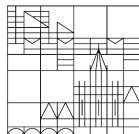


as | 2nd conference
Konstanz
September 25-27
digital societies 2019

Conference Booklet

Constance, Germany

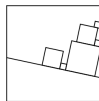
Universität
Konstanz



ETH zürich

This conference is supported by:

The Politics
of Inequality



Centre for the Advanced Study
of Collective Behaviour



Welcome Address

A warm welcome to all participants of the Academy of Sociology's conference on Digital Societies at the University of Konstanz.

The Academy of Sociology was founded two years ago to foster the analytical empirical orientation in sociology – with a focus on Germany but with a broader outreach. The Academy's members decided to put the enormous social changes and challenges that come along with digitalization at the centre focus of this conference. Societies around the globe have become digital at a tremendous pace and with consequences for many aspects of social relations and social life.

The conference program lists over 80 contributions on the topics of Digital Societies. We invited 12 keynote speakers who are experts in their fields – often at a younger age. In addition to standard paper presentations, we also included an inspiring poster session to the meeting. I am absolutely convinced that we will get a comprehensive and thrilling overview on the state of the field.

Konstanz is a well-suited location for this conference for several reasons. Besides its research-oriented university, the city is a small but beautiful place to meet with colleagues and friends. Two newly established research clusters (supported by the German Excellence Strategy) make Konstanz a focal point of timely social sciences. We thank both research clusters for their generous support and we invite you to explore their excellent research possibilities for senior and junior colleagues.

I also thank the DFG (Deutsche Forschungsgemeinschaft) for additional funding to invite international colleagues. Finally, let me mention the cooperation with the ETH Zurich where computational social science and social network analysis found a strong home base. We are very happy that colleagues from the ETH Zurich contribute to and support this conference.

The organizing committee has done a great job to set up the program, the local team was in constant motion over the past months to plan all details with often overwhelming enthusiasm. However, and most importantly, I would like to thank all presenters that will make this conference a great experience.

I very much hope that all of you have stimulating days at Konstanz – and enjoy the program and social events as well.



Thomas Hinz

AS Founding President

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General Information

Organizing Committee

Akademie für Soziologie e.V. (AS) / Academy of Sociology

Thomas Hinz (AS president / University of Konstanz)

Ulrik Brandes (ETH Zurich)

Claudia Diehl (University of Konstanz)

Andreas Diekmann (ETH Zurich / University of Leipzig)

Karsten Donnay (University of Konstanz)

Andreas Jungherr (University of Konstanz)

Cornelia Kristen (AS vice president / University of Bamberg)

Sebastian Schnettler (AS board / University of Oldenburg)

Conference Office & Information Point

To register upon arrival, please visit the registration desk in the foyer on level A6. Here you will receive all necessary participant documents and further conference information. The office also serves as a point of information throughout the whole conference and will open up on Wednesday at 12pm.

Conference Venue

University of Konstanz

Universitätsstraße 10, 78464 Konstanz

For more information visit: uni.kn/anreise

Public Transport

You can comfortably reach the University of Konstanz by bus. Tickets for the bus are included in your registration fee.

We will send you the tickets via mail a few days before the conference starts. Please remember to print them before travelling to Constance and carry them with you upon arrival.

In order to reach the campus, you can use the lines 9AB or 11.

Timetables (in German) are available at:

www.stadtwerke-konstanz.de/mobilitaet/bus/fahrplaene/

Timetables (in English) can be requested at:

www.stadtwerke-konstanz.de/en/bus/journey-planner/

Recommended busses

Wednesday, September 25

Bahnhof	13:18	13:33	13:48	Universität	19:27	19:43	19:57
Zähringerplatz	13:23	13:38	13:53	Zähringerplatz	19:33	19:53	20:03
Universität	13:30	13:48	14:00	Sternenplatz	19:35	19:55	20:05

The station *Sternenplatz* is next to the *Constanzer Wirtshaus*, in which the Early Career Researcher Reception will take place.

Thursday, September 26

Bahnhof	08:18	08:33	08:48	Universität	19:13	19:27	19:43
Zähringerplatz	08:23	08:38	08:53	Zähringerplatz	19:23	19:33	19:53
Universität	08:30	08:48	09:00	Bodanplatz	19:31	19:46	20:01

The station *Bodanplatz* is next to the *il Boccone*, in which the Conference Dinner will take place.

Friday, September 27

Bahnhof	08:18	08:33	08:48	Universität	15:13	15:27	15:43
Zähringerplatz	08:23	08:38	08:53	Zähringerplatz	15:23	15:33	15:53
Universität	08:30	08:48	09:00	Bahnhof	15:33	15:48	16:03

Bicycle Rental System (KonRad)

The city's bicycle rental system (called *KonRad*) is available around the clock, seven days a week. There are 15 KonRad rental stations from which you can easily borrow a bicycle. You can rent a bike in one place and return it at some other station easily. Every started half hour costs 1 Euro with a maximum of 9 Euro for 24 hours.

Before first renting a rental bike, you need to sign up as a user, free of charge. This takes only a few minutes and is easiest done via web or by using the "Mein Konstanz" app. Once the account is set up, you're ready to go.

Parking

To park your car please follow the signs and use the parking decks "Süd" or "Nord" only. Parking fee is 1.50€ per day, to be paid in cash or via bank card. Cars not being parked correctly will be towed.

Early Career Researcher Reception

Constanzer Wirtshaus

Spanierstraße 3, 78467 Konstanz

Closest bus station: *Sternenplatz*

Conference Dinner

il Boccone

Bodanstraße 20-26, 78462 Konstanz

Closest bus station: *Bodanstraße*

First Aid

In case of an emergency please call the emergency hotline 112. Furthermore, you can call the University's own emergency hotline dialling +49 7531 88 2222 with your own phone. Additionally, you may approach the conference staff, who will then organize assistance and aid for you.

Cash Dispenser

There is an ATM on level 5, next to the Campus Café. It will only issues euro banknotes and there is no possibility to exchange currencies at the University.

Mobile Network

There also is a digital version of the conference program. You can load it using the following URL: m.digitalsocieties2019.net Once loaded, you can use the app offline. You can also save presentations to a list of favourites. The app works on mobile devices only, access via Firefox is not supported.

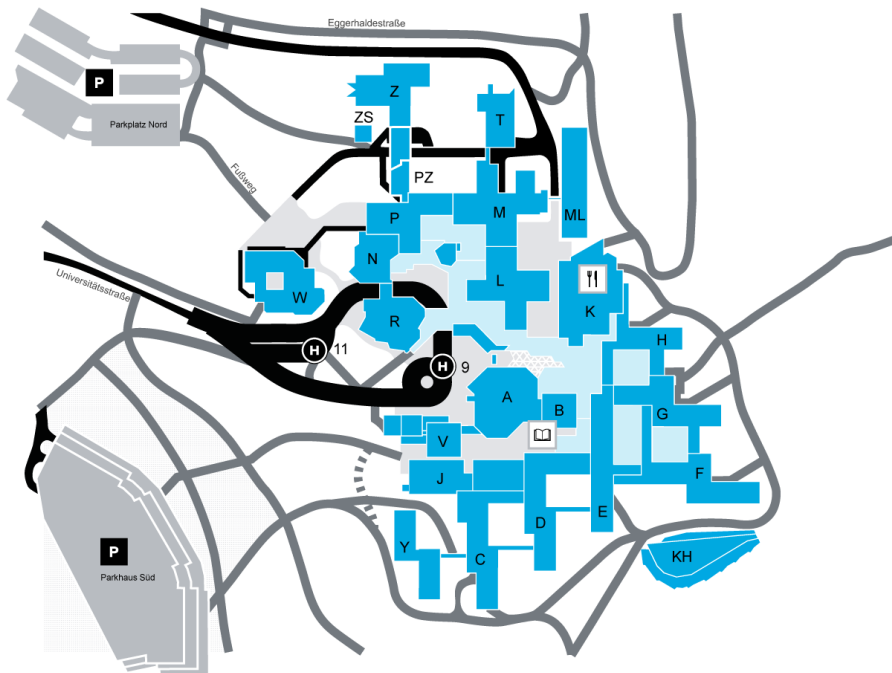
Wi-Fi

In addition to the eduroam network, you are invited to join the 'conference'-network, which you can log into using the username ds2019 and the password RU7yi1Yx.

Social Media

To be embedded in the digital world, you can use and follow our conference's hashtag #akadsoz2019.

