrlees, Michael Farrell, Christopher Bliss, Amartya Sen, John Hicks, Richard Goodwin, Nicholas Stern, John Flemming, Richard Layard, Terence Gorman, John Vickers, Oliver Hart, Paul Klemperer, Angus Deaton, and Lionel Robbins
Cologne (on the occasion of Brexit negotiations)
2 April 2019

European Fiscal Policy
Humboldt Forum at Humboldt University, Berlin
8 May 2019

Saving and Investing in the 21st Century – The Great Divergence
Cologne, Book launch with Hagen Krämer
8 October 2019

Book launch with Hagen Krämer: Saving and Investing in the 21st Century – The Great Divergence
Awarded the Hans Möller Medal by the Alumni Group of Munich Economists, Munich
22 October 2019

Book launch with Hagen Krämer: Saving and Investing in the 21st Century – The Great Divergence
Annual FFM Conference, Berlin
29 October 2019

2020

Book launch with Hagen Krämer: Saving and Investing in the 21st Century – The Great Divergence
DIW (Deutsches Institut für Wirtschaftsforschung)
9 January 2020

Book launch with Hagen Krämer: Saving and Investing in the 21st Century – The Great Divergence
Annual Meeting of German Keynes Society, "Optimal Public Debt"
18 February 2020

Book launch with Hagen Krämer, "Saving and Investing in the 21st Century – The Great Divergence", and discussion with a panel of academic economists
University of Frankfurt, Center for Financial Studies (CFS)
27 February 2020

Book launch with Hagen Krämer, "Saving and Investing in the 21st Century – The Great Divergence"
Evangelische Akademie Tutzing, Conference on "The Role of the State in the Great Transformation"
4 March 2020

COVID-19 and Public Finance
Video meeting, Arbeitskreis II of the parliamentary group of the Free Democrats (FDP), German Bundestag
16 June 2020

COVID-19 and Public Finance
Video meeting of the parliamentary group of the FDP, chaired by Christian Lindner. Discussion with Lars Feld (Chairman of the German Council of Economic Experts)
30 June 2020

Professional Activities

Memberships

Fellow of the Econometric Society

Founding Member of the European Economic Association (EEA)

Foreign Honorary Member of the American Academy of Arts and Sciences

Member of the North Rhine-Westphalian Academy of Sciences, Humanities and the Arts

Member of the German Academy of Technical Sciences

Member of the Academic Advisory Board of the German Ministry of Economic Affairs

D. Research Portraits

Fabian Winter

The past three years have been very productive and exciting. My work has further zoomed in on the foundations of normative change in several areas, such as normative change due to demographic change and migration, in social media, and with regard to the foundations of cooperation. Furthermore, I have started several replication projects and continued my research on the sociology of science.

Together with Nan Zhang and colleagues from the University of Zurich, I have worked on a series of field experiments to investigate the consequences of ethnic diversity on the validity of social norms. In Zhang and Winter (2018), we show that sanctioning behavior differs substantially depending on whether migrants or natives transgress a norm, and whether the observer is a migrant or a native. While migrants and natives sanction ingroup members to about the same extent, natives are much more likely to sanction migrants than vice versa. A second project together with Nan Zhang, Amelie Aidenberger, and Heiko Rauhut (Zhang et al. 2019) takes a closer look at status differences among migrants. We show that helping a migrant depends to a large degree on plausible deniability: if their phone is clearly visible, most Swiss people would borrow their phone for a short call when asked for it, irrespectively of whether the person asking is Swiss, German, or from another national background. This changes when the phone is not visible: in this context, people with a Swiss accent are much more likely to receive the phone than Germans, and to an even lesser extent, other minorities. The corresponding paper recently won the Best Article Award from the European Consortium of Sociological Research. In another stream of research, Amalia Álvarez Benjumea and I looked into how the things that "can be said" in social media change depending on descriptive norms. While this research area is still very active, we have already published

very promising results. In Álvarez Benjumea and Winter (2018), we show that hate speech can be effectively moderated by censoring comments that are too negative. Observing peer punishment, i.e., calling out inappropriate comments, has little to no effect on other people's comments. A related project exploits the occurrence of a terrorist attack during the data collection of hate comments (R&R at PNAS). We show that social norms are particularly important in the aftermath of these events, when people seem to seek guidance on what to do and say. While a more hostile environment motivates some people to post racist comments even without a terrorist attack, the difference between neutral and hostile environments is severely amplified after the attacks, when the already very negative comments become even more negative. Together with Amalia Álvarez Benjumea and Nan Zhang, we are currently collecting new longitudinal and panel survey data. We use the run-up to the 2020 U.S. presidential election in order to "track the Trump Effect" of how norms of speech change over the course of a campaign (in preparation).

I have continued my work on the foundations of cooperation and social norms in several projects over the past three years. A large collaboration with researchers from all over the world investigates the diverse patterns of social mindfulness and its relation to cooperative actions around the globe (Van Doesum et al., R&R at PNAS 2020). In Álvarez et al. (2020), we look at the coordinating aspects of descriptive norms in cooperation problems and show that it is paramount for cooperation to announce publicly what is expected of the team members. Rauhut and Winter (2017) theoretically investigate how normative conflicts impact the effectiveness of punishment in situations where cooperation norms and fairness norms can give competing recommendations. A joint paper with Axel Franzen (2017) studies the effectiveness of peer

© Thomas Hartmann

Contact

winter@coll.mpg.de

https://www.coll.mpg.de/fabian-winter

punishment and how it relates to the number of potential sanctioners. This paper eventually lead to a three-year project funded by the German Research Foundation (DFG). In this project, Adrian Hillenbrand and I are investigating the consequences of population uncertainty, i.e., uncertainty about the number of players in a game, on volunteering behavior. In Hillenbrand und Winter (2018), we show that volunteering in the volunteer's dilemma in fact increases under population uncertainty, when studied in a lab setting. Going to the field, however, paints a different picture: In a large-scale online labor experiment (Werner et al. 2020), we find that population uncertainty in small to very large teams has no effect on volunteering, and neither does the group size. In Hillenbrand and Winter (in preparation), we theoretically predict the emergence of specific cooperation norms in stable and unstable social relations. A test of our predictions in a lab experiment shows results that are very close to our theoretical predictions. In a related paradigm, Mitesh Kataria and I have studied whether friendship networks can be structured by how trustworthy people are towards outsiders (Kataria and Winter 2020). In Franzen et al. (2018), we study visible markers of empathy and its relation to pro-social behavior. In an experimental study, we show that being susceptible to contagious yawning correlates with a high degree of empathy for others. Finally, in Winter et al. (2018a), we show how different normative cues can evolve over the course of ongoing negotiations, and how normative conflict shapes the outcomes of fairness problems.

Over the past years, I have also made further progress in understanding publication patterns in different scientific disciplines. In Rauhut et al. (2018), we study how early "success" in citations leads to future success. Rauhut and Winter (2017) provide a bibliometric and historical case study on differences in German sociology journals. We have also made considerable progress in Winter, Rathmann, and Rauhut (2020). This computationally complex project uses a matching approach to study the effect of strategically citing certain authors in the hope of receiving reciprocal citations in return.

Finally, I have conducted and contributed to a number of replication projects. In Winter and Diekmann, we replicate a recent de Vohs et al. study on the psychological consequences of money on a range of outcomes, for instance voluntary donations and other non-strategic decisions. While the originally reported results largely hold, they do not translate into strategic situations. Breznau et al. (2019, in preparation a, b) take a very different approach: in this replication study, almost 100 teams replicated the same hypothesis on the same survey data set. The central claim of the original article was that immigration decreases support for the welfare state in 17 OECD countries. Most of the replication attempts, including ours, failed to confirm this claim without any doubt. We are currently working on two papers which we intend to submit to *Science* and the *American Sociological Review*, respectively. Finally, Nan Zhang, Johanna Gereke, David Kretschmer, and I are part of the SCORE replication initiative headed by Brian Nosek. With respect to the claim selected for replication by SCORE, we successfully replicated a network study published in the *American Journal of Sociology*. However, in the process, we found a number of serious flaws in the original study's statistical analysis, which we are currently addressing in a separate comment to the *American Journal of Sociology* (Kretschmar et al., in preparation).

Publications (since 2017)

Publications in Peer-reviewed Journals

Álvarez Benjumea, A. and Winter, F. (2020). The Breakdown of Anti-Racist Norms: A Natural Experiment on Normative Uncertainty after Terrorist Attacks. *PNAS*, 117(37), 22800–22804.

Winter, F. and Kataria, M. (2020). You Are Who Your Friends Are?: An Experiment on Homophily in Trustworthiness Among Friends. *Rationality and Society*, 32(2), 223–251.

Zhang, N., Aidenberger, A., Rauhut, H. and Winter, F. (2019). Prosocial Behavior in Interethnic Encounters: Evidence from a Field Experiment with High- and Low-Status Immigrants. *European Sociological Review*, 35(4), 582–597.

Crosetto, P., Weisel, O. and Winter, F. (2019). A flexible z-Tree and oTree implementation of the Social Value Orientation Slider Measure. *Journal of Behavioral and Experimental Finance*, 23, 46–53.

Winter, F., Rauhut, H. and Miller, L. (2018). Dynamic Bargaining and Normative Conflict. *Journal of Behavioral and Experimental Economics*, 74, 112–126.

Álvarez Benjumea, A. and Winter, F. (2018). Normative Change and Culture of Hate: An Experiment in Online Environments. *European Sociological Review*, 34(3), 223-237.

Franzen, A., Mader, S. and Winter, F. (2018). Contagious Yawning, Empathy and Their Relation to Prosocial Behavior. *Journal of Experimental Psychology: General,* 147(12), 1950–1958.

Winter, F. and Zhang, N. (2018). Social Norm Enforcement in Ethnically-Diverse Communities. *PNAS – Proceedings of the National Academy of Sciences,* 115(11), 2722–2727.

Hillenbrand, A. and Winter, F. (2018). Volunteering under Population Uncertainty. *Games and Economic Behavior*, 109, 65–81.

Rauhut, H. and Winter, F. (2017). Vernetzung und Positionierung der Kölner Zeitschrift für Soziologie und Sozialpsychologie (KZfSS) in der länder-, disziplinen- und sprachübergreifenden Diskussion. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, (Suppl 1) 69, 61–74.

Articles in Edited Volumes etc.

Winter, F. and Diekmann, A. (2020). The Psychological Consequences of Money: Two Replications and Four Extensions. In: Buskens, V., Corten, R. and Snijders, C. (eds.) *Advances in the sociology of trust and cooperation: theory, experiments, and applications*. Oldenbourg: De Gruyter, 309-318.

Rauhut, H., Winter, F. and Johann, D. (2018) Does the Winner Take It All? Increasing Inequality in Scientific Authorship. In: Scott, R. A., Kosslyn, S. M. and Buchmann, M. (eds.) *Emerging Trends in the Social and Behavioral Sciences*, 1-14.

Winter, F. and Franzen, A. (2017). Diffusion of Responsibility in Norm Enforcement: Evidence from an N-Person Ultimatum Bargaining Experiment. In: Prezpjorka, W. and Jann, B. (eds.). *Social dilemmas, institutions and the evolution of cooperation.* Oldenbourg: De Gruyter, 303–326.

Rauhut, H. and Winter , F. (2017). Types of Normative Conflicts and the Effectiveness of Punishment. In: Prezpjorka, W. and Jann, B. (eds.). *Social dilemmas, institutions and the evolution of cooperation*. Oldenbourg: De Gruyter, 239–258.

Revise & Resubmit

Van Doesum, N., Ryan, J., Murphy, O., Aharonov-Majar, E., ... , Winter, F., ... (2020) Social Mindfulness Across the Globe. R & R: *PNAS – Proceedings of the National Academy of Sciences.*

Winter, F., Rathmann, J. and Rauhut, H. (2020). The Increasing Dominance of Networking in the Production of Knowledge. R & R: *PNAS – Proceedings of the National Academy of Sciences.*

Submissions

Álvarez Benjumea, A., Freund, L., Luckner, K. and Winter, F. (2018). Public Signals as Coordination Devices: The Moderating Effect of Group Identity.

Hillenbrand, A., Werner, T. and Winter, F. (2019). Volunteering at the Workplace Under Incomplete Information: Teamsize Does Not Matter. *MPI Discussion Paper* 2020/4.

Böhm, R., Fleiß, J., Rauhut, H., Rybnicek, R. and Winter, F. (2017). Representative Evidence on Social Value Orientation in Austria.

Working Papers

Breznau, N., Rinke, E. M., Wuttke, A., Adem, M., Adriaans, J., ..., Winter, F., ... (2019). The Crowd- sourced Replication Initiative: Investigating Immigration and Social Policy Preferences. Executive Report. Universität Mannheim.

Rauhut, H. and Winter, F. (2018). Der Markt der Aufmerksamkeit in der Soziologie: Trends im Publizieren, Zitieren und Netzwerken. SSRN 3264134.

Winter, F. (2017). Real Effort Tasks in Economic Experiments: An Empirical Comparison of Tasks and their Behavioral Effects. *mimeo,* MPI Collective Goods.

Work in Progress

Kretschmer, D., Gereke, J., Winter, F. and Zhang, N. (in preparation). Ethnic Composition and Friendship Segregation: A comment on Smith et al. 2016.

Breznau et al. (in preparation a). Midnight in the Garden of Forking Paths: The Realities of Researcher Variability.

Breznau et al. (In preparation b). Does Immigration Undermine Public Support for Social Policy? A Crowdsourced Re-Investigation.

Hillenbrand, A. and Winter, F. (in preperation). How the Stability of Social Relations Shapes the Emergence of Latent Norms.

Álvarez Benjumea, A., Winter, F. and Zhang, N. (ongoing). Tracking the Trump Effect: A Long Term Study of How Political Campaigns Change the Unsayable.

Álvarez Benjumea, A., Hillenbrand, A., Zhang, N. and Winter, F. (in preparation). Risk perception and Normative Change during the COVID-19 Outbreak.

Scholarships and Awards

DFG-Project Grant for the Project "Volunteering under Population Uncertainty", one postdoc position + research funds.

European Sociological Review, Best Article of the Year Prize for articles published in the in 2019 for: Zhang, N., Aidenberger, A., Rauhut, H. and Winter, F. (2019). "Prosocial Behavior in Interethnic Encounters: Evidence from a Field Experiment with High- and Low-Status Immigrants".

Organized Workshops

Together with David Hugh-Jones of University of East-Anglia, I am organizing the annual interdisciplinary Cultural Transmission and Social Norms workshop. Speakers in recent years included Bob Sugden, Christina Bicchieri, Pete Richerson, Joe Henrich, Simon Gächter, and many other young and distinguished researchers. The 2017 Workshop was held at UEA in Norwich, the 2018 edition was held at MIT in Cambridge, MA, and the 2020 edition was rescheduled to December 2020.

ISA World Congress (Toronto), Section 45: Mechanisms of Normative Change.

Professional Activities

Reviewer for

German Economic Review, *Journal of Evolutionary Economics*, *Palgrave Research Methods Series*, *Social Forces (3)*, *Social Science Research*, *Social Science & Medicine*, *Zeitschrift für Soziologie (2)*, Conference "Social Norms and Institutions", *Journal of Economic Psychology*, *Social Psychology Quarterly (2)*, *Experimental Economics*, *Social Indicators Research*, *European Sociological Review*

D. Research Portraits

Nan Zhang

Overview

I joined the MPI as a Senior Research Fellow in the Research Group "Mechanisms of Normative Change" on 1 September 2016. From 2014-2016, I was a Max Weber Fellow at the European University Institute in Florence, Italy. I obtained my PhD in Political Science from Stanford University (2014), and I also hold a JD from Stanford Law School (2011). My research lies primarily at the intersection of Political Science and Sociology, and my work since 2017 has focused on three main topics: (i) immigration, ethnic diversity, and social cohesion; (ii) nationalism, political development, and state-society interaction; and (iii) civic responses to corruption.

Immigration, Ethnic Diversity, and Social Cohesion

Recent waves of immigration have changed the demographic face of Western societies and generated heated debates about the consequences of ethnic diversity for social cohesion. My research uses experimental methods (particularly field experiments) to investigate the extent to which ethnic boundaries shape prosocial behavior in real-world encounters.
Zhang et al. (2019) study other-regarding preferences via a helping experiment in Zurich's Central Train Station. The intervention consists of approaching commuters with a small request for assistance (borrowing a mobile phone). We employed professional actors who could vary the dialect in which this request was phrased and thereby signal either a native or immigrant identity. The results demonstrate a discernible pattern of anti-foreigner bias, especially against members of stereotypically "low-status" immigrant groups.
In another field experiment, Winter and Zhang (2018) examine reactions to norm violations committed by confederates with and without migration backgrounds. The experiment uncovers

an asymmetric pattern of social sanctioning, whereby almost 20% of natives sanction minority norm-breakers, whereas only 4% of minorities sanction natives. These patterns speak against the commonly-cited proposition that norm enforcement is ethnically-bounded, but are instead suggestive of the influence of status hierarchies in interethnic encounters.
Other projects in this line of research are currently in the writing and planning phases. Zhang, Gereke, and Baldassarri (unpublished work) use an unobtrusive measure of physical distancing to capture aversion to intergroup contact. Our contact experiment randomly exposes commuters in the Milan subway to the presence of immigrants and measures their aversive reactions. Results from two waves of data collection show greater aversion to contact with African confederates (compared against a native "baseline"), but no discrimination against Asian confederates.
Gereke, Schaeffer, and Zhang (unpublished work) studies how the ethnicized portrayal of immigrants as welfare recipients affects public support for welfare policies in Denmark. We measure welfare support using a field experiment soliciting signatures on political petitions in support of various welfare policies. Data collection was originally envisioned for summer 2020, but has unfortunately been postponed due to the current Corona situation.
Finally, Álvarez, Winter, and Zhang (unpublished work) are conducting a natural survey experiment embedded within a long-term public opinion study of the effects of the 2020 U.S. Presidential election on anti-racist norms.

Nationalism, Political Development, and State-Society Interaction

A longstanding tradition in political science has studied the co-development of political institutions with national identities and national cultures. Much of this research has traditionally relied

Contact

zhang@coll.mpg.de

https://www.coll.mpg.de/nan-zhang

upon qualitative sources and methods. I contribute original quantitative evidence to this literature and study the processes by which states gained the capacity increasingly to shape the societies they purport to rule.

Lee and Zhang (2017) argue that "legibility" – i.e., the breadth and depth of the state's knowledge about its citizens and their activities – is crucial to effective, centralized governance. The paper contributes an original measure of legibility based on the errors in age-counts obtained from national population censuses and demonstrates an empirical relationship between legibility and centralized tax collection. A related paper (Zhang and Lee, 2020) examines the role of linguistic harmonization in expanding state power. Drawing upon detailed historical data from 19th-century France, we demonstrate that literacy in the language of state administration facilitates compliance with family-law regulations.

Lee and Zhang (unpublished work) study the relationship between American state-building and the development of a national identity. Efforts to examine historical identity construction have been hampered by the lack of quantitative measures of nationalist sentiment in an era before public-opinion data. Our project overcomes this limitation via the use of text-as-data methods. Specifically, historians argue that Americans in the 19th century gradually stopped thinking of the United States as a federative entity comprised of multiple, equal sovereign states, and instead thought of it as a single national entity. This transformation is evident in the well-documented grammatical change in which the phrase "United States" shifted from a plural noun to a singular noun. We examine this grammatical shift using verbatim transcriptions of speeches given in the U.S. Congress. By linking natural-language speech data to speaker biographies, we can begin to paint a picture of how economic, social, and political developments came together to shape American national identity.

Civic Responses to Corruption

Over the past four years, I have also worked on several projects relating to corruption, which was the theme of my PhD research. In particular, anti-corruption research has highlighted the potential for grassroots action to improve governance outcomes, but the conditions under which citizens are willing to stand up against corruption remain under-studied. Are individuals from some societies socialized into a "culture of corruption" that makes them more accepting of malfeasance, or is the failure to denounce wrongdoing simply a response to low-quality enforcement institutions? Zhang (2018) reports results from a laboratory experiment to examine how the propensity to report corruption differs between Northern and Southern Italians, two populations experiencing different levels of corruption in everyday life. For each group, I experimentally manipulate the quality of enforcement institutions. When given high-quality institutions, all participants are more willing to report corruption. Moreover, Southerners and Northerners behave similarly when placed within the same institutional environments. These results suggest that high-corruption societies are not "culturally" predisposed to tolerate malfeasance. Rather, improving the capacity of enforcement institutions may significantly strengthen accountability norms.

Poertner and Zhang (unpublished work) study civic reactions to corruption by leveraging natural experiments from Argentina and Costa Rica, involving the unprecedented sentencing of two former Presidents on corruption charges. Exploiting the coincidence in timing between these cases and fieldwork on nationally representative surveys, we show that high-profile efforts to punish corrupt actors paradoxically eroded trust in institutions and produced "resigned citizens" who expressed a lower willingness to vote or join in collective demonstrations.

Future Research Agenda

I have been approved by the German Research Foundation (DFG) to head a new Emmy Noether Research Group: "Making Diversity Work: New Behavioral Indicators of Social Cohesion in Multi-ethnic Communities." The six-year project will combine field experiments with administrative data to analyze how trust and cooperation can be sustained in ethnically diverse settings. This research program innovates over existing studies, which have primarily privileged comparisons between ethnically homogenous vs. heterogeneous areas, while overlooking important differences between highly diverse contexts. By their design, prevailing approaches cannot explain why some diverse areas exhibit higher levels of trust and cooperation than others. To gain analytical leverage over this question, the Making Diversity Work project will instead examine variation across multiethnic neighborhoods in order to identify the factors contributing to positive diversity outcomes. Using innovative field-experimental methods, I will develop a sophisticated set of behavioral indicators to map variation in prosocial behavior across diverse urban areas. These new data will be used to (i) test systematically new theories about how different characteristics of diverse neighborhoods contribute to local cooperation; (ii) disentangle the individual-level mechanisms underlying social cohesion in multiethnic settings; and (iii) develop a richer understanding of social relations that takes both the natives' and the minorities' experiences into account. Overall, it is hoped that results from this research will open up new scientific perspectives on cooperation in diverse communities and generate critical policy knowledge about how to "make diversity work" in an era of rapid demographic change.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Zhang, N. and Lee, M. (2020). Literacy and State-Society Interactions in 19th Century France. *American Journal of Political Science*, 64(4), 1001–1016.