Location Maps



Locations

Conference Office	Building A, level A6
Talks	Building A, level A7
Poster Session	Building A, level A5
(nearest) Restrooms	Building A, B, and K

Programme

Wednesday, September 25, 2019

Time	Programme	Location
14:00 – 14:30	Welcome Addresses - Dirk Leuffen <i>Vice Rector University of Konstanz</i> - Ulrik Brandes <i>ETH</i> - Thomas Hinz <i>Academy of Sociology</i>	A 701
14:30 – 15:00	Nils Weidmann * <i>University of Konstanz</i> Remote-Sensing Digital Interactions: Using Network Measurement for Political Science Research	A 701
15:00 – 15:30	Sophie Mützel * <i>University of Lucerne</i> Sociological Research in the Digital Age: Analytical and Methodological Challenges and Opportunities	A 701
<i>Coffee Break (A6)</i>		
16:00 – 16:30	Andreas Diekmann * <i>ETH and University of Leipzig</i> Trust, Trade, and Technology. Theory and Research on Trust Relations in the Digital World	A 701
16:30 – 17:15	Dissertation Award Ceremony Hanno Kruse <i>University of Cologne</i> Residential Barriers and Bridges to the Social Integration of Young Immigrants in Germany	A 701
17:30 – 19:30	Academy of Sociology Business Meeting	A 701
20:00	Early Career Researcher Reception	Constanzer Wirtshaus

* Invited Speakers are marked with an asterisk

Any changes in the programme will be communicated on screens and will also be reflected in the app.

Thursday, September 26, 2019

Time	Programme	Location
09:00 – 10:30	Reputation and Open Peer Production on Digital Platforms Wojtek Przepiorka * The Effectiveness of Online Reputation Systems to Promote Social and Economic Exchange Achim Edelmann, Rudolf Farys Discrimination on Social Trading Platforms Lea Stahel “Shaming Divides”: How Capital-Rich Public Figures are Aggressively Shamed by Their Audiences Jürgen Lerner, Alessandro Lomi The Liability of Balance in Open Peer-Production	A 702
09:00 – 10:30	Network Mechanisms Markus Strohmaier * Modeling Minorities in Social Networks Johannes Weyer Governance in the Digital Age. Combining Insights from Analytical Sociology and Agent-Based Modelling Christoph Spörlein, Elmar Schlüter, Pamina Noack Ethnic Insults in YouTube Comments: Social Contagion and Selection Effects during the German Immigration Crisis Malte Doehne, Katja Rost Network Mechanisms of Localized Knowledge Spillovers in the Geography of Innovation	A 703
09:00 – 10:30	Labour Market and Digitalisation I Anja-Kristin Abendroth, Martin Diewald, Mareike Reimann How Digitalized is Work in Large German Workplaces, and how is Digitalized Work Perceived by Workers? New Insights In the Digitalization of Work Sophia Zimmermann Digital Fluency – a Key Competence to Perform in the Digital Age? Philipp Brandt The Data Scientist Role: Professional Identity Construction in the Digital Age	A 704
<i>Coffee Break (A5)</i>		

Thursday, September 26, 2019

Time	Programme	Location
11:00 – 12:30	Open Session on Inequality and Education Pia Blossfeld Social Origin and the Long-Term Changes in the Transitions between the Academic and the Non-Academic Educational Tracks after the First Educational Degree: Implications for the German Vocational Training System Felix Bittmann, Steffen Schindler Alternative Routes to Higher Education Eligibility in Germany – Diversion, Inclusion, Equalisation? Christoph Müller Vocational Retraining in the Context of Technological Change and Social Inequality Clemens Ohlert Decline of the Collective Bargaining, the Introduction of a General Minimum Wage and the Distribution of Hourly Wages, 2010-2014	A 702
11:00 – 12:30	Terrorism and Social Media Christian Czymara, Alexander Schmidt-Catran Islamist Terrorism, Online Media and Support for Refugees in Germany Christof Nägel, Mark Lutter The Christmas Market Attack in Berlin and Attitudes towards Refugees: A Natural Experiment with Data from the European Social Survey Fabian Winter, Amalia Alvarez Benjumea The Breakdown of Anti-Racist Norms: A Natural Experiment on Normative Uncertainty after Terrorist Attacks Malte Reichelt Terrorist Events, Media Coverage and Their Effects on Labour Market Segregation in Germany	A 703
11:00 – 12:30	Labour Market and Digitalisation II Alexandra Wicht, Stephen Reder, Clemens Lechner Sources of Individual Differences in Adults' Digital Skills Anita Tisch, Sophie-Charlotte Meyer Work Intensification and Digitalisation of Work. A Large-Scale Empirical Test of a New Guiding Framework Michael Otto, Andreas Damelang Who is Hit by Automation Technology? Testing Skill Inequality and Occupational Inequality with German Robot Data Simon Walo Skills, Automation, and Occupational Change	A 704
<i>Lunch Break (K6/K7)</i>		

Thursday, September 26, 2019

Time	Programme	Location
13:30 – 14:30	Poster Session	A 6
14:30 – 16:00	Open Session on Social Inequality Holger Lengfeld, Stephanie Pravemann, Katharina Müller The German Middle Class: the Sensitive Center of Society? Andreas Eberl Who Cares about Social Capital? The Effect of Informal Caregiving on Social Capital Investments Anna-Theresa Saile, Susanne Strauß, Andreas Haupt Explaining Women's Increasing Contribution to the Couple Income. The Case of East and West Germany 1976-2011 Ariane Bertogg, Susanne Strauß How Couples' Division of Labour Influences Their Caregiving Activities – a European Comparison among the 50+ Population	A 702
14:30 – 16:00	Opinion Formation Michael Mäs * Do Filter Bubbles Foster Opinion Polarization? What We Know and What We Need to Know to Answer this Question Susumu Shikano, Theresa Küntzler, Taehee Kim A Paradox of Digital Innovation in Political Participation: Emerging new Digital Divides Kieran Mepham, András Vörös, Christoph Stadtfeld The Joint Dynamics of Social Networks and Political Opinions: A Bipartite Network Approach Amalia Alvarez Benjumea, Fabian Winter, Nan Zhang Tracking the Trump Effect: A Long-Term Study of How Political Campaigns Change the Unsayable	A 703
14:30 – 16:00	Labour Market and Digitalisation III Matthias Dütsch The Effect of Wage Shocks on Automatable Jobs. Evidence from the Introduction of the German Minimum Wage Myriam Baum, Felix Lukowski Work in the Digital Age: More Complexity, More Training? Firm-Level Evidence from Germany Anja-Kristin Abendroth Digitalized Work as a Status Characteristic? Investigating the Implications of Digitalized Work for Claims Making for Career Advancement among Different Groups of Workers in Large German Workplaces Heike Brockmann, John Torpey, Wiebke Drews A Class for Itself? On the Worldviews of the New Tech Elite	A 704
<i>Break (A5)</i>		

Thursday, September 26, 2019

Time	Programme	Location
16:30 – 18:00	Mixed Methods and Data Quality Jana Diesner * Impact of Human Decision Making on Social Computing Research Christoph Beuthner, Bernd Weiß, Florian Keusch, Henning Silber Linking Digital Data to Survey Data – Respondents Willingness to Consent and the Potential of Facebook Data Jan Rasmus Riebling, Andreas Schmitz, Jörg Blasius Data Quality of Process-Generated Data Elad Ben Elul The Privacy Settings of the House and the Architecture of Social Networks: A Case Study from Urban Ghana	A 702
16:30 – 18:00	Political Sociology Philipp Lutscher Digital Responses to Sanctions? Denial-of-Service Attacks against Sender Countries Vincenz Frey, Delia Baldassarri, Francesco Billari Internet Access and Participation: Evidence from a Quasi-Natural Experiment Katrin Paula Sometimes Less is More: Censorship, News Falsification, and Disapproval in 1989 East Germany Simon Kühne, Dorian Tsolak Welfare State Support and Stereotypes towards Recipients	A 703
16:30 – 18:00	Environmental Applications of Digital Data Tobias Rüttenauer Using Large Scale Register Based Data to Analyse Environmental Inequality: Different Measures, Different Scales – Same Results? Valentina Rotondi, Ridhi Kashyap, Luca Maria Pesando, Simone Spinelli, Francesco Billari Leveraging Mobile Phones to Attain Sustainable Development Axel Franzen, Fabienne Wöhner The Impacts of the Digitalization of the Labour Market on Commuting Behaviour in Switzerland: Evidence from the Swiss Mobility and Transport Microcensus Marco Hellmann, Jan Schlüter Data-Driven Coordination between Human Driver and Partially Automated Car. Measurement Challenges of Human-Machine-Interaction	A 704
18:15 – 19:15	Presentation Open Science Initiative	A 701
20:00	Conference Dinner	Il Boccone