Zhang, N., Aidenberger, A., Rauhut, H. and Winter, F. (2019). Prosocial Behavior in Interethnic Encounters: Evidence from a Field Experiment with High- and Low-Status Immigrants. *European Sociological Review*, 35(4), 582–597.

Winter, F. and Zhang, N. (2018). Social Norm Enforcement in Ethnically Diverse Communities. *Proceedings of the National Academy of Sciences,* 115(11), 2722-2727.

Zhang, N. (2018). Institutions, Norms, and Accountability: A Corruption Experiment with Northern and Southern Italians. *Journal of Experimental Political Science*, 5(1), 11–25.

Lee, M. and Zhang, N. (2017). Legibility and the Informational Foundations of State Capacity. *Journal of Politics* 79(1), 118–132.

Working Papers

Poertner, M. and Zhang, N. (under review). The Paradoxical Effects of Combating Corruption on Political Engagement: Evidence from Two Natural Experiments.

Zhang, N., Gereke, J. and Baldassarri, D. Racial Avoidance in Everyday Encounters: A Field Experiment in the Milan Metro.

Work in Progress

Álvarez Benjumea, A., Hillenbrand, A., Winter, F. and Zhang, N. Risk Perception and Normative Change During the COVID-19 Outbreak.

Álvarez Benjumea, A., Winter, F. and Zhang, N. Tracking the Trump Effect: A Long Term Study of How Political Campaigns Change the Unsayable.

Gereke, J., Schaeffer, M. and Zhang, N. Immigration, Ethnic Diversity, and the Future of the Scandinavian Welfare State: A Field Experiment in Greater Copenhagen.

Lee, M. and Zhang, N. From Pluribus to Unum: Statebuilding in 19th Century America.

Prizes and Awards

2020

German Research Foundation (DFG) Emmy Noether Program

Research in the Humanities and Social Sciences Grant, Princeton University
Winner of the 2020 *European Sociological Review* Best Article Prize for "Prosocial Behavior in Interethnic Encounters"

Lectures and Presentations (since 2017)

2017

Social Norm Enforcement in Ethnically Diverse Communities
IMEBESS, Barcelona
May 2017

Legibility and the Informational Foundations of State Capacity
Governance in Areas of Limited Statehood, FU Berlin
June 2017

Social Norm Enforcement in Ethnically Diverse Communities
APSA, San Francisco
August 2017

Social Norm Enforcement in Ethnically Diverse Communities
BEELab, University of Florence
November 2017

2018

Literacy and State-Society Interactions in 19th-Century France
Hohenheim University
May 2018

Literacy and State-Society Interactions in 19th-Century France
Heidelberg University
May 2018

Stereotypes and Social Norm Enforcement in Interethnic Encounters: Survey Evidence and Behavior in the Field
IMEBESS, European University Institute
May 2018

Prosocial Behavior in Interethnic Encounters: Evidence from a Field Experiment with High- and Low-Status Immigrants
Mittelbau Seminar, MZES
June 2018

Stereotypes and Social Norm Enforcement in Interethnic Encounters: Survey Evidence and Behavior in the Field
The Migration Conference, Lisbon
June 2018

Panel on Behavioral and Cultural Approaches to Tax Compliance
ECPR, Hamburg
August 2018

Implicit Bias Against Immigrants Is Unaffected by Their Socioeconomic Status
Analytical Sociology Workshop, Venice International University
November 2018

2019

Implicit Bias Against Immigrants Is Unaffected by Their Socioeconomic Status
Think Causally! Experiments in the Social Sciences, European University Institute
February 2019

Implicit Bias Against Immigrants Is Unaffected by Their Socioeconomic Status
IMEBESS, Utrecht University
May 2019

Does Immigration Undermine Public Support for Welfare? Evidence from a Conjoint Experiment
INTERACT Conference, Bocconi University
June 2019

Tracking the Trump Effect: A Long-Term Study of How Political Campaigns Change the Unsayable
Digital Societies Conference, University of Konstanz
September 2019

Tracking the Trump Effect: A Long-Term Study of How Political Campaigns Change the Unsayable
Analytical Sociology Workshop, Venice International University
November 2019

2020

All engagements cancelled.

Teaching

2019
Experimental Methods in the Social Sciences
GIGA, Hamburg

Professional Activities

Referee for

PNAS, American Political Science Review, American Journal of Political Science, Journal of Politics, Quarterly Journal of Political Science, World Politics, European Sociological Review, Journal of Ethnic and Migration Studies, Journal of the Economic Studies Association, Diligentia Foundation

D. Research Portraits

I have also taken part in two large-scale replication initiatives:

[1] The Crowdsourced Replication Initiative: Investigating Immigration and Social Policy Preferences, organized by N. Breznau, E. M. Rinke, and A. Wuttke

[2] Systematizing Confidence in Open Research and Evidence (SCORE), organized by the Center for Open Science

Claudia Zoller

I am currently employed as a postdoc-toral researcher and lecturer at the Center for Social and Health Innovation at the Management Center Innsbruck. I graduated from the University of Cologne's PhD program in October 2018 and was part of Prof. Sutter's research group until September 2018.

During my time at the institute, from October 2017 to September 2018, I mainly worked on my PhD thesis, covering the following topics:

(i) the development of social preferenc-es and behavioral patterns through-out childhood;
(ii) fairness and inequity preferences.

In addition, I am still currently involved in a joint project with Matthias Sutter, Angelo Romano, and Zvonimir Bašić, in a large-scale lab-in the-field experiment on the development of cooperation in young children. We let 964 children, aged three to six, play a repeated prison-er's dilemma game. In a unified exper-imental framework, we examine which of three fundamental pillars of human cooperation – direct and indirect reci-procity as well as third-party punishment – emerges earliest and is most effective in increasing cooperation in a social dilemma. We find that third-party punish-ment exhibits a striking positive effect on cooperation. Children engage in reciprocating others; however, direct and indirect reciprocity do not increase over-all cooperation levels. We discuss theory and policy implications of our findings.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Sutter, M., Zoller, C. and Glätzle-Rützler, D. (2019). Economic Behavior of Children and Adolescents – A First Survey of Experimen-tal Economics Results. *European Economic Review*, 111, 98–121.

Working Papers

Bortolotti, S., Soraperra, I., Sutter, M. and Zoller, C. (2017). Too Lucky to Be True: Fair-ness Views under the Shadow of Cheating. *CESifo Working Paper* No. 6563.

Lectures and Presentations (since 2017)

2018

Busy little bees – An experiment on endoge-nous time scheduling and diligence in early childhood
ESA World Conference, Berlin
July 2018

Busy little bees – An experiment on endoge-nous time scheduling and diligence in early childhood
MPI Inaugural Conference, Bonn
May 2018

Busy little bees – An experiment on endoge-nous time scheduling and diligence in early childhood
MPI Workshop Berlin-Bonn-Leipzig, Bonn
March 2018

Busy little bees – An experiment on endoge-nous time scheduling and diligence in early childhood
Innsbruck Winter School, Kühtai
February 2018

Contact

claudia.zoller@mci.edu

https://www.coll.mpg.de/claudia-zoller

D. Research Portraits

Frederike Zufall

Following the completion of my doctoral studies at Humboldt University of Berlin in 2015, I worked for three years as an assistant professor at Waseda University, Tokyo. After one more year at the Research Group on Law Science Technology & Society (LSTS), Free University of Brussels, I joined the Institute on 1 September 2020.

During my time at Waseda University I approached IT law and data regulation from a comparative perspective. At the same time, the interdisciplinary environment at the Waseda Institute for Advanced Study gave me the opportunity to build on my long-standing affinity with computer science: I initiated interdisciplinary research projects, with both computer scientists and mathematicians, exploring how legal concepts could be carried over to technology. My aim at the MPI is to benefit from this applied work and to address theoretical preconditions for implementing Legal Tech in procedural law in my habilitation thesis.

Research Outline

I have an ongoing research cooperation with **computer scientists (Natural Language Processing)** from the University of Duisburg-Essen (Germany). We pursue the implementation of technical solutions that allow for the adaptation of legal requirements by NLP techniques. For our first research paper, we investigated how the assessment of criminal offenses (here: defamation) could be operationalized with regard to social-media content. We suggested a way to create large datasets, usable by neural networks for automated classification – without depending on existing court decisions. Therefore, we annotated training data according to a legislation-dependent annotation schema. From a legal point of view, one objective was to address the crucial relationship between regulation to protect individuals and the freedom of expression. The resulting research paper (Zufall, Horsmann, Zesch; 2019) has been accepted by NAACL-HLT 2019, one of the top conferences in the area of NLP. Our follow-up project focuses on the criminal offense of "Incitement to Hatred" while outlining specific NLP tasks related to its operationalization. We started collaborating with the Cologne public prosecutor's office (Cybercrime Zentrum NRW), inter alia by accessing their investigation files. Our research has yielded further fruit, as we are active contributors to the Federal Criminal Police Office's (BKA) research project KIS-TRA ("Einsatz von KI zur Früherkennung von Straftaten"), advising and working on automatic detection systems for criminal offenses (i.e., "hate speech").

Furthermore, I have initiated an interdisciplinary research project with mathematicians from Waseda University. We work on **applied mathematics**, namely on how legal dogmatics could be translated into mathematical models. With this, our project aims to contribute further to the foundations of Legal Tech: while most current approaches focus on machine learning (including my NLP research, described above), exploring the extent to which mathematical models – as a more abstract and less data-driven approach – could stand in for legal concepts, this aspect has rarely been investigated. The advantages lie in a higher degree of explainability and transparency, but come at the price of higher abstraction and simplification. Our paper (currently under review) tries to demonstrate this based on the concept of balancing competing interests, namely the conflict between access to information and the right to the protection of personal data and to privacy, as applied by the European Court of Justice's Google Spain decision.[1]

Contact

zufall@coll.mpg.de

https://www.coll.mpg.de/frederike-zufall

---

1   ECJ, Case C-131/12, Judgment of the Court (Grand Chamber), 13 May 2014, ECLI:EU:C:2014:317.

Building on these interdisciplinary and applied projects, my **habilitation thesis** will address theoretical preconditions for implementing Legal Tech in procedural law. If machine-learning approaches feed on training data, the sources (judicial decisions, laypersons, expert annotation, etc.), composition, and validation of these datasets are crucial to the legal effect we might be willing to assign to these systems. However, explainability, transparency, and accuracy of automated decision-making systems do not merely depend on the data set: feature engineering, software design, pre-training, and steps of an NLP pipeline are all part of the technical process. How does this relate to our understanding of legal decision-making and legal procedure? The need to address algorithmic regulation not just on a legal level, but also on the level of technical implementation – and, ultimately, how these are intertwined – is a precondition for future Legal Tech solutions. Connected research questions would, for instance, concern the possibility of legal redress, as prescribed by the rule of law, but also the role of participation in administrative procedure. How do we define and understand the substance of legal procedure, due process, and, ultimately, the application of law? We might have to rethink existing legal mechanisms and to adapt them, while still maintaining the fundamental concepts on which our legal systems were built.

Publications (since 2017)

Articles in Peer-Reviewed Journals

Zufall, F. (2019). Shifting Role of the Place: From locus delicti to online ubiquity in EU, Japanese and U.S. conflict of tort laws, *The Rabel Journal of Comparative and International Private Law* (RabelsZ) 2019/4, 760-796.