Friday, September 27, 2019

Time	Programme	Location
09:00 – 10:30	Gender and Ethnic Biases Ridhi Kashyap * Measuring Global Gender Inequality Indicators Using Large-Scale Online Advertising Data Claudia Wagner * Digital Manifestations of Gender Bias Carsten Schwemmer, Sebastian Jungkunz Whose Ideas are Worth Spreading? The Representation of Women and Ethnic Groups in TED Talks	A 701
09:00 – 10:30	Open Session on Replication and Publication Bias Gerhard Krug, Benjamin Fuchs Will the True Causal Effect Please Stand Up? A Critique of Using Fixed-Effects Regression to Estimate the Effects of Personal Contacts on Wage Nico Sonntag Not Seeing the Forest for the IVs Andreas Schneck Are Really Most of our Research Findings False? An Empirical Estimation of Trends in Statistical Power, Publication Bias and the False Discovery Rate in Psychological Journals Katarina Zigova, Thomas Hinz, Chris Doucouliagos Publication Bias and Academic Age: Evidence from Meta-Studies in Economics	A 703
<i>Coffee Break (A5)</i>		

Friday, September 27, 2019

Time	Programme	Location
11:00 – 12:30	Open Session on Integration of Immigrants Johanna Gereke Covert Discrimination is Unaffected by Immigrant's Socioeconomic Status Amalia Alvarez Benjumea Uncovering Hidden Opinions: The Contagion of Anti-Immigrant Views Jörg Dollmann, Markus Weißmann The Story after Immigrant's Ambitious Educational Choices: Real Improvement or Back to Square One? Julia Rüdell, Jan-Philipp Steinmann "With a Little Help from my Educated Friends": Revisiting the Role of Social Capital for New and Long-Term Immigrants' Labour Market Integration in Germany	A 701
<i>Lunch Break (A5)</i>		
13:15 – 13:45	Suzy Moat * <i>University of Warwick</i> Sensing Human Behaviour with Online Data	A 701
13:45 – 14:15	Emilio Zagheni * <i>Max Planck Institute for Demographic Research and University of Washington, Seattle</i> Using Digital Trace Data for Demographic Research	A 701
14:15 – 14:45	Dirk Helbing * <i>ETH</i> Digital Society and Sustainability Transition – Grand Challenges for the Social Sciences	A 701
14:45 – 15:00	Closing Remarks	A 701

Talks

Thursday, September 26

Reputation and Open Peer Production on Digital Platforms

09:00 – 10:30 at A702, Chair: Andreas Jungherr

The Effectiveness of Online Reputation Systems to Promote Social and Economic Exchange

- *Wojtek Przepiorka (Invited Speaker; University of Utrecht)*

Reputation promotes trust in online traders, their products and services. But can we trust the ratings and reviews about online traders? Wojtek Przepiorka's research investigates the opportunities and pitfalls of online reputation systems with the aim to establish quality criteria by which online reputation systems can be assessed.

Discrimination on Social Trading Platforms

- *Achim Edelmann, Rudolf Farys (University of Bern)*

Over the last decades, we have seen an unprecedented rise of digital markets. Most recently, this includes the rise of online trading platforms that provide new opportunities for private, small-scale investments. While scholars have shown that discrimination can affect financial investments more generally, it remains unclear whether and how related inefficiencies also impede private investments online. We explore this issue using virtual portfolios from an online platform from the DACH region (Germany, Austria, Switzerland) specialized in small-scale private investments. Drawing on arguments about ethnic discrimination, we hypothesize that people invest their money less often with non-German sounding traders due to a lack of trust and perceived expertise. We find that traders with non-German sounding names receive between 54% (2017) and 86% (2019) less money from investors than traders with German-sounding names. We explore possible mechanisms underlying this discrimination effect. Among other

things, we classify trader's names by gender to explore whether trader's gender could explain the found effect; moreover, we use text analytical techniques to explore whether the effect is dependent on the portfolio descriptions that traders provide.

"Shaming Divides": How Capital-Rich Public Figures are Aggressively Shamed by Their Audiences

- *Lea Stahel (University of Zürich)*

Public figures such as politicians, CEOs, and journalists are increasingly shamed by their audiences online. Why some are flooded by aggressive shaming while others are spared remains unclear. Accordingly, this study refers to literature on shaming and applies Bourdieu's notion of capital and its extensions in media theory. It is expected that the more capital that public figures have, the more often they are aggressively shamed. This is because more powerful figures can be better instrumentalized by audiences who seek power and recognition. Applying this reasoning to journalists, it predicts them to be more frequently shamed the higher their journalistic cultural capital, mediated social capital, and celebrity capital. A Swiss online survey of 530 journalists confirms all hypotheses. This study contributes a so-far lacking, comprehensive social-theoretical explanation of inequality in aggressive shaming of public figures. Further, the multivariate analysis of a representative sample adds a more sophisticated empirical approach.

The Liability of Balance in Open Peer-Production

- *Jürgen Lerner¹, Alessandro Lomi²*

(¹University of Konstanz, ²University of Lugano)

Online peer-production projects typically support social evaluation where participants can express agreement or disagreement towards the contributions of others, giving rise to signed event networks. How does the structure of these emergent networks affect the quality of teamwork? We

address this question in an analysis of the network mechanisms underlying the production of about 5,000 high-quality Wikipedia articles with the network mechanisms in a contrasting sample of comparable articles of lower quality. Balance theory predicts that Wikipedia contributors, for instance, tend to agree with the enemies of their enemies. However, we find that contributors to high-quality articles display weaker tendencies to conform to the behavioural predictions of balance theory. We claim that these results have implications far beyond our research setting by pointing to a hypothetical social paradox: cognitively consistent micro-behaviour (as predicted by balance theory) induces a polarized macro-level structure that is associated with a sub-optimal outcome.

Network Mechanisms

09:00 – 10:30 at A703, Chair: Ulrik Brandes

Modeling of Minorities in Social Networks

- *Markus Strohmaier (Invited Speaker; RWTH Aachen and GESIS)*

Homophily can put minority groups in social networks at a disadvantage by restricting their ability to establish links with people from a majority group. This can limit the overall visibility of minorities in the network, and create biases. In this talk, I will show how the visibility of minority groups in social networks is a function of (i) their relative group size and (ii) the presence or absence of homophilic behaviour. In addition, the results show that perception biases can emerge in social networks with high homophily or high heterophily and unequal group sizes, and that these effects are highly related to the asymmetric nature of homophily in networks. This work presents a foundation for assessing the visibility of minority groups and corresponding perception biases in social networks in which homophilic or heterophilic behaviour is present.

Governance in the Digital Age

- *Johannes Weyer (TU Dortmund)*

Combining insights from analytical sociology and agent-based modelling modern societies of the 21st century are facing a fast-growing digitisation of almost every sphere of life and work, from industrial production to transport logistics, retailing and, finally, private life such as sleeping, cooking, leisure activities et cetera. Smart devices are collecting large amounts of data that allow to identify persons and objects and to check their current status and position. It rather seems that algorithms are governing our world (O'Reilly 2013) – with far-reaching impacts at the individual as well as on the societal level (Section 1). Hence, the digital real-time society is in need of new governance approaches in order to cope with these challenges, to keep pace

with the rapid technological development, to maintain control and to guarantee a worthwhile future of our society (Section 2). Understanding – and maybe shaping – the digital society requires modelling the mechanisms that are guiding the dynamics of socio-technical systems in general and of the digital society in particular. Hence, we propose a multi-level model of governance (MLG, Section 3), rooted in a basic model of a socio-technical system. This approach allows to study and to analyse complex, non-linear interactions of systems within systems and thus may provide insights how to govern the digital society and to avoid the risk of losing control. Investigating the governance of complex socio-technical systems requires new, innovative methods. Agent-based modelling is a suitable means to implement artificial societies at the computer screen, to experiment with various governance scenarios, and to predict, which scenario produces results that are societally acceptable or politically desirable (Section 4). The simulation framework SimCo, developed at TU Dortmund and rooted in analytical sociology, helps to better understand the functioning of complex systems and to provide means for governing the digital society.

Ethnic Insults in YouTube Comments: Social Contagion and Selection Effects During the German Immigration Crisis

- *Christoph Spörlein¹, Elmar Schlüter², Pamina Noack¹*
(¹University of Bamberg, ²University of Gießen)

We investigate the extent to which ethnic insults propagate through comment networks in YouTube videos from four German political talk shows. We argue that comments incorporating ethnic insults signal social norms and embolden others to emulate offensive behaviour, therefore potentially contributing the contagiousness of insulting commenting. Moreover, periods of highly salient intergroup conflict (e.g., terrorist attacks), further reduce inhibitions to publicly post insulting content further multiplying the spread of this behaviour. Results indicate that the use of ethnic insults in online

comment sections appears socially contagious: the presence of ethnic insults increases the prevalence of insulting comments by 2 percentage points. This relationship almost triples in the aftermath of violent incidents. However, based on the results of a pseudo-panel, our empirical findings suggest the social contagiousness of ethnic insults is essentially a function of social selection processes and not social contagion.