Zufall, F., Horsmann, T., Zesch, T. (2019). From legal to technical concept: Towards an automated classification of German political Twitter postings as criminal offenses, *Proceedings of the Annual Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies* (NAACL-HLT), Minneapolis, USA, 1 (Long Paper), 1337-1347.

Zufall, F. (2019). Challenging the EU's 'right to be forgotten'? Society's 'right to know' in Japan, *European Data Protection Law Review (EDPL)*, 1, 17-25.

Submissions

Zufall, F., Zhang, H., Kloppenborg, K., Zesch, T. Operationalizing the legal concept of 'Incitement to Hatred' as an NLP task.

Zufall, F., Kimura, R., Peng, L., A simple mathematical model for the legal concept of balancing of interests (confidential).

Book Chapters

Zufall, F., Zingg, R. (forthcoming). Data Portability in a Data-Driven World, in: Peng/Lin/Streinz (Eds.), *Reconfiguring International Economic Law in an AI Era*, Cambridge University Press.

Zufall, F. (2017/2018/2019). Artikel 50 DSGVO [Art. 50 General Data Protection Regulation (GDPR)], in: Eßer/Kramer/v. Lewinski (Eds.), DSGVO/BDSG, 5th ed. 2017, 6th ed. 2018, 7th ed. 2020.

Discussion Paper

Zufall, F. (2017). Digitalisation as a catalyst for legal harmonisation: The EU digital single market, *WIAS Research Bulletin* No. 10, 103-110.

E.   Conferences & Workshops

E.   Conferences & Workshops organized by the Max Planck Institute for Research on Collective Goods

2018

Workshop with the Cologne School of Journalism
Max Planck Institute for Research on Collective Goods, Bonn
23 January 2018

11th IMPRS Uncertainty Thesis Workshop
Jointly organized with the University of Jena, Germany
Schloss Ringberg, Germany
05-09 March 2018

Workshop with the Research Groups of Professors Ralph Hertwig and Richard McElreath
Max Planck Institute for Research on Collective Goods, Bonn
14 March 2018

ECONtribute Retreat
Jointly organized with the University of Bonn and the University of Cologne
Max Planck Institute for Research on Collective Goods, Bonn
18 April 2018

Inaugural Conference of the Experimental Economics Group
Bonn, Germany
28-29 May 2018

Without Money?
37th Seminar on the New Institutional Economics
Jointly organized with Urs Schweizer, University of Bonn, Germany
Florence, Italy
06-09 June 2018

Experimental Finance Workshop
Max Planck Institute for Research on Collective Goods, Bonn
19 June 2018

IMPRS Topics Workshop
Jointly organized with University of Jena, Germany
Rome, Italy
24-28 September 2018

Workshop with CREED Amsterdam
Max Planck Institute for Research on Collective Goods, Bonn
28 November 2018

2019

Workshop with the Cologne School of Journalism
Max Planck Institute for Research on Collective Goods, Bonn
16 January 2019

Workshop with the Research Groups of Professors Loukas Balafou-tas and Kai Konrad
Innsbruck, Austria
8 February 2019

12th IMPRS Uncertainty Thesis Workshop
Jointly organized with the University of Jena, Germany
Leucorea, Wittenberg, Germany
03-06 March 2019

Workshop on Behavioral and Experimental Economics
Max Planck Institute for Research on Collective Goods
15 May 2019

Experimental Finance Workshop
Max Planck Institute for Research on Collective Goods
4 June 2019

Causality in the Law and in the Social Sciences
38th Seminar on the New Institutional Economics
Jointly organized with Urs Schweizer, University of Bonn, Germany
Porto, Portugal
05-08 June 2019

2020

Workshop with the Cologne School of Journalism
Max Planck Institute for Research on Collective Goods, Bonn
16 January 2020

All further conferences and workshops were cancelled due to the COVID-19 pandemic.

F. Research Seminars

F.I   External Speakers in our Research Seminars

2017

Fedor Levin
MPI for Demographic Research, Rostock, Germany
"The Influence of Episodic Memory Decline on Food Choice"
9 January 2017

Molly Crockett
University of Oxford, UK
"The Price of Principles"
9 January 2017

Alia Gizatulina
University of St. Gallen, Switzerland
"Designer Uncertainty and Bet-on-the-Liar Mechanism"
11 January 2017 (Economics Seminar)

Marc Scheufen
University of Bochum, Germany
"Does Online Access Promote Research in Developing Countries?"
16 January 2017

Matteo Ploner
University of Trento, Italy
"Taking Over Control: An Experimental Analysis of Delegation Avoidance in Risky Choices"
23 January 2017

Rafael Aigner
German Institute for Economic Research (DIW), Berlin, Germany
"The Fehmarn Belt Duopoly – Can the Ferry Compete with a Tunnel?"
25 January 2017 (Economics Seminar)

Andrej Angelovski
LUISS Guido Carli, Rome, Italy
"Can Competition Resolve the Free-rider Problem in the Voluntary Provision of Impure Public Goods? Experimental Evidence"
30 January 2017

Arianna Galliera
LUISS Guido Carli, Rome, Italy
"Behavioral Patterns in Conditional Generosity"
30 January 2017

Francesca Marazzi
LUISS Guido Carli, Rome, Italy
"Do All 'Bad' Apples Taste the Same? Experimental Analysis of Heterogeneity in Local Public-goods Provi-sion"
30 January 2017

Valentin Wagner
University of Düsseldorf, Germany
"Seeking Risk or Answering Smart? Framing in Elementary Schools"
1 February 2017 (Economics Seminar)

Ingela Algers
Toulouse School of Economics, France
"How Many Wives Do Men Want? On the Evolution of Polygyny Rates"
6 February 2017

Francesco Cerigioni
Universitat Pompeu Fabra and Barcelona Graduate School of Economics, Barcelona, Spain
"Stochastic Choice and Familiarity: Inertia and the Mere Exposure Effect"
8 February 2017 (Economics Seminar)

Nikita Zakharov
University of Freiburg, Institute for Economic Research, Freiburg, Germany
"Does Independent Media Matter in Non-Democratic Elections? Experimental Evidence from Russia" (with Ruben Enikolopov, Michael Rochlitz, and Koen Schoors)
15 February 2017 (Economics Seminar)

Viola Ackfeld
Cologne Graduate School, Germany
"On the Evolution of Trust Behavior when Sharing Strategic vs. Non-strategic Private Information"
20 February 2017

Christoph Möllers
University of Berlin, Germany
"From Dogma to Data? Legal Reasoning as an Object of Empirical Research"
20 February 2017

Alex Smolin
University of Bonn, Germany
"Evaluation Theory of Wage Growth"
21 February 2017 (Economics Seminar)

Lilia Zhurakhovska
University of Duisburg-Essen, Germany
"The Long-run Effects of the Universal Basic Income: Experimental Evidence"
13 March 2017

Luigi Franzoni
University of Bologna, Italy
"Applying Behavioural Economics to Policy-making: Some Experiences"
13 March 2017

Niels Petersen
University of Münster, Germany
"An Empirical Analysis of Constitutional Prohibitions of Discrimination"
20 March 2017

Benedikt Herrmann
European Commission, Brussels, Belgium
"Applying Behavioural Economics to Policy-making: Some Experiences"
20 March 2017

Milena Nikolova
IZA– Institute for the Study of Labor, Bonn, Germany
"Your Spouse is Fired! How Much Do You Care?"
22 March 2017 (Economics Seminar)

Ewald Engelen
University of Amsterdam, Netherlands
"Trade Narratives at the Service of Restoration: The Case of Europe's Capital Markets Union"
3 April 2017

Davide Cantoni
(joint with David Y. Yang, Noam Yuchtman, Y. Jane Zhang)
LMU Munich, Germany
"Are Protests Games of Strategic Complements or Substitutes? Experimental
Evidence from Hong Kong's Democracy Movement"
10 April 2017

Martin Obradovits
University of Innsbruck, Austria
"The Loss-Leading Puzzle"
19 April 2017 (Economics Seminar)

Emilio Calvano
University of Bologna, Italy
"Can We Trust the Algorithms that Recommend Products Online? A Theory of Biased Advice with No Pecuni-ary Incentives and Lab Evidence"
26 April 2017 (Economics Seminar)

Marie Lalanne
Goethe-Universität Frankfurt, SAFE Research Center, Germany
"Do Social Ties Lead to Job Referrals: Evidence from US Board Ap-pointments"
3 May 2017 (Economics Seminar)

Alexander Vostroknutov
University of Trento, Italy
"Social Norms and Preferences for Redistribution"
8 May 2017

Martin Guzi
Masaryk University, Brno, Czech Republic
"Unstable Political Regimes and Wars as Drivers of International Migration"
11 May 2017 (Economics Seminar)

Xandra Kramer
(joint with Christoph Engel)
University of Rotterdam, Netherlands
"Perceived Access to Justice"
15 May 2017

Mila Versteeg
University of Virginia, School of Law, USA
"Rights without Resources: The Impact of Constitutional Social Rights on Social Spending"
15 May 2017

Willemien Kets
Kellogg School of Management, Northwestern University, Evanston, USA
"Strategic Uncertainty and the Costs and Benefits of Diversity"
29 May 2017

Ctirad Slavik
Center for Economic Research and Graduate Education – Economics Institute
Prague, Czech Republic
"Wage Risk and the Skill Premium"
30 May 2017 (Economics Seminar)

Wilhelm Hofman
University of Cologne, Germany
"Antecedents and Consequences of the Desire to Punish Perpetrators in Everyday Life"
19 June 2017

Vikrant Vig
London Business School, United Kingdom
"The Privatization of Bankruptcy: Evidence from Financial Distress in the Shipping Industry"
26 June 2017

Florian Engl
University of Cologne, Germany
"A Theory of Causal Responsibility Attribution"
10 July 2017

Ulrike Vollstädt
University of Duisburg, Germany
"Quantitative Wirtschaftspolitik"
17 July 2017

Sebastian Goerg
Florida State University, USA
"Norm Violations and their Spillovers: Evidence from the Lab and Field"
17 July 2017

Bertil Tungodden
Norwegian School of Economics, Bergen, Norway
"Beliefs about Behavioral Responses to Taxation"
24 October 2017

Stefan Bechtold
(joint with Christoph Engel)
ETH Zurich, Switzerland
"The Valuation and Incentive Effects of Moral Rights: Two Field Exper-iments"
30 October 2017

Sarah Auster
(joint with Nicola Pavoni)
Bocconi University, Milan, Italy
"Optimal Delegation, Unawareness, and Financial Intermediation"
20 November 2017

Jakub Harasta
Institute of Law and Technology, Masaryk University, Czech Republic
"Natural Language Processing and Citations Analysis in Law"
27 November 2017

Lawrence Solan
Brooklyn School of Law, New York, USA
"Using Big Data in Legal Interpretation"
27 November 2017

F. Research Seminars

Armin Falk
Institute on Behavior & Inequality (briq), Bonn, Germany
"Moral Behavior and Happiness"
04 December 2017

Rupak Majumdar
MPI for Software Systems, Saarbrücken, Germany
"Reactive Synthesis for Cyber-Physical Systems"
11 December 2017

Ralph Beyer
University of Adelaide, Australia
"The Double Dividend of Relative Auditing: Theory and Experiments on Corporate Tax Enforcement"
19 December 2017

2018

Axel Ockenfels
University of Cologne, Germany
"Current Challenges in Market Design"
15 January 2018

Richard McElreath
MPI for Evolutionary Anthropology, Leipzig, Germany
"10 Years of Experimental Work on Cultural Microevolution"
22 January 2018