Network Mechanisms of Localized Knowledge Spillovers in the Geography of Innovation

- *Malte Doehne, Katja Rost (University of Zürich)*

We connect the insight that social environments are conducive to individual creativity with the observation that creative persons are attracted to regions in which they can live out their creativity, and in doing so, indirectly contribute to the creative potential of regions. We capture the resultant dynamics in a network theory of localized knowledge spillovers. We test this theory using two independently curated, historical datasets. The first includes the geocoded places and years of the births and deaths of 142,902 creative individuals who lived in Europe between 1000 and 1900 AD. The second dataset consists of the geocoded places and founding years of 3,345 monasteries of the largest Roman-Catholic Orders in Europe in that period. Between 1000 and 1900 AD, monastery foundings were elaborate, entrepreneurial acts that profoundly affected the local production economy. Regional and temporal variation in monastery founding rates allows us to examine knowledge spillovers resulting from the agglomeration of creative persons. We develop a life-cycle theory of regional innovation over time.

Labour Market & Digitalisation I

09:00 – 10:30 at A704, Chair: Thomas Hinz

How Digitalized is Work in Large German Workplaces, and how is Digitalized Work Perceived by Workers?

*- Anja-Kristin Abendroth, Martin Diewald, Mareike Reimann
(Bielefeld University)*

Digitalization is only a generic term for a broad range of very different, quickly developing applications, ranging from using digital communication tools over artificial intelligence to robotics. Existing surveys in Germany so far miss to provide a comprehensive overview of digitalized work in occupations and workplaces and the implications for workers. We realized a measurement of different dimensions of digitalized work which distinguishes digitalized communication and information processing, digitalized regulation and control of work processes, and working with robots in the third wave of a quantitative Linked Employer–Employee Panel Survey. This design has major advantages as it enables to capture the variety of digitalization processes in various industries; embed digitalization in different workplace settings; and address the fact that the implementation of same or similar digital technologies and the implications for workers are negotiated within workplaces with different inequality regimes. We present first results demonstrating the distribution of these different dimensions of digital work across our employer and employee sample.

Digital Fluency - a Key Competence to Perform in the Digital Age?

- Sophia Zimmermann (University of Konstanz)

The digitalization of the workplace appears to be both a curse and a blessing for organizations as the pervasiveness of digital technologies can have opposite effects on individual work performance. To be successful in the digital age, it seems therefore imperative for organizations to promote and

exploit factors that may enable positive digital employee performance. However, much of existing research has been focused on a performance inhibitor, namely technostress. We address this research gap by conceptualizing and testing a facilitator of digital employee performance: digital fluency. Drawing on the ability-motivation-opportunity framework, we propose that subordinates' digital fluency consisting of digital knowledge and digital self-efficacy will positively affect their digital performance. We further argue that the effect of followers' digital fluency on their digital performance can be increased through the digital fluency level of their supervisor. We find support for this theoretical model in a multisource and time-lagged sample of 205 employees and respective supervisors from a German medium-sized company.

The Data Scientist Role: Professional Identity Construction in the Digital Age

- *Philipp Brandt (University of Mannheim)*

The system of professions has shifted over the last decade as the “data scientist” role has gained sudden and widespread recognition. Although every profession has had to define its identity, how novel roles emerge remains poorly understood. This study mobilizes field observations from New York City’s technology scene and introduces “reflexive creativity” as a concept to explain professional identity construction. I show how data scientists explain their benefits, legitimacy and coherence with reference to established scientific expertise. They present this expertise in the context of concrete individual experiences. Science thus serves as a means for data scientists to understand who they are, not an aim itself. This argument draws on the first empirical account of professional identity construction as it unfolds. The results shed new light on the longstanding sociological question of professional emergence and explain how fleeting and indirect interactions define a salient community from the individual level.

Open Session on Inequality and Education

11:00 – 12:30 at A702, Chair: Claudia Diehl

Social Origin and the Long-Term Changes in the Transitions between the Academic and Non-Academic Educational Tracks after the First Educational Degree: Implications for the German Vocational Training System

- *Pia Blossfeld (University of Leipzig)*

This article examines the increasing permeability between the academic and the vocational track. Using newly retrospective data from the Adult Cohort (SC6) of the National Educational Panel Study (NEPS), the complete educational careers of adults living in West Germany are reconstructed. The results show that the careers of youth and young adults in the West German educational system with regard to vocational training have impressively changed. Across cohorts, a decreasing proportion of adolescents with a ‚Hauptschulabschluss‘ or a ‚Realschulabschluss‘ subsequently complete vocational training. People with these degrees increasingly upgrade their educational degree to a higher education entry certificate. In turn, the proportion of students with a higher education entry certificate who decide to complete vocational training instead of a tertiary degree has strongly risen.

Alternative Routes to Higher Education Eligibility in Germany – Diversion, Inclusion, Equalisation?

- *Felix Bittmann, Steffen Schindler (University of Bamberg)*

The educational system of Germany is known as highly stratified due to its early between school tracking that is assumed to be highly predictive of educational and occupational outcomes. From an inequality perspective, this deserves attention because it is related to questions of diversion and inclusion. Our paper aims to explain the independent influence of school track in lower secondary education while regarding the strong mechanisms

of self-selection. By using techniques from propensity-score-matching, growth-curve models and fixed-effect regressions, we attempt to quantify the mechanisms that influence interest in continuing education after completion of a first lower secondary track. Our findings suggest that there are considerable effects of school types which are independent of self-selection. Regarding these in future policy might contribute to reduce social inequality and avoid diverting students away from higher education.

Vocational Retraining in the Context of Technological Change and Social Inequality

- *Christoph Müller (Institute for Employment Research – IAB)*

Technological change affects employment by substituting routine tasks and complementing complex non-routine tasks. Even though substitution of routine labour does not result in loss of employment at the aggregate level in Germany, technological change shifts labour between sectors. However, it is unclear how exactly affected workers can move between sectors. Vocational retraining offers an opportunity to enter other occupational fields when being at risk of substitution. If technological change increases the importance of retraining throughout the life course, differences in educational behaviour could come into effect leading to different participation in retraining. Therefore, the focus of this project is to investigate how technological change shapes the participation in retraining and thus might affect inequality in subsequent labour market outcomes of participants and non-participants. I use longitudinal data on employment and training biographies and investments in technology to investigate how technological change affects this educational decisions and subsequent labour market outcomes.

Decline of Collective Bargaining, the Introduction of a General Minimum Wage and the Distribution of Hourly Wages, 2010-2014

- *Clemens Ohlert (Office of the Minimum Wage Commission)*

This paper examines how the continued decline of collective bargaining and the announcement of a general minimum wage affected the evolution of wage inequality between the years 2010 and 2014 as compared to effects of market forces. We use two cross-sections of the German Structure of Earnings Survey (SES) for the years 2010 and 2014 to examine changes in the distribution of gross hourly wages. To separately identify effects of collective bargaining agreements, effects of the announcement of a general minimum wage and effects of further worker and firm characteristics, we estimate counterfactual wage distributions using unconditional quantile regressions. Changes in the shares of workers earning hourly wages below the minimum wage and changes in the share of workers covered by collective agreements are used to capture institutional effects on the wage distribution.

Terrorism and Social Media

11:00 – 12:30 at A703, Chair: Karsten Donnay

Islamist Terrorism, Online Media and Support for Refugees in Germany

- *Christian Czymara, Alexander Schmidt-Catran*

(Goethe University Frankfurt)

Mass media has long been considered an important determinant of exclusionary attitudes toward ethnic minorities. However, empirical evidence on this relationship remains largely anecdotal. We examine German online media reporting on refugees in the weeks before and after the attack on a Christmas market in Berlin on 19 December 2016 (n articles=1,216). The fact that the attacker entered Germany to apply for asylum connected the attack to the recent inflow of refugees. We draw upon unsupervised machine learning to quantify how German quality media reported on the attack. Results reveal that the attack had significant impact on media reporting. However, the strong focus on the attack is only short lived. In a subsequent step, we link media reporting to data on attitudes toward the German refugee policy. In contrast to theoretical expectations, both follow almost opposite trajectories. Hence, there seems to be no clear and direct macro-level effect of the information environment at large on public opinion.

The Christmas Market Attack in Berlin and Attitudes toward Refugees: A Natural Experiment with Data from the European Social Survey

- *Christof Nagel¹, Mark Lutter²*

(¹German Police University, ²University of Wuppertal)

We study changes in attitudes toward refugees after the terrorist attack on the Berlin Christmas Market of December 19, 2016 by making use of random variation in the field period of the European Social Survey (ESS), thus forming a natural experiment. The survey's field period took place in Germany from August 23, 2016, to March 26, 2017. Hence, the Christmas

market attack took place approximately halfway through the ESS's field phase. We argue that the terrorist attack creates a spillover effect and negatively shapes public opinion of uninvolved ethnic minorities. Our data analysis suggests that immediately after the event, only people with a right-wing political attitude appear to be affected by the proposed spillover effect. However, we find that the worsening of attitudes toward refugees can also be observed in the general population as time progresses. We do not find variation according to educational levels.