Markus Dertwinkel-Kalt
University of Cologne, Germany
"Local Thinking and Skewness Preferences"
23 January 2018

Oliver Braganza
University of Bonn, Germany
"Proxy Economics: A Transdisciplinary Theory of Competition with Imperfect Information"
24 January 2018

Krishna Gummadi
MPI for Software Systems, Saarbrücken, Germany
"Fairness in Machine Decision-Making"
29 January 2018

Matthias Stefan
University of Innsbruck, Austria
"The Consistency of Different Risk Elicitation Methods"
06 February 2018

Stefan Magen
Ruhr University, Bochum, Germany
"On Experimental Legal Philosophy"
19 February 2018

Arthur Dyevre
University of Louvain Law School, Leuven, Belgium
"The Geography of Legal Integration in Europe: Mapping and Predicting Subnational Disparities in Referral Activity"
12 March 2018

Andreas Engert
University of Mannheim, Germany
"The Inefficiency of Efficient Breach: Contract Renegotiation under Asymmetric Information"
19 March 2018

Ludovica Orlandi
University of Essex, UK
"The Effect of Being an Only Child on Preferences Structure and Strategic Behavior"
21 March 2018

Felix Kölle und Lukas Wenner
University of Cologne, Germany
"Present-Biased Generosity: Dynamic Inconsistency and Social Preferences in Real-Effort Allocations"
21 March 2018

Roberto Weber
University of Zurich, Switzerland
"Revealed Privacy Preferences: Are Privacy Choices Rational?"
04 April 2018

Alessandra Cassar
(joint with Y. Jane Zhang)
University of San Francisco, USA
"The Competitive Woman"
17 April 2018

Johanna Mollerstrom
Humboldt University Berlin / DIW, Germany
"A Meritocratic Origin of Egalitarian Behavior"
25 April 2018

Georg Weizsäcker
Humboldt University Berlin, Germany
"Learning from Realized versus Unrealized Prices"
25 April 2018

James Konow
University of Kiel, Germany
"The Just World at Work: Theory and a Natural Field Experiment"
15 May 2018

Daniel Schunk
University of Mainz, Germany
"The Effects of Self-Regulation Training in Primary Schools: Evidence from a Randomized Controlled Trial"
16 May 2018

Iris Schneider
University of Cologne, Germany
"The Path of Ambivalence: Using Mouse Trajectories to Understand Evaluative Conflict"
22 May 2018

Bart Goldsteyn
University of Maastricht, Netherlands
"The Impact of Peer Personality on Academic Achievement"
05 June 2018

Ludger Wößmann
University of Munich / ifo Center for the Economics of Education, Germany
"Does Ignorance of Economic Returns and Costs Explain the Educational Aspiration Gap? Evidence from Representative Survey Experiments"
06 June 2018

Benjamin Enke
Harvard University, Cambridge, USA
"Moral Values and Voting"
04 July 2018

Dorothea Kübler
WZB (Berlin Social Science Center), Berlin, Germany
"How Lotteries in School Choice Help Leveling the Playing Field"
04 July 2018

Maria Bigoni
University of Bologna, Italy
"Money is More than Memory"
20 July 2018

Imran Rasul
University College London, United Kingdom
"Safe Spaces for Women: Evidence from a Field Experiment in Sierra Leone During the Ebola Epidemic"
10 October 2018

Jan Hausfeld
University of Konstanz, Germany
"Motives in Economic Interactions: An (interactive) Eye-Tracking Study"
10 October 2018

Simon Gächter
University of Nottingham, United Kingdom
"The Rule of Law and Voluntary Cooperation: Experimental Evidence from 43 Societies"
17 October 2018

Shaul Shalvi
University of Amsterdam, Netherlands
"Ethical Free-Riding: When Honest People Find Dishonest Partners"
22 October 2018

Robert Böhm
RWTH Aachen University, Germany
"Parochial Altruism: Measurement Issues"
24 October 2018

Felix Mauersberger
University of Bonn, Germany
"Thompson Sampling: Endogenously Random Behavior in Games and Markets"
29 October 2018

Simeon Schudy
Ludwig Maximilian University of Munich, Germany
"A Field Experiment on Leadership Functions and Team Performance in Non-Routine Analytical Team Tasks"
31 October 2018

Marco Fabbri
University of Amsterdam, Netherlands
"Market Integration and the Effects of Institutions on Prosocial Behavior"
05 November 2018

Gerhard Riener
DICE – University of Düsseldorf, Germany
"The Intrinsic Value of Decision-Making in the Household: Evidence from a Charitable Giving Experiment in Egypt"
07 November 2018

Agne Kajackaite
WZB Berlin, Germany
"Poverty Negates the Impact of Social Norms on Cheating"
14 November 2018

Daniel Balliet
Vrije Universiteit Amsterdam, Netherlands
"Advancing Evolutionary and Cultural Perspectives on Interdependence and Cooperation"
19 November 2018

Stefan Bechtold
ETH Zurich, Switzerland
"Moral Rights and Incentives: Two Field Experiments"
19 November 2018

Jordi Brandts
Barcelona Graduate School of Economics, Spain
"Dispelling Misconceived Beliefs: The Case of Rent Control"
21 November 2018

Jürgen Jost
Max Planck Institute for Mathematics in the Sciences, Leipzig, Germany
"Methods of Complexity Reduction and Their Effects in Social, Economic, and Computational Environments"
26 November 2018

Christopher Harms
University of Bonn, Germany
"Testing Null Effects – Why? How?"
26 November 2018

Julia Becker
University of Osnabrück, Germany
"Psychological Effects of Neoliberalism"
04 December 2018

Tilko Swalve
University of Mannheim, Germany
"How Familiarity Improves Judicial Deliberation: Evidence from the German"
12 December 2018

Michel Maréchal
University of Zurich, Switzerland
"Civic Honesty Around the Globe"
12 December 2018

Hannah Schildberg-Hörisch
DICE – University of Düsseldorf, Germany
"Who Should Benefit from Affirmative Action? Ability, Effort, and Discrimination as Justifications for Quota Rules"
12 December 2018

Holger Spamann
Harvard Law School, USA
"The ICTY Experiment: A Triple-Use Study on Legal Reasoning"
17 December 2018

2019

Alexander Stremitzer
ETH Zurich, Switzerland
"Aspirational Goals, Overpromising, and Negative Spillovers"
14 January 2019

F. Research Seminars

Achim Wambach
University of Mannheim, Germany
"Exploiting Uncertainty about the Number of Competitors in Procurement Auctions"
16 January 2019

Markus Kneer
University of Zurich, Switzerland
"Guilty Minds and Biased Minds"
21 January 2019

Yuval Feldman
Bar-Ilan-University, Israel
"Big Data and the Situational Regulation of Ordinary Unethicality"
22 January 2019

Johannes Abeler
University of Oxford, United Kingdom
"Determinants and Malleability of Truth-Telling Preferences"
23 January 2019

Fabian Kosse
Ludwig Maximilian University of Munich, Germany
"Prosociality: Hard to Build, But Easy to Destroy"
31 January 2019

John Hamman
Florida State University, USA
"Delegation and Team Selection"
04 February 2019

Bernhard Kittel
University of Vienna, Austria
"Power, Knowledge and Justice: Experiments on Distributive Decisions in Networks"
11 February 2019

Eric Helland
Claremont McKenna College, California, USA
"The Value of an Attorney: Evidence from Changes to the Collateral Source Rule"
18 February 2019

Eyal Zamir
The Hebrew University of Jerusalem, Israel
"Substituting Invalid Contract Terms: Theory and Empirics"
25 February 2019

Roger Berger
University of Leipzig, Germany
"Determinants of Fair Behavior: An Evolutionary Perspective and Some Experimental Evidence from Guinea"
11 March 2019

Simon Columbus
University of Amsterdam, Netherlands
"Situation Perception Mediates Framing Effects on Cooperative Behavior"
25 March 2019

Michael Goldhammer
University of Bayreuth, Germany
"Das Öffentliche Recht und die Kunst der Prognose"
25 March 2019

Sandro Ambühl
University of Toronto, Canada
"Evaluating Financial Competence & Peer Advice on Financial Decisions: A Case of the Blind Leading the Blind?"
27 March 2019

Joshua Dean
Institute on Behavior & Inequality (briq), Bonn, Germany
"Noise, Cognitive Function, and Worker Productivity"
02 April 2019

Paul Smeets
Maastricht University, Netherlands
"Get Real! Individuals Prefer More Sustainable Investments"
02 April 2019

Teodora Boneva
University of Oxford, United Kingdon
"Socioeconomic Gaps in University Enrollment: The Role of Perceived Pecuniary and Non-Pecuniary Returns"
03 April 2019

Stefan Trautmann
University of Heidelberg, Germany
"Does Money Make you Mean?"
03 April 2019

Michael Kirchler
University of Innsbruck, Austria
"Cognitive Skills and Economic Preferences in the Fund Industry"
10 April 2019

Wolfgang Ketter
University of Cologne, Germany
"Should Humans be Users or Slaves of AI? An Experiment on the Future of Work"
05 May 2019

Michal Bauer
CERGE-EI, Charles University, Czech Republic
"Scapegoating: Experimental Evidence"
08 May 2019

Gerrit Hornung
University of Kassel – Institut für Wirtschaftsrecht, Germany
"Regulating Hybrid Intelligence"
13 May 2019

Anthony Niblett
University of Toronto, Canada
21 May 2019

Alexander Cappelen
NHH Norwegian School of Economics, Norway
"How Do Adults Handle Distributive Conflicts Among Children? Experimental Evidence from China and Norway"
22 May 2019

Karen McAuliffe
University of Birmingham Law School, UK
"Using Corpus Linguistics in Legal Research: A European Court of Justice Project"
27 May 2019

Michael Livermore
University of Virginia Law School, USA
"Public Law Seminar: Using Genetic Data to Estimate Causal Influences in the Obesity-SES Relationship"
27 May 2019

Matthew Smith
University of Bonn, Germany
"The Future of IT Security: Usability, Empiricism, and AI"
27 May 2019

Adi Leibovitch
The Hebrew University of Jerusalem, Israel
"Bargaining in the Shadow of the Judge"
03 June 2019

Stefan Thurner
Medical University of Vienna, Austria
"What Can We Learn about the Homo Sapiens from Computer Games?"
03 June 2019

Uwe Sunde
LMU Munich, Germany
"Patience, Accumulation, and Comparative Development"
05 June 2019

Iwan Barankay
Wharton University of Pennsylvania, USA
"Financial Incentives to Support Statin Adherence and Lipid Control (Habit Formation): A Randomized Clinical Trial"
12 June 2019

Vicente Valentim
European University Institute Florence, Italy
"Into the Parliament and Into the Mainstream: How Radical Right Parties Become Normalized"
19 June 2019

Ilja van Beest
University of Tilburg, Netherlands
"Three is More Than Two in More Ways than One"
01 July 2019

Johannes Haushofer
Princeton University, USA
"Psychology and Behavioral Economics of Poverty"
03 July 2019

Andreas Leibbrandt
Monash University, Melbourne, Australia
"Rank-Order Tournaments with Safeguards: Experimental Evidence on Workplace (De-)Motivation"
10 July 2019

Alex Imas
Carnegie Mellon University, Pittsburgh, USA
"Ownership, Learning, and Beliefs"
11 July 2019