The Breakdown of Anti-Racist Norms: A Natural Experiment on Normative Uncertainty after Terrorist Attacks

- *Fabian Winter, Amalia Alvarez Benjumea*

(Max Planck Institute for Research on Collective Goods)

Terrorist attacks can have profound consequences for the erosion of social norms. We argue that these attacks create substantial uncertainty about whether norms of civic conversations still hold. To test our theory, we examine (i) the impact of terrorist attacks on the level of hate speech, and (ii) how the effect of terrorist attacks depends on the uncertainty about social norms of prejudice expression. We report on the results of a unique combination of a natural and a lab-in-the-field experiment. We exploit the occurrence of two consecutive Islamist terrorist attacks in Germany, the Würzburg and Ansbach attacks, in July 2016.

Terrorist Events, Media Coverage and Their Effects on Labour Market Segregation in Germany

- *Malte Reichelt (NYUAD)*

Over the past decades multiple terrorist attacks, claimed by foreign fundamentalist organizations, hit European countries. Such attacks are known to influence public opinion and sentiments against foreigners, but little is known about whether and under which conditions terrorist attacks or

media coverage affect actual behaviour and shape society in the aftermath of these events. I use German administrative data as well as data from the Global Terrorism Database (GTD) and archival data from a major German newspaper to show that terrorist events in Europe have a negative impact on employment probabilities of foreigners from majority Muslim countries. These effects are mainly driven by firms that have not employed a person from majority Muslim countries at the time of the event. Hiring probabilities in firms with more employees from majority Muslim countries on the contrary do not show an altered hiring behaviour, leading to labour market segregation on the macro level.

Labour Market and Digitalisation II

11:00 – 12:30 at A704, Chair: Thomas Hinz

Sources of Individual Differences in Adults' Digital Skills: A Large-Scale Empirical Test of a New Guiding Framework

- *Alexandra Wicht¹, Stephen Reder², Clemens M. Lechner¹*
(¹GESIS, ²Portland State University)

We develop an integrative conceptual framework that seeks to explain individual differences in digital skills. Building on practice engagement theory, this framework views the continued usage of digital technologies at work and in everyday life (ICT use) as the key prerequisite for the acquisition of digital skills. At the same time, the framework highlights that ICT use is itself contingent upon individual and contextual preconditions, most notably literacy skills. We apply this framework to data from two recent German large-scale studies (total N 5,281) that offer objective measures of adults' digital skills. Findings support our framework's view of ICT use as a key prerequisite for digital skills. Moreover, they demonstrate that literacy skills have strong associations with digital skills, largely by virtue of their indirect associations through ICT use. By comparison, regional digital cultures evince only limited explanatory power for individual differences in digital skills.

Work Intensification and Digitalisation of Work

- *Anita Tisch, Sophie-Charlotte Meyer*
(*Federal Institute for Occupational safety and Health*)

Although digitisation will bring an end to work, some tasks and professions are already changing drastically (Dengler and Matthes, 2018). An increasing number of studies indicates an intensification of work through digitization (Arnold et al., 2016; Ahlert, 2018) with negative consequences for the well-being of employees (Meyer et al., 2019). Against this background, we are

investigating the hypotheses that employees have to familiarise with new technologies and that this can lead to work intensification. Using the BIBB/BAuA Employment Survey 2018 our linear probability models suggest a positive relationship between the introduction of new technologies, - both new computer programs as well as new manufacturing technologies - and work intensification. Interaction models show, that for the introduction of new computer programs, the confrontation with new tasks seems to further increase time and performance pressure. However, confrontation with new manufacturing technologies and contemporaneously new tasks seem to reduce time and performance pressure.

Who is Hit by Automation Technology? - Testing Skill Inequality and Occupational Inequality with German Robot Data

- Michael Otto, Andreas Damelang (FAU Erlangen-Nürnberg)

The number of robots in the German manufacturing industries has almost tripled within the last two decades. While this large growth of automation technology may affect total employment in one way or another, research about the social outcomes of automation on the micro level is rare. Thus, our article investigates the individual risk of entering into unemployment and analyses which groups are particularly exposed to automation. We test two competing theoretical approaches that offer different suggestions about social groups at risk: (1) low qualified workers (skill inequality) or (2) workers in occupations with a high exposure to automation (occupational inequality). In our analytical design, we use an integrated measure for individual workplace automation, which combines two different risks: High actual investments in robots at the industry level and jobs with a high estimated substitution potential at the micro level. We find evidence for occupational inequality rather than for skill inequality.

Skills, Automation, and Occupational Change

- *Simon Walo (University of Zürich)*

According to common belief, automation is largely responsible for the recent structural changes in European labour markets. However, the exact nature of these changes remained controversial, and therefore it could not be determined whether they are caused by automation alone or by other factors. For these reasons, we analyse the patterns of occupational change in 23 European countries between 1998 and 2017. Despite the variation between countries, we find a trend towards occupational upgrading if occupations are ranked by education and a trend towards polarization if they are ranked by wages. Using some of the most prominent measures, we then assign values of automatability to each occupation and test whether they can explain these observed changes. We find that automation can only explain upgrading, but not polarization of labour markets. Thus, certain occupations must clearly be affected by other factors than only their susceptibility to automation.

Poster Session

13:30 – 14:30 at A5

(1) Potentials and Biases of Image Recognition Algorithms

- *Emily Bello-Pardo, Carly Knight, Jeff Lockhart, Stan Oklobdzija, Iacopo Pozzana, Martijn Schoonvelde, Carsten Schwemmer*

Images are a powerful medium for communication of information, emotions, social identities and political opinions. At the same time, analyzing high-dimension image data is challenging as many social scientists do not have access to large training datasets or lack the technical expertise for applying deep learning algorithms. Image recognition services such as the Google Vision API offer cheap and easy to use alternatives. In this study, we examine the extent to which Google Vision can be leveraged to answer social science research questions. For a case study, we used the Twitter API to extract all available tweets for every US Member of Congress in the 17 months following their inauguration in January, 2017 ($N \approx 420,000$). We then passed all images in our sample ($N \approx 200,000$) to Google Vision to obtain label annotations. Furthermore, we validate annotations of a sample of 2,000 images stratified by content and author with the help of workers recruited on Mechanical Turk. For each image, workers were asked to identify sociodemographic attributes of persons shown in images as well as to detect image annotations that are not in line with the content shown in images. Our results suggest that, overall, human raters predominantly agree with labels assigned by Google Vision. However, we also find substantial evidence for gender bias with regards to image annotations, but also with regards to person recognition. Even for very similar images, the Google Visions tends to assign labels related to physical appearance to images including women and labels related to power to images including men. Moreover, the algorithm fails to recognize women in pictures more often in comparison to

men. Depending on the research application, we therefore advise social scientists to be careful when using image recognition systems.

(2) x-hub Project: Transdisciplinary Reuse of Experimental Data

- *Dirk Betz, Claudia Biniossek, Hermann Helke*

Experimental methods are used in a rapidly increasing number of studies in sociology, political science, and economics. These disciplines share many topics – e.g., public goods, large groups, social preferences – and many theoretical puzzles. But findings do cross community borders only to a very limited degree. One consequence is that different conceptual and methodological approaches and criteria are applied in these separated communities, without much awareness and transparency about that circumstance. Therefore, the x-hub project aims to establish an infrastructure that fosters transparency, replicability, and reuse of experimental data across disciplinary borders. Diverging methods and paradigms applicable to primary data sets shall become visible at first sight, so that researchers from any sub-discipline can find and evaluate the data and research from their respective discipline-specific perspective. The x-hub project is jointly run by the University of Vienna, University of Magdeburg and GESIS and includes the data repositories x-science and x-econ.

(3) x-science Repository Service for Different Types of Sociological Experiments

- *Claudia Biniossek, Dirk Betz, Hermann Helke*

x-science repository service (<https://www.x-science.org>) is specialized in experimental data from sociology, and other social sciences. Its beta version was launched in 2018. x-science delivers different sets of metadata tailored to the needs of different sociological research paradigms (e.g., factorial surveys, game-theoretical experiments, social psychological experiments). Thus, in a first step, in collaboration with researchers from social sciences,

community-specific metadata was defined. x-science combines the demand for transdisciplinary reuse and research with online platforms containing core elements of any typical research data service. Datasets from all types of experiments are stored in the same, shared database. Data from economic experiments archived with the partner repository x-econ are also visible within x-science. Interoperability to further experimental disciplines (psychology, experimental philosophy) is outlined. As x-science is now in a beta version, we aim to discuss the comments of AS members on our repository for the final release later this year.