Michael Wiedmann
Norton Rose Fulbright LLP, London, UK
"Die EU-*Whistleblower*-Richtlinie"
17 July 2019

Henning Hermes
NHH Bergen, Norway
"If You Could Read My Mind – An Experimental Beauty-Contest Game with Children"
26 September 2019

Henry Schneider
Queen's University, Kingston, Canada
"Promoting Best Practices in a Multitask Workplace: Experimental Evidence on Checklists"
26 September 2019

Rachel Kranton
Duke University, Durham, NC, USA
"Deconstructing Group Bias: Social Preferences and Groupy vs. Non-Groupy Behavior"
02 October 2019

Jean-Louis van Gelder
University of Twente, Netherlands
"The Potential of Virtual Reality to Study Criminal and Unethical Behavior"
07 October 2019

Thomas M.J. Möllers
University of Augsburg, Germany
"The Role of Social Sciences in the Application of Law"
14 October 2019

Nina Grgić-Hlača
MPI for Software Systems, Saarbrücken, Germany
"Human Decision-Making with Machine Advice: An Experiment on Bailing and Jailing"
28 October 2019

Alon Harel
The Hebrew University of Jerusalem, Israel
"The Hand-Formula Debate: A Behavioral Analysis"
11 November 2019

Jacob Livingston Slosser
University of Copenhagen, Denmark
"An Experimental Approach to the Effect of Framing on Judgment and Precedent Choice"
11 November 2019

Anna Bindler
Department of Economics, University of Gothenburg, Sweden
"Scaring or Scarring? Labor-Market Effects of Criminal Victimization"
13 November 2019

Ingvild Almas
Stockholm School of Economics, Sweden
"The Role of Preferences, Beliefs, and Decision-Making for Child Development: New Measures for a Structural Approach"
13 November 2019

Sule Alan
European University Institute, Florence, Italy
"Mitigating the Social Exclusion of Refugee Children: An Intervention on Perspective-Taking"
20 November 2019

Tim Cason
Purdue University, West Lafayette, USA
"Correlated Beliefs: Predicting Outcomes in 2x2 Games"
27 November 2019

F. Research Seminars

Kerstin Noelle Vokinger
ETH Zurich, Switzerland
"Re-Identification of Anonymized Court Decisions: An Experiment Based on 'Linkage'"
02 December 2019

Peter Krebs and Stefanie Jung
University of Siegen, Germany
"Moral und Rechtsgefühl in unternehmerischen Vertragsverhandlungen"
02 December 2019

Anna Pegels
German Development Institute, Bonn, Germany
"Say When! Understanding Waste Separation through a Field Experiment in Argentina"
04 December 2019

Peter Richerson
University of California, Davis, USA
"The Evolutionary Origins of Human Virtue and Vice"
09 December 2019

Daniel Chen
Toulouse School of Economics, France
"Stereotypes in High Stake Decisions: Evidence from U.S. Circuit Courts"
11 December 2019

Camille Terrier
University of Lausanne, Switzerland
"Fiscal and Education Spillovers from Charter School Expansion"
11 December 2019

2020

Jens C. Dammann
University of Texas, School of Law, Austin, USA
"Fee-Shifting Bylaws and Shareholder Wealth. An Empirical Analysis"
07 January 2020

Helga Fehr-Duda
University of Zurich, Switzerland
"Risk in Time: The Intertwined Nature of Risk-Taking and Time-Discounting"
08 January 2020

Marie-Claire Villeval
GATE Lyon, France
"Teaching Norms in the Street"
08 January 2020

Rima-Maria Rahal
Tilburg University, Netherlands
"Glowing with Joy or Stricken by Guilt? Assessing Affective Processes in Prosocial Behavior via Thermal Imaging."
13 January 2020

John Dylan Haynes
Berlin Center for Advanced Neuroimaging – Bernstein Center for Computational Neuroscience, Germany
"What Does Brain Science Tell Us About Free Will?"
13 January 2020

Katja Langenbucher
House of Finance, Goethe University, Frankfurt, Germany
"Responsible A.I. Credit Scoring"
20 January 2020

Daniela Sele
ETH Zurich, Switzerland
"Algorithmic Explanations in the Field"
20 January 2020"

Urs Fischbacher
University of Konstanz, Germany
"Cooperation, Bribery, and the Rule of Law"
22 January 2020

Franz Reimer
University of Gießen, Germany
"Aufgaben und Herausforderungen einer Theorie des Umweltrechts"
27 January 2019

Martin Kocher
Institut für höhere Studien, Vienna, Austria
"Increase Children's Interest in STEM: A Field Experiment in Austria"
05 February 2020

Daniele Nosenzo
University of Nottingham, UK
"Law and Norms: Empirical Evidence"
05 February 2020

Klaus-Robert Müller
TU Berlin, Germany
"Toward Explainable AI"
17 February 2020

Norbert Paulo
University of Salzburg, Austria
"Thought Experiments in Ethics and Law"
02 March 2020

Erik Kimbrough and Alexander Vostroknutov
Chapman University, Orange, CA, USA
"A Theory of Injunctive Norms"
23 March 2020

Ulrike Hahn (online)
Birkbeck University of London, UK
"The Problem of Testimony"
20 April 2020

Mona Garvert (online)
MPI for Human Cognitive and Brain Sciences, Leipzig, Germany
"How the Brain Represents the World to Guide (Adaptive?) Decisions"
11 May 2020

Oliver Kirchkamp (online)
(joint with Wladislaw Mill)
University of Jena, Germany
"Conditional Cooperation and the Effect of Punishment"
18 May 2020

Elliott Ash (online)
(joint with Sergio Galletta and Tommaso Giommoni)
ETH Zurich, Switzerland
"A Machine-Learning Approach to Analyzing Corruption in Local Public Finances"
29 June 2020

Erin Krupka (online)
(joint with Steve Leider and Ming Jian)
School of Information, University of Michigan
"Renegotiation Behavior and Promise-Keeping Norms"
13 July 2020

F.II Internal Speakers in our Research Seminars

2017

André Schmelzer
"Strategy-proofness of Stochastic Assignment Mechanisms"
9 January 2017

Christoph Engel
"Property Rule vs. Liability Rule" (joint with Oren Bar-Gill)
16 January 2017

Susann Fiedler
"The Cost of Worrying"
16 January 2017

Ioanna Grypari
"One Strike and You're Out: The Effects of the Master Lever on Senators' Positions" (joint with Olga Gorelkina)
17 January 2017 (Economics Seminar)

Eugenio Verrina
"When the State Doesn't Play Dice: An Experimental Analysis of Opportunistic Fiscal Policies and Tax Compliance" (joint with Matteo Ploner)
23 January 2017

Christoph Engel
"Experimental Social Planners" (joint with Svenja Hippel)
30 January 2017

André Schmelzer
"Committing the English and the Continental Way" (joint with Christoph Engel)
13 February 2017

Lars Freund and Franziska Tausch
"Compulsory Insurance and Nudging: How Contract Formation Affects Fraudulent Behavior"
20 February 2017

Paul Schempp
"Liquidity Creation, Capital Requirements, and Regulatory Arbitrage"
29 March 2017 (Economics Seminar)

Lars Freund
(joint with Amalia Alvarez Benjumea and Katharina Luckner)
"Compulsory Insurance and Nudging: How Contract Formation Affects Fraudulent Behavior"
10 April 2017

Jens Frankenreiter
"Forum Selling in Germany? Supply-side Effects in Forum Shopping in German Courts"
10 April 2017

André Schmelzer
"Strategy-proofness of Stochastic Assignment Mechanisms"
24 April 2017

Claudia Cerrone
(joint with Christoph Engel)
"Kantian Motivations and Prosocial Behavior"
24 April 2017

Svenja Hippel
"Robust Mechanism Design: Testing Informational Robustness against Beliefs"
29 Mai 2017

Christoph Engel
"Empirical Methods for the Law"
19 June 2017

Adrian Hillenbrand
(joint with Svenja Hippel)
"Strategic Rational Inattention: An Experiment on Product Search with Hidden Costs"
26 June 2017

Amalia Alvarez Benjumea
"Spillover Effects in Hate Speech after Terrorist Attacks: A Natural Experiment"
26 June 2017

Yoan Hermstrüwer
(joint with Claudia Cerrone and Pedro Robalo)
"Debarment and Collusion in Procurement Auctions"
10 July 2017

Phil Brookins
"Testing Disclosure Policies in Contests"
10 July 2017

Claudia Cerrone
(joint with Francesco Feri, Philip Neary)
"The Regret Game: Regret as a Coordination Device"
17 July 2017

Eugenio Verrina
"Stories We Tell: The Effect of Narratives on Moral Decision-Making"
23 October 2017

Jens Frankenreiter
"Informal Judicial Hierarchies: Case Assignment and Chamber Composition at the European Court of Justice"
23 October 2017

Christoph Engel
(joint with Oren Bar-Gill)
"Property Rule vs. Liability Rule: An Experiment"
20 November 2017

Leo Hoeft
"Abuse of Power and Social Norms"
27 November 2017

Jens Frankenreiter
"Writing Style and Legal Traditions – A Quantitative Investigation of the Stylistic Features of the Case Law of the European Court of Justice"
27 November 2017

Phil Brookins
(with Claudia Cerrone and Dmitry Ryvkin)
"K-pay Auctions"
04 December 2017

Lisa Lenz
"Does Guilt Aversion in Groups Explain Insurance Fraud?"
04 December 2017

Amalia Álvarez
"Public Provision of Information and Normative Change"
11 December 2017

Phil Brookins
"Disclosure Policies in Dynamic Stochastic Tournaments"
11 December 2017

Anna Baumert
"Moral courage, "Zivilcourage", or "courage civique". Psychological Processes of Bystander Intervention Against Norm Violations"
11 December 2017

2018

Leo Hoeft
"Normative Behavior in the Lab"
15 January 2018

Rima Rahal
"Eyes on Morals: Investigating the Cognitive Processes Underlying Moral Decision-Making via Eye-Tracking"
15 January 2018

Claudia Cerrone
"The Visible and Hidden Costs of Control Under Delegation"
22 January 2018

Fedor Levin
"Positivity Effect and Decision-Making in Aging"
22 January 2018

Stefania Bortolotti
"Blind Rage: Inequality, Intentions, and Indiscriminate Punishment"
22 January 2018

Cornelius Schneider
"Revealed Preferences for Capital Taxation: Periodical Wealth Tax versus Estate Tax"
29 January 2018

Hanjo Hamann
"Quantifying Discomfort: Representative Survey Research in Tenancy Litigation"
29 January 2018

Claudia Cerrone
"Debarment and Collusion in Procurement Auctions"
19 February 2018

Adrian Hillenbrand
(joint with Fabian Winter and Phil Brookins)
"The Collateral Price of Inequality for Climate Change Action"
12 March 2018

Pascal Langenbach
"Compensating the Victim or Paying a Fine: Does it Matter for the Level of Precaution?"
19 March 2018

Svenja Hippel
"Replicating a Seminal & Econ Paper"
19 March 2018

Nan Zhang
"Stereotypes and Social Norm Enforcement in Interethnic Encounters"
19 March 2018

Maj-Britt Sterba
"The Scope of Justice: Attitudes on Morally Relevant Group Characteristics in Redistribution Decisions"
26 March 2018

Amalia Álvarez
"Uncovering Hidden Opinions: The Effect of Social Acceptability on Selective Disclosure"
26 March 2018

Ali Seyhun Saral
"Evolution of Conditional Cooperation in Prisoner's Dilemmas"
4 April 2018

Alexander Schneeberger
"Choosing the Right Social Norm: General vs. Group-Specific Norms"
11 April 2018

Lars Freund
"Reciprocity in Bilateral Trade?"
11 April 2018

Susann Fiedler
"Introducing InDiDa - the New DecisionLab Database of Individual Difference Measures"
16 April 2018

Carina Hausladen
"Honesty and Time Pressure"
02 May 2018

Christoph Engel
"Clashing Fairness Norms as a Source of Tax Evasion"
07 May 2018

Florian Lindner
"Delegated Decision-Making and Social Competition in the Finance Industry"
15 May 2018

Phil Brookins
"The Risk Elicitation Puzzle"
23 May 2018

Sebastian Schneider
"Consistency in the Elicitation of Higher-Order Risk Preferences and Their Intensity Measures"
23 May 2018

F. Research Seminars

Daniel Salicath
"Exploring a New Incentivization Procedure for the Elicitation of Risk"
23 May 2018

Christoph Engel
(joint with Claudia Cerrone)
"Is the Veil of Ignorance a Resource?
30 May 2018

Cornelius Schneider
"Follow Up: Revealed Preferences for Capital Taxation"
05 June 2018

Ignacio Herrera-Anchustegui
"Zero Rating: A Competition and Legal Perspective"
05 June 2018

Isa Garbisch & Gabriela Küchler
"Determinants for Behavior in a Moral Courage Situation"
27 June 2018

Daniel Toribio-Flórez
"Moral Courage under Ambiguity: The Moderating Role of Different Justice Sensitivities"
27 June 2018

Lars Freund
"The Role of Reciprocity in Bilateral Trade Environments"
02 July 2018

Cornelius Schneider
"Enforced Tax Compliance in the Lab"
02 July 2018

Yoan Hermstrüwer
"Matching under Legal Constraints: The Value of Not Knowing the Law"
09 July 2018

Adrian Hillenbrand
"The Differential Effect of Narratives"
09 July 2018

Maj-Britt Sterba
"Large-Scale Cooperation and Support for Redistribution"
09 July 2018

Marcel Schubert
"Understanding and Optimizing Group Situations: Leveraging Machine Learning in Behavioral Economics"
09 July 2018

Sebastian Schneider & Shambhavi Priyam
"(Higher-Order) Risk Preferences of Adolescents and Their Consequences"
20 July 2018

Matthias Heinz
"What Do Employee Referral Programs Do?"
27 September 2018

Pascal Langenbach
"The Price of Justice in the Individual Case"
08 October 2018

Sebastian Schneider
"Self-Selection of Educational Gatekeepers into Field Experiments"
18 October 2018

Christoph Engel
"Estimating Heterogeneous Reactions to Experimental Treatments"
22 October 2018

Nan Zhang
"Should I Sit or Should I Stand? Gender, Race, and Everyday Discrimination in the Milan Metro"
29 October 2018

Laurence O'Hara
"Structured Balancing of Interests"
05 November 2018

Maj-Britt Sterba
"Fairness in the Claims Problem with Risky Environments"
05 November 2018

Ali Seyhun Saral
"zBrac: A Translation Utility for zTree"
26 November 2018

Leonhard Hoeft
"Legal Compliance & Reputation"
26 November 2018

Cornelius Schneider
"The Desirability of Cheating in Optimal Income Taxation"
03 December 2018

Phil Brookins
"Information Disclosure in Contests with Endogenous Entry: An Experiment"
03 December 2018

Rima Rahal
"Justice Is in the Eyes of the Beholder: Eye-Tracking Evidence on the Obligation to Pay Damages"
10 December 2018

Alexander Schneeberger
"The Effect of Moral Similarity on Group Formation and Norm Compliance"
17 December 2018

Jens Frankenreiter
"Forum Selling Abroad"
17 December 2018

2019

Pascal Langenbach
"Fine versus Liability: Experimental Evidence on Care Incentives"
07 January 2019

Lisa Lenz
"The Effect of Intergroup Contact and Inclusive Policies on Prejudice and Discrimination"
07 January 2019

Anna Baumert Group
"Investigating Moral Courage in Game Settings. Discussion and Brainstorm"
14 January 2019

Eugenio Verrina
"The Story of a Failed Replication and What to Do about It"
28 January 2019

Maj-Britt Sterba
"The Eager and the Idle: Fairness Views on Risk-Taking Given Different Effort Provision"
28 January 2019

Christoph Engel
"Governing Heterogeneous Societies"
04 February 2019

Martin Sternberg
"Hybrid Markets: Human Pricing and the Presence of Algorithms"
18 February 2019

Yoan Hermstrüwer
"School Choice and Matching with Procedural Information"
25 February 2019

Jens Frankenreiter
"Bridging the Gap Between Experiments and Observational Studies? The Neyman-Rubin Causal Model and Propensity Score Matching"
25 February 2019

Christoph Engel
"Property is Dummy-Proof" and "Does the Fundamental Transformation Deter Trade?"
11 March 2019

Nathan Maddix
"Policy Preferences for Financial Nudges – Evidence from the United States"
14 March 2019

Eugenio Verrina
"The Dark Side of Experts"
25 March 2019

Sofia Monteiro
"Belief Revision without Behavioral Change in Nutrition Programs: Experimental Evidence from a Pop-Up Grocery Store in South Africa"
28 March 2019

Cornelius Schneider
"Negative Income Tax and Beliefs"
01 April 2019

Adrian Hillenbrand
"Someone Else Will Do It!? Designated Volunteers under Population Uncertainty"
01 April 2019

Alexander Schneeberger
"The Effect of Self- and Social Image on Conscience Accounting"
29 April 2019

Nan Zhang
"Does Immigration Undermine Public Support for Welfare? Proposal for a Conjoint Experiment"
29 April 2019

Christoph Engel and Lars Freund
"Behaviorally Efficient Remedies: An Experiment"
06 May 2019

Yoan Hermstrüwer
"Machine-Based Decision Aids in Ultimatum Bargaining"
06 May 2019

Pascal Langenbach
"Sanction Severity and Perceived Punishment Probability"
13 May 2019

Christoph Engel
(joint with Keren Weinshall)
"Manna from Heaven for Judges: Judges' Reaction to a Quasi-Random Reduction in Caseload
17 June 2019

Christoph Engel and Lilia Zhurakhovska
"Governing with Words"
01 July 2019

Maj-Britt Sterba
"Fairness Views on Risk-Taking Given Different Effort Provision"
22 July 2019

Cornelius Schneider
"The Bright Side of Tax Evasion"
22 July 2019

Eugenio Verrina
"The Dark Side of Experts"
06 August 2019

Adrian Hillenbrand
(joint with Fabian Winter)
"How the Stability of Social Relations Shapes the Emergence of Latent Norms"
06 August 2019

Nan Zhang
(joint with Amalia Álvarez)
"Tracking the Trump Effect: How Political Campaigns Change the Unsayable"
07 October 2019

Lisa Lenz
"Strategic Discrimination in Embedded Settings"
14 October 2019

Claudia Cerrone
"Delegation under Overconfidence"
28 October 2019

Corinna Hausladen and Marcel Schubert
"Using Natural Language-Processing to Replicate Political Ideology Labels of Judicial Opinions"
28 October 2019

Claudia Cerrone and Yoan Hermstruewer
"School Choice with Consent: An experiment"
04 November 2019

Marcel Schubert
"Algorithms as Prosecutors"
11 November 2019

Pascal Langenbach and Eugenio Verrina
"The Power of Democratic Representation: Solving Social Dilemmas through Elected Policy-Makers"
25 November 2019

F. Research Seminars

Maj-Britt Sterba
"Functional Beliefs in a Just World"
25 November 2019

Christoph Engel
"Does the Fundamental Transformation Deter Trade?"
02 December 2019

Adrian Hillenbrand and Eugenio Verrina
Introduction of a Job-Market Paper
09 December 2019

2020

Laurence O'Hara and Victoria Barnes
"Does the Fundamental Transformation Deter Trade?"
20 January 2020

Yoan Hermstrüwer und Pascal Langenbach
"Governing with Humans and Computers: An Experimental Investigation"
27 January 2020

Pascal Langenbach and Cornelius Schneider
"Public Opinion and Courts"
10 February 2020

Christoph Engel
"Does the Fundamental Transformation Deter Trade?"
17 February 2020

Yoan Hermstrüwer and Pascal Langenbach
"Governing with Humans and Computers: An Experimental Investigation"
17 February 2020

Christoph Engel
"Does the Fundamental Transformation Deter Trade?"
17 February 2020

Christoph Engel
"Judicial Tech"
02 March 2020

Maj-Britt Sterba (online)
"Lost Control: Personal Experience during the Corona Pandemic and Preferences for Redistribution"
20 April 2020

Lukas Kiessling (online)
"Peers and Mental Health"
21 April 2020

Marcel Schubert (online)
"Vectorizing Social Cues"
27 April 2020

Ali Seyhun Saral (online)
"Social Choice for Social Production: Voluntary Provision and Aggregation of Information Goods"
27 April 2020

Sofia Monteiro (online)
"Selection Neglect and Training in Bayesian Reasoning"
28 April 2020

Stefan Schmidt (online)
"Shared Attention"
28 April 2020

Pascal Langenbach (online)
(Joint with Tim Friehe and Murat Mungan)
"Event Significance Influences Belief Formation: Experimental Evidence from a Taking Game"
04 May 2020

Daniel Toribio-Florez (online)
"From the MPS to our MPI: A Common Discussion about Open Science"
04 May 2020

Sebastian Schneider (online)
"Tell Me the Truth if It Fits my Agenda: Experiments on Information Avoidance to Justify (the Abstinence from) Actions
05 May 2020

Ali Seyhun Saral (online)
"Social Choice for Social Production: Aggregation of Voluntarily Provided Information Goods"
05 May 2020

Cornelius Schneider (online)
(Joint with Wladyslaw Mill)
"Less Enforcement, Higher Revenues? An Empirical Investigation of Germany Tax Enforcement"
11 May 2020

Rima-Maria Rahal (online)
(Joint with Lawrence O'Hara)
"Context Dependence of Normative Judgments – Evidence from a Survey Study During the COVID-19 Epidemic?"
11 May 2020

Nathan Maddix (online)
"When the Workplace is Home: Experimental Evidence on Remote Work Productivity"
13 May 2020

Daniel Salicath (online)
"Decision-Making under Scarcity for the Poor"
13 May 2020

Shu Chen (online)
(Joint with Sebastian Kube and Matthias Wibral)
"How Communication Moderates Intergroup Vicarious Retribution: An Online Experiment Design"
18 May 2020

Yoan Hermstrüwer (online)
(Joint with Claudia Cerrone and Onur Kesten)
"School Choice with Consent: An Experiment"
18 May 2020

Eriselda Danaj (online)
(Joint with Susan Fiedler)
"The Consistency of Counterproductive Work Behavior"
25 May 2020

Alina Fahrenwaldt (online)
(Joint with Daniel Toribio-Flórez)
"Do Governmental Covid-19 Measures Affect Social Distancing Norms and Intervention Behavior? Data from Germany"
25 May 2020

Alina Fahrenwaldt (online)
"Bott, K. M., Cappelen, A. W., Sørensen, E. Ø., & Tungodden, B. (2019). You've Got Mail: A Randomized Field Experiment on Tax Evasion. Management Science"
08 June 2020