(4) Personality Traits as a Partial Explanation for Gender Wage Gaps and Glass Ceilings

- *Matthias Collischon*

This paper investigates whether personality traits can explain glass ceilings (increasing gender wage gaps across the wage distribution). Using longitudinal survey data from Germany, the UK and Australia, I combine unconditional quantile regressions with wage gap decompositions to identify the effect of personality traits on gender gaps and investigate potential channels of the effect. The results suggest that the impact of personality traits on wage gaps increases across the wage distribution in all countries. Personality traits explain up to 14% of the overall gender wage gap at the top of the wage distribution and around 7-9% at the mean. The effect is mostly driven by direct wage effects (potentially through productivity or bargaining behavior) of certain traits that differ between men and women, while access to jobs and discrimination of women based on personality traits play a minor role.

(5) What is More Valuable: Confidentiality or Availability of Data? Work in Process on an Online Experiment Using Willingness to Pay in a Ransomware Scenario to Examine Users' Valuation of Their Data

- Freya Gassmann, Janina Beck, Nora Gourmelon, Zinaida Benenson

Ransomware are malicious programs that take control of data and systems, and release them for payment. Currently, there is no research about what is more valuable for users: availability or confidentiality of their data in ransomware attacks, and which factors influence this valuation. To investigate this issue, we design a between-subjects field experiment with the ransomware target as independent variable (confidentiality or availability) and willingness to pay as dependent variable. The ransomware message states "Your data is encrypted" and "Your data is stolen", respectively. Respondents in the pretest rated both scenarios as quite realistic. To avoid a self-selection bias and to have a widespread socio-economic background of participants, two different samples will be collected (university students and clickworkers). New insights would help the computer security community to develop novel protective technologies that match users' interests, which would in turn help to develop a safe digital society.

(6) Digitalised Regulation and Control and the Implications for Work Autonomy

- Elisa Gensler, Anja Abendroth

Work autonomy is an important resource for employees managing their working tasks and is also positively correlated with job satisfaction. However, most recent developments in digital technologies described as the fourth industrial revolution facilitate flexible adaption and automated regulation of work processes by gathering detailed process information and data-handling in real time (e.g. by algorithms). Therefore, questions arise whether implementing digitalised regulation and control, for example by providing automated work instructions by machines fosters a restriction of employees'

work autonomy. Based on the concept of organisational inequality, we argue that organisational structures and practices shape the implementation of digital regulation and control and its consequences for workers' autonomy. Using unique linked employer-employee data of workers in large German workplaces, we test with which tendency and to what extent employees' autonomy is affected by digitalised regulation and whether this effect varies between different occupational (status) and qualification groups, accounting for sectors.

(7) Segregation and Charitable Giving

- *Zbignev Gricevic*

A large corpus of literature investigates how the presence of ethnic and economic out-group affects pro-social behaviour. However, some long-standing theoretical controversies have not yet been resolved and empirical results are mixed. On the one hand, researchers associated with social identity and group-threat theories argue that out-group presence will drive down the pro-the out-group members. On the other hand, social contact theorists claim that residing in the ethnically and economically mixed neighbourhoods will have a positive influence as social contact reduces out-group prejudice. One way to reconcile these two theoretical streams is to take the geographical clustering of social groups into account. Residential segregation will reduce the likelihood of inter-group cooperation by limiting inter-group contact opportunities as well as making group boundaries more salient. My study tests this hypothesis by linking neighbourhood-level social indicators and detailed individual-level data on charitable giving to refugees in Germany.

(8) Communication Structures vs. Contextual Vocabulary of Shared Generic Terms

- *Hermann Helke*

This projected research focuses the analysis of correlations between interdisciplinary communication structures and how they influence the linguistic context of (shared) generic terms. It is based on the assumption that there is a mutual influence between the linguistic context, the use of a specific conceptual vocabulary and the way knowledge is referenced and provided in scientific communication processes. Methodological it is planned to use a social network analysis based on blockmodeling for exploring the intrinsic structures of referencing on an institutional level. Quantitative text analysis will reveal comparing themes and contextual vocabulary used in these communication structures. The sample is chosen from the “web of science” database, crediting the ranking of journals from sociology and behavioural economy. The final results should foster and augment an interdisciplinary communication between economic science and sociology enhancing the possibility of a mutual use of empirical data.

(9) Social Consequences of the Digital Transformation of Occupations

- *Per Kropp, Katharina Dengler*

We analyse substitution potentials of occupational tasks in Germany. In our analyses, we focus on occupations where more than 70 percent of the tasks could be done by digital technology. Depending on their occupational structure, social groups differ considerably with regard to the share of employees working in such occupations. First results show, that male workers are more affected by digitalisation processes in their occupations than women, younger more than older employees, and the less educated more than the better educated. In addition, we will focus on the consequences if digitalisation for different regions types in Germany. Despite our clear results, it is not easy to draw conclusions from our analysis. If

occupations are upgraded by the replacement of routine tasks, making them more interesting, productive, and, eventually, better payed, than substitution might turn out as an advantage. If substitution results in layoffs, it brings obviously a disadvantage. However, realising advantages will require education and further education of workers. Our results should help identifying where the appropriate labour policies should have their focus.

(10) Webs of Deception: Detecting and Measuring the Diffusion of Online Disinformation during the Elections in Ukraine

- Aleksandra Urman, Mykola Makhortykh

In our presentation, we examine the involvement of automated (bots) and human agents (trolls) in the online disinformation efforts during 2019 presidential elections in Ukraine. Our interest towards Ukraine is attributed to two reasons: firstly, as part of the ongoing Russian-Ukrainian conflict, Ukraine is frequently targeted by online disinformation campaigns sponsored by Russia. Secondly, domestic Ukrainian actors increasingly adopt disinformation techniques to target their political opponents that further increases polarization in the Ukrainian society. To analyze the role of online disinformation in 2019 elections, we examine activity on Twitter in relation to main presidential candidates and combine sentiment analysis and logistic regression techniques to identify malign actors and differentiate between automated and human agents. Then, we examine the content of messages produced by trolls and bots to compare discursive strategies used by them. Finally, we evaluate the impact of disinformation by tracing the diffusion of manipulative content on Twitter.

(11) Innovation Transfer in Vocational and Educational Training (VET) System Switzerland

- *Ramona Martins, Daniel Degen*

Trends such as technological and digital change are leading to an increasing dynamism in Swiss working environments. The VET System constantly needs to integrate the recently identified requirements into the vocational training of learners in all three learning areas of the Swiss VET-System (vocational schools, workplace and branch courses). However, there is a lack of institutionalised and sustainable forms of cooperation, which incorporate a linkage of content between the learning areas and a transfer of innovation into the training of learners (Euler, 2004). In this project, we want to examine how the innovation transfer efforts and strategies within and between the learning areas are structured and set up. Following Bormann (2011), who has elaborated a model of innovation transfer based on a knowledge-sociological approach, we understand innovation transfer as a knowledge-based social practice, which is supported not only by individual but also by collective actors. Therefore we interview VET trainers in all three learning areas to identify personal and collective innovation transfer strategies and to examine how new training content is rapidly adapted and integrated into basic vocational training in times of fast technological change.

(12) School Performance: Does Distance to School Matter?

- *Ingrid Stöhr, Corinna Krämer*

School routes in Germany are very different depending on the type of school and the type of district the students are living. In the consequence students' daily commute to secondary school varies as well. Therefore, it will be examined whether obvious regional discrepancies in school availability are important for school performance at secondary school level. Theoretically the paper refers to the framework of the rational choice theory. So it is argued that a longer way to school is associated with higher costs, which reduce the

individual resources that are relevant for school performance. Especially important are alternative costs arising from long commuting such as time for learning, sleeping or just relaxing. For the first time, the direct distances between place of residence and school location can be used to answer the question based on data of the starting cohort 3 (Grade 5, years 2010 to 2013) of the German National Educational Panel Study (NEPS).

(13) Foot-in-the-Door or Door-in-the-Face? A Survey Experiment on Multiple Requests for Consent to Data Linkage

- *Sandra Walzenbach, Annette Jäckle, Jon Burton, Mick P. Couper, Tom Crossley*

It is increasingly common to link survey data to administrative data. Researchers face the challenge of maximising consent rates, but also of ensuring that consent is informed. Using an online access panel, we collected survey data from 5,500 respondents in Great Britain to shed light on how people process linkage requests and which question features help them to undergo an informed decision process, particularly when asked for multiple consents at the same time. The collected data comprises consent decisions with regard to five different administrative data sources (e.g. taxes, education, health). In addition, participants answered several questions to ascertain their understanding of the consent process and rated the sensitivity of the request. We experimentally varied the order of the requests and the format of the question (e.g. presentation on separate pages vs same page). This allows us to estimate to what extent consent and understanding are influenced by question order and page sequencing.

(14) Is Television Dead? The Digital Divide and Omnivorous Film Consumption

- *Sebastian Weingartner*

Social inequality in cultural consumption is primarily visible in the consumption of cultural products from diverse brow-levels, denoted as cultural omnivorousness. But are contemporary digital technologies maybe capable of attenuating these inequalities? Since digital technologies potentially make cultural products from all brow-levels available to wider audiences, the distinguishing effect of omnivorousness might shrink. However, research on the digital divide indicates that technology use is highly socially structured, leading to a reproduction of traditional inequalities in the digital sphere. These conflicting hypotheses are empirically tested in the domain of film consumption. Differentiating between four types of technologies (television, television on demand, DVD, Internet) and two types of omnivorousness (“by-volume”, “by-composition”), results reveal that digital technologies rather reinforce social inequalities in cultural consumption. Traditional television, in contrast, exhibits the highest levels of omnivorousness and lowest levels of social structuration. Hence, not digital technologies are an equalizing force, but television.

(15) Digitalization and the Labour Market: Home Office and Flextime Usage in International Comparison

- *Fabienne Wöhner, Sebastian Mader*

The ongoing dissemination of internet-based information and communication technologies (ICTs) changes the working environment. This offers the possibility to use flexible forms of work like home office or flextime. We perform an international comparative multilevel analysis of different characteristics of flexible work users compared to non-users. For this, we utilize the ISSP 2015 data as well as the European Working Conditions Survey from 2015. As flexible forms of work facilitate the organization of

family and the professional life, they are hypothesized to foster gender equality. Thus, we carry out a country-level analysis in which we investigate to what extent country differences in the usage of flexible work explain differences in the labour market participation rate of women using data from the World Bank. Finally, we regress countries' averages of home office and flextime usage on various digitalization indicators to test the initial assumption that ICTs promote flexible forms of work.

Open Session on Social Inequality

14:30 – 16:00 at A702, Chair: Cornelia Kristen

The German Middle Class: the Sensitive Centre of Society?

- *Holger Lengfeld, Stephanie Pravemann, Katharina Müller*
(*University of Leipzig*)

In the last 10 years or so research provided rich evidence about how social change affected the middle classes in developed societies. In our paper we test a specific thesis we call the particular sensitivity of the middle class. We assume that for the German middle-class occupational changes such as fixed-term employment contracts, part-time employment, episodes of unemployment, variable pay and employment instability jeopardise the long-term planning reliability of the life course. Using a original survey carried out in 2016, we analyse whether or not the occurrence of these events in the recent employment history leads to a higher level of perceived status uncertainty of the middle class, compared to other classes. Multivariate analyses show that this assumption seems to hold true, as members of the middle class, if affected by these events, show a particularly strong increase in average status uncertainty, compared to members of other classes.

Who Cares about Social Capital? The Effect of Informal Caregiving on Social Capital Investments

- *Andreas Eberl (IAB Nürnberg)*

Social capital is a resource derived from a person's social network and is important for various outcomes. Social capital declines over time and requires investments to avoid further declines or to increase the stock. However, certain life events can negatively affect social capital. This paper analyzes how informal caregiving, defined as unpaid assistance to persons who cannot perform the usual activities of daily living without help, affects social capital investments. Drawing on the German Socio-Economic Panel

(GSOEP) with data for 15 years, I apply fixed effects (FE) regressions to estimate the effect of changing caregiving status (extensive margin) and the effect of an additional hour of caregiving (intensive margin) on social capital investments. The results show that caregiving negatively affects investments in social capital for weak and strong ties unrelated to the care task. Furthermore, caregiving increases investments in strong ties that are care related.

Explaining Women's Increasing Contribution to the Couple Income. The Case of East and West Germany 1976-2011

- Anna-Theresa Saile¹, Susanne Strauß¹, Andreas Haupt²

(¹University of Konstanz, ²KIT Karlsruhe)

Our study aims to explain women's increasing contribution to the couple's income in Germany based on Microcensus data (West: 1973-2011, East: since 1991), using linear regressions and Oaxaca-Blinder decompositions. First, we identify compositional effects, i.e. the share of couples where women work longer hours, are higher educated and have a higher occupational status than their husbands have increased in West Germany, which has contributed to close the income gap within couples. Moreover, women's increasingly stable working biographies allow them to accumulate higher replacement benefits that in turn increase their contribution to the couple's income also in times of non-employment. Last, we find that the effect of (small) children on women's contribution to the couple's income has increased in West Germany in the 1990s while this effect has become smaller and even reversed in the past years; in East Germany, this "motherhood income penalty" has been much smaller already since the 1990s.

How Couples' Division of Labour Influences Their Caregiving Activities. A European Comparison among the 50+ Population

- Ariane Bertogg, Susanne Strauß (University of Konstanz)

Previous evidence points at problems of reconciling informal caregiving and employment, as well as gender and welfare state differences therein. Drawing on theories of household economy and doing gender, we ask how couples' employment constellations influence caregiving behaviour, and to what extent this influence differs between men and women and between different societal contexts. Our analyses are based on five waves from the Survey of Health, Ageing and Retirement in Europe (SHARE). We estimate Fixed-Effects regression models with time-varying country-level indicators. First results indicate that men and women differ in their provision of care according to the couple's division of labour. Regarding the societal context, we find that increasing expenditures for publicly financed home care increase men's participation in caregiving if they are the secondary worker. In contexts with higher gender equality, the likelihood to care decreases for both men and women, albeit to a lesser degree for men who are the secondary worker. Generally, our results show that generous welfare regimes and higher gender equality rather promote patterns of household specialization.

Opinion Formation

14:30 – 16:00 at A703, Chair: Andreas Jungherr

Do Filter Bubbles Foster Opinion Polarization? What We Know and What We Need to Know to Answer this Question

- Michael Mäs (Invited Speaker; University of Groningen)

In this talk, Michael Mäs reviews the public and scholarly debate about the effects of web personalization on opinion polarization. While he echoes the warning that personalization can affect societal processes, he argues that we leap to conclusions when we propose that personalization is responsible for increased polarization.

A Paradox of Digital Innovation in Political Participation: Emerging new Digital Divides

- Susumu Shikano¹, Theresa Küntzler¹, Taehee Kim²

(¹University of Konstanz, ²University of Oldenburg)

Today, different kinds of digital tools for political participation (e.g. online petitions, digital platforms for communication with political elites, etc) are available. These tools are well-intended to involve a wider range of citizens in political decision making processes. At the same time, such availability of digital tools can also undermine potential political participation and lead to additional digital divides since it requires internet-related skills besides the skills for political participation. Correspondingly, we hypothesize that the information about a digital tool for political participation can reduce the level of internal political efficacy of those citizens who have a lower-level of internet self-efficacy. An analysis of a panel survey data with an experimental design, which was conducted in two German cities (Mannheim and Ladenburg), confirmed our hypothesis at the national level, but not at the local level.

The Joint Dynamics of Social Networks and Political Opinions: A Bipartite Network Approach

- *Kieran Mepham, András Vörös, Christoph Stadtfeld (ETH)*

Political polarization is a phenomenon claimed to be key to much modern societal conflict, often conceptualized as the uneven distribution of multiple opinions in a society. We define network polarization through the inclusion of network clustering of like-minded individuals cooccurring with opinion clustering. Social selection and influence on individual-level variables may produce network polarization, as shown by multivariate simulation studies. Empirical studies, however, have evidenced these only in univariate cases. We thus examine empirical, multivariate data of individuals in a network for evidence of selection and influence, and structural patterns characterizing network polarization. We model the coevolution of the network and individuals' political attitudes over time in two complete networks using the SAOM framework. We also simulate forward, obtaining goodness-of-fit statistics focusing on new context relevant structures. This work aids our understanding of interpersonal processes' effects on network polarization, and raises new questions on this topic.

Tracking the Trump Effect: A Long-Term Study of How Political Campaigns Change the Unsayable

- *Amalia Alvarez Benjumea, Fabian Winter, Nan Zhang*

(Max Planck Institute for Research on Collective Goods)

Many commentators have argued that the election of Donald Trump has emboldened those espousing bigoted beliefs and caused a rise in hate speech. We present the research design and baseline results from a project investigating the "Trump effect" on norms governing online hate-speech in the run-up to and aftermath of the 2020 US presidential elections. Empirically, we conduct an experiment simulating an online discussion board in which participants rate the social acceptability of a series of hostile

comments pertaining to different social groups. Importantly, only some of these groups are likely to be systematically targeted by Trump during the 2020 campaign, allowing us to leverage the non-targeted groups as an experimental control. By tracking changes in ratings over time and as a function of specific rhetorical events, we can estimate the effect of Trump's behaviour and political fortunes on anti-prejudice norms.