Maj-Britt Sterba (online)
"Lost Control and Preferences for Redistribution – Results"
15 June 2020

Nathan Maddix (online)
"Opt-Out Defaults and Active Choices: Expertise, Choice, and Projective Paternalism"
16 June 2020

Claudia Cerrone (online)
"Estimating Present Bias and Sophistication. Testing 'Doing it Now or Later'"
22 June 2020

Eugenio Verrina (online)
"Personal Norms, Social Norms, and Image Concerns"
22 June 2020

Laurence O'Hara (online)
(Joint with Rima-Maria Rahal)
"Compliance Given Incentives to Free-Ride"
29 June 2020

Carina Hausladen (online)
(Joint with Martin Fochmann and Peter Mohr)
„Predicting (Dis-)Honesty: Leveraging Text Classification for Behavioral Experimental Research"
06 July 2020

Christoph Engel (online)
(Joint with Eyal Zamir)
"Sunlight is the Best Disinfectant. Or Is It?"
06 July 2020

Lisa Lenz (online)
"The Impact of Inclusive Social Policies on Economic Types of Discrimination"
13 July 2020

Nina Grgić-Hlača
"Dimensions of Diversity in Human Perceptions of Algorithmic Fairness"
13 July 2020

Zvonimir Bašić (online)
"Social Norms, Personal Norms, and Image Concerns"
13 July 2020

Sebastian Schneider (online)
"Higher-Order Risk Preferences: New Experimental Measures, Determinants, and Related Field Behavior"
13 July 2020

Lukas Kiessling (online)
"The Long-Run Effects of Peers on Mental Health"
13 July 2020

Ali Seyhun Saral (online)
"Evolution of Conditional Cooperation in Prisoner's Dilemmas"
7 October 2020

Sebastian Schneider (online)
"Addressing Validity and Generalizability Concerns in Field Experiments"
7 October 2020

Lukas Kiessling (online)
"Parental Paternalism"
7 October 2020

Nathan Maddix (online)
"The Mountain, the Hills, and the Plateau: Enhanced Choices in Finance, Energy, and Health Domains"
7 October 2020

G. Visiting Scholars

G.   Visiting Scholars

Affiliates

Anne	van Aaken	01 July 2007	31 March 2021
Isabel	Schnabel	01 October 2007	31 March 2021
Stefan	Bechtold	01 January 2009	31 March 2021
Stefan	Magen	01 October 2010	31 March 2021
Felix	Bierbrauer	01 April 2011	31 March 2021
Christian	Traxler	01 September 2011	31 March 2021
Sebastian	Goerg	01 October 2012	31 March 2021
Lilia	Zhurakhovska	01 July 2013	31 March 2021
Niels	Petersen	01 April 2015	28 February 2021
Michael	Kurschilgen	01 November 2015	31 March 2021
Emmanuel	Towfigh	31 March 2017	31 March 2021
Paul	Schempp	01 April 2017	31 March 2021

Visiting Researchers

Carl Christian	von Weizsäcker	since 01 April 2004	
Alexander	Schneeberger	01 October 2016	31 December 2020
Lisa	Lenz	01 October 2016	31 December 2020
Stephanie	Ureña Salas	01 July 2016	30 June 2019
Oliver	Himmler	01 September 2016	31 December 2020
Carina	Hausladen	01 October 2017	30 September 2020
Sotiris	Georganas	25 November 2017	31 December 2020
Ignacio	Herrera-Anchustegui	23 April 2018	07 June 2018
Adrian	Künzler	11 June 2018	29 June 2018
Rea	Antoniou	30 July 2018	31 August 2018
Matthias	Heinz	01 March 2018	31 December 2018
Fedor	Levin	01 August 2016	30 April 2019
Tobias	Werner	17 September 2018	31 March 2019
Konstantin	Chatziathanasiou	01 October 2018	31 December 2020
Rima-Maria	Rahal	22 October 2018	31 August 2020
Manuel	Froitzheim	01 January 2019	30 June 2019
Sylvia	Beckmann	01 January 2019	30 June 2019
Marie	Hellmann	01 January 2019	31 July 2019
Claudia	Zoller	01 January 2019	31 December 2020
Daniela	Glätzle-Rützler	01 March 2019	31 December 2020
Parampreet	Bindra	01 March 2019	31 December 2020
Anna	Untertrifaller	01 May 2019	31 December 2019
Lena	Miketta	15 June 2019	31 December 2019
Víctor	Bethencourt Rodríguez	12 August 2019	15 November 2019
Nives	Della Valle	02 September 2019	31 August 2020
Eriselda	Danaj	01 October 2019	31 January 2021
Alastair	Ball	01 November 2019	31 July 2020
Stefania	Bortolotti	26 November 2019	31 December 2022
Nina	Grgić-Hlača	01 December 2019	31 December 2020
Claudia	Cerrone	01 August 2020	31 December 2020
Farid	Anvari	05 October 2020	20 November 2020
Marco	Fontana	12 October 2020	06 December 2020

H. Institutional Research Cooperations

H. Institutional Research Cooperations

ECONtribute Law & Economics Workshop
University of Bonn, since 2006
Stefanie Egidy and Yoan Hermstrüwer are co-organizers

The ECONtribute Law & Economics Workshop is a bi-weekly interdisciplinary workshop that brings together social scientists and legal scholars whose research focuses on Law & Economics. It is jointly organized by the Graduate School of Economics, the Law Facult, and the Max-Planck-Institute for Research on Collective Goods. Past presenters include Kathryn Spier, Jeff Rachlinsky, Roberta Romano, Ted Eisenberg, Katharina Pistor, Henry Hansmann, Eric Talley, Alan Schwartz, Jen Arlen, Lewis Kornhauser, and many others (https://www.jura.uni-bonn.de/castle/econtribute-law-and-econ-workshop).

Erasmus University Rotterdam
Christoph Engel has held the part-time chair in Experimental Law & Economics since 2013.

European Network "Competition Law and Economics"

joint with

- the Centre for Competition Policy (CCP) at the University of East Anglia

- the Amsterdam Center for Law and Economics (ACLE) at the University of Amsterdam

- the European University Institute, in particular the Robert Schuman Centre and the Florence School of Regulation

- the Bergen Center for Competition Law and Economics (BECCLE) at the Norwegian School of Economics and the University of Bergen

- the Mannheim Centre for Competition and Innovation (MaCCI) at the ZEW Centre for European Economic Research and the University of Mannheim

- The institute organized a two-day workshop on "Experimental Comparative Law" on 23–24 May 2019 for the network.

Institute for Advanced Studies (IHS)

Matthias Sutter has been appointed member of the scientific advisory board of the Institute for Advanced Studies (IHS) in Vienna (2018–2021).

International Max Planck Research School on Behaviorally Smart Institutions (IMPRS BeSmart) (see C.VI.1)

Partners:

- Christoph Engel, MPI Bonn, Behavioral Law and Economics

- Matthias Sutter, MPI Bonn, Experimental Economics

- Felix Bierbrauer, University of Cologne, Faculty of Management, Economics and Social Sciences

- Daniel Zimmer, University of Bonn, Faculty of Law

- Uri Gneezy, UC San Diego, Rady School of Management

- Bertil Tungodden, Norwegian School of Economics

- Stefan Bechtold, ETH Zurich, Center for Law and Economics

- Eyal Zamir, Hebrew University, Law School

Chair: Christoph Engel

International Max Planck Research School on Adapting Behavior in a Fundamentally Uncertain World (IMPRS Uncertainty) (see C.VI.2)

The International Max Planck Research School on Adapting Behavior in a Fundamentally Uncertain World (IMPRS Uncertainty) combined approaches from economics, law, and psychology to explain human decisions under uncertainty more effectively and to better design institutional responses.

- The Uncertainty School was jointly hosted by:

- Max Planck Institute for Human Development, Berlin (Gigerenzer)

- Faculty of Economics, University of Jena (Kirchkamp, Cantner)

- Department of Psychology, University of Jena (Kessler, Rothermund)
- Faculty of Law, University of Bonn (Zimmer)
- Faculty of Management, Economics, and Social Sciences, University of Cologne (Bierbrauer)
- Rationality Center, Jerusalem (Kareev)
- Workshop in Political Theory and Policy Analysis, Bloomington (Todd)
- Psychology Department, Bloomington (Todd)
- Interdepartemental Centre for Research Training in Economics and Management, University of Trento (Mittone)

Co-chairs were Christoph Engel and Oliver Kirchkamp.

Kadir Has University

Cooperation between the MPI and Kadir Has University for the project "Corporate Culture and Employee Productivity: A Randomized Informational Intervention on Multiple Corporations" (2019–2021).

Toulouse School of Economics & University of Lausanne

Cooperation between all three institutions for the project "Cognitive and Non-Cognitive Skills in Adolescents" (2019–2021).

University of Innsbruck

Matthias has held a part-time chair in Experimental Economics since 2006.

University of Cape Town

Cooperation between MPI and UCT for the project "The Effect of Technology-Assisted Behavioral Interventions in Type-2 Diabetics".

Visiting Assistant Professorship at the University of Virginia

German legal scholarship is very receptive of insights and findings from other disciplines. Many law professors hold an LL.M. from a good U.S. law school. The U.S. legal literature is widely read and cited. Despite this attitude of openness, most German legal academics have a national or European agenda. Not too many of them publish in the U.S. law reviews, and even less of them submit their manuscripts to international peer-reviewed journals. While in the top U.S. law schools many faculty members hold a second degree, this is rare in Germany. Compared with most of their national peers, the lawyers working at the institute are therefore closer to the social sciences and to the American discourse in law.

Given the very positive attitude of most German law faculties, the additional knowledge and skills that lawyers acquire at the institute are likely to be well received by the German academic market. This expectation is supported by the fact that all who have been working at the institute and passed their habilitation in law quickly gained a chair. Yet, if candidates on top had a U.S. network, this would make them even more competitive. And with the additional expertise, lawyers originating from the institute might also want to apply for positions in countries like the Netherlands, the UK, Denmark, or even the U.S. All these countries might be attractive, since their legal academia is not only curious about neighboring disciplines, but is willing to define the law itself as a social science. Criminology notwithstanding, such positions are still very rare in Germany.

In order to make it for a position specifically targeted at the intersection between law and one of the social sciences, be that economics or psychology, the applicant first and foremost needs publications in good peer-reviewed journals. The institute provides any possible support for this, and we gladly see that these efforts are paying off. But it would help lawyers who are interested in such a career even better if the market perceived them as part and parcel of U.S. legal scholarship. Specifically, it can be expected that having been an assistant professor at a good U.S. law school would provide them with two benefits at a time: additional expertise and contacts, and a very visible signal on the market.

With these considerations in mind, we have approached the University of Virginia Law School. The school has consistently been ranked among the 10 best schools in the United States. It is strongly invested in law and economics, law and psychology, and was among the founding fathers of the empirical legal movement. The focus of the Virginia Law School is thus particularly congenial to the program of the institute. We are therefore very pleased that the Virginia Law School has repeatedly offered researchers from the institute the opportunity to spend time there as visiting professors. The program is financed from Max Planck funds. Two Senior Research Fellows (Emanuel Towfigh and Jens Frankenreiter) have held this position, to full mutual satisfaction.

Max-Planck-Institut
zur Erforschung von
Gemeinschaftsgütern