Labour Market & Digitalisation III

14:30 – 16:00 at A704, Chair: Thomas Hinz

The Effect of Wage Shocks on Automatable Jobs. Evidence from the Introduction of the German Minimum Wage

- *Matthias Dütsch (Federal Institute for Occupational Safety and Health)*

The consequences of technological change on the labour market have been a core concern of researchers for many years. This paper contributes to research on the effects of technology on wages and employment by evaluating the extent to which minimum wages induce a substitution away from jobs which are automatable. I follow the task-based empirical framework and raise the question, whether the introduction of the German minimum wage in 2014 caused a decline in employment among routine-intensive occupations. To identify causal effects I use an identification approach to exploit a natural experiment created by the occupational variation in wages. It is assumed that the observed treatment effect varies by occupations depending on the share of workers affected by the new minimum. Findings suggest that the introduction of the German minimum wage obviously triggered technological changes and led to a 'routine-biased technological change' in the labour market.

Work in the Digital Age: More Complexity, More Training? Firm-Level Evidence from Germany

- *Myriam Baum, Felix Lukowski*

(Federal Institute for Vocational Education and Training – BIBB)

Considering the digital transformation of the labour market, this paper investigates firms' provision of employer-provided training for employees with different skill levels. Following human capital theory, firms only invest in training, when they expect higher returns from increased worker productivity. Using data from the BIBB Establishment Panel, a fractional logit model is

applied. The estimation results suggest that firms with a higher share of digital technology users provide more employer-provided training for employees of all skill levels. On the contrary, more working time spent with digital technologies leads to less training. A potential explanation for the results could be that after initial training in handling digital technologies, there are substantial learning effects, since employees become more skilled using them. In addition, employees who perform interactive and cognitive tasks more frequently receive more training. This indicates firms' investment in employees with more complex tasks.

Digitalized Work as a Status Characteristic? Investigating the Implications of Digitalized Work for Claims Making for Career Advancement among Different Groups of Workers in Large German Workplaces

- Anja-Kristin Abendroth (Bielefeld University)

Changes of work due to new digital technologies are likely to foster claims-making for valued resources in workplaces. Previous research so far has shown a wage premium for work with computers resulting in an increase in earning inequalities between low and high skilled workers. We aim to contribute to existing research by studying various forms of digitalized work and the implications for claims making for career advancement distinguishing digitalized communication and information processing, digitalized regulation and control of work processes, and working with robots in the third wave of a quantitative Linked Employer–Employee Panel Survey. Moreover, we use an organizational inequality approach arguing that the implementation of digital technologies and the implications for workers are negotiated within workplaces with different inequality regimes which can create considerable variation in the implications. As a consequence, we study how digitalized work and other relevant status categories within

workplaces interrelate in their implications for claims making for career advancement.

A Class for Itself? On the Worldviews of the New Tech Elite

- Hilke Brockmann, John Torpey, Wiebke Drews

(European University Institute)

The emergence of a new tech elite in Silicon Valley (and beyond) raises questions about their economic reach, political influence, and social importance. How do these inordinately influential people think about the world and our common future? Precisely, we test if a) members of the tech elite share a common, meritocratic view of the world, b) if they have a mission for the future, and c) if they share a contradictory relationship to democracy. Our data set is comprised of the 100 richest people in the tech world according to Forbes and rests on their published pronouncements on Twitter, and on their statements on the websites of their philanthropic endeavors. Automated text analysis reveals that the tech elite has a more meritocratic view of the world than the general US Twitter population. The tech elite also sentimentally proclaims to “make the world a better place” but in this respect they do not differ from other super-wealthy people. However, their relationship to democracy is unsettled. Particularly the youngest internet cohort of the tech elite thinks little of democratic checks and balances, taxation and regulations.

Mixed Methods & Data Quality

16:30 – 18:00 at A702, Chair: Karsten Donnay

Impact of Human Decision Making on Social Computing Research

- *Jana Diesner (Invited Speaker; University of Illinois)*

Using computational methods, such as techniques from AI and machine learning, for studying social structure and behaviour requires scholars and practitioners to make a plethora of choices, such as how to prepare data for analysis, implement algorithms, measure effects, and validate results. I present findings from our work on assessing the impact of choices that humans have to make as part of research design and data analytics processes on our understanding of social systems, highlight sources of potential biases, and suggest strategies for mitigating biased insights.

Linking Digital Data to Survey Data – Respondents Willingness to Consent and the Potential of Facebook Data

- *Christoph Beuthner¹, Bernd Weiß¹, Florian Keusch², Henning Silber¹*
(¹GESIS, ²University of Mannheim)

The ability to link survey data to digital data sources opens new possibilities for researchers. Social media platforms, research apps and the usage of smartphone sensors are feasible options to collect such data. Data for this study comes from a German non-probability online access panel and was collected in 2018. Respondents were randomly assigned to either use a smartphone or a desktop-computer/laptop. In total around 30% of respondents were willing to share their data, nevertheless pairwise comparisons revealed significant differences within most of the data domains. We found the position of the consent request to have a strong impact on respondent's willingness to share their data. When it came to the linkage of Facebook data, 14% of respondents completed the linkage

procedure successfully. 98% of those had at least some information publicly available on their profile.

Data Quality of Process-Generated Data

- *Jan Rasmus Riebling¹, Andreas Schmitz², Jörg Blasius²*

(¹University of Wuppertal, ²University of Bonn)

The rise of new information technologies and digital communication has brought access to an abundance of new data on social phenomena and processes, thus promising innovative ways of analyzing social mechanisms. Yet, at the same time it has proved to be a challenge for social science methodologies. These challenges are mostly due to the structure and complexity of new types of data that require different methods of data assessment and management. In our contribution, we want to initiate a more systematic discussion on quality-distorting mechanisms in process-generated data. The distortion mechanisms are thought to be embedded in socio-technical systems (STS), meaning they are a result of social interactions recorded, mediated or facilitated through digital technologies. In order to evaluate the mechanisms of distortion we generate datasets using agent-based simulation to study their effects. We discuss different statistical techniques to test if these distortions can be identified.

The Privacy Settings of the House and the Architecture of Social Networks: A Case Study from Urban Ghana

- *Elad Ben Elul (Tel Aviv University)*

The academic and journalistic discourse about digital culture is full of warnings and protests about the danger (and even death) of privacy. Surveillance cameras, invasive algorithms, and increased exposure on social networks are just some of the technologies that critics see as a threat to a basic universal right: privacy. This ethnographic paper challenges this perception by describing the privacy practices of urban Ghanaians at home

and online. By comparing the domestic space and its architecture of privacy to social media platforms and their particular usage by Ghanaians, I ask: how do people assign public and private roles to specific spaces? I discuss the oppositions, parallels, and continuities between these spaces and maintain the holistic approach of digital anthropology. Furthermore, I suggest the possibility that in a digital age many people experience privacy in enhanced and improved ways.

Political Sociology

16:30 – 18:00 at A703, Chair: Sebastian Schnettl

Digital Responses to Sanctions? Denial-of-Service Attacks against Sender Countries

- *Philipp Lutscher (University of Konstanz)*

Cyberattacks have been portrayed as a new weapon in interstate conflict. However, it remains unknown how widely these are used to respond to foreign aggression. This paper is the first that investigates if sanctions lead to an increase in Denial-of-Service (DoS) attacks - cyberattacks that overload targeted servers - on the sender country by using a novel dataset of passively measured DoS attacks from Internet traffic. I discuss two scenarios why this may be the case: (1) Either target states respond with DoS attacks to sanctions (and particularly threats thereof) in order to gain concessions and/or (2) hacking groups and citizens use them out of patriot sentiments. Using information about the timing of US and EU sanctions and time series models from 2008 - 2016 show only limited evidence for an increase of DoS attacks when sanctions are imposed; while sanction threats appear to not influence DoS attacks at all.

Internet Access and Participation: Evidence from a Quasi-Natural Experiment

- *Vincenz Frey¹, Delia Baldassarri², Francesco Billari¹*

(¹Bocconi University, ²New York University)

With the diffusion of the Internet, opposing speculations have emerged about how the Internet affects civic and political engagement. We investigate the empirical validity of these speculations using data from the 2012 American National Election Studies. In that year, face-to-face interviewing was supplemented with a sample of online respondents. We exploit the fact that the firm that conducted the web survey – Knowledge Networks – offered

laptop computers and Internet access for free to offline sample households. We thus analyse the effects of Internet access on participation in a quasi-natural experiment in which some offline households were sampled for the face-to-face survey while others were sampled for the web survey and furnished with free Internet access. We find that the quasi-random assignment of Internet access has small and mostly insignificant effects on political participation. By contrast, our results show that Internet access substantially promotes various forms of civic engagement, such as organizational membership or doing volunteer work. Finally, we find evidence for the expectation that Internet access deepens preference-based divides, rendering those who were already engaged even more engaged.

Sometimes less is more: Censorship, News Falsification, and Disapproval in 1989 East Germany

- *Katrin Paula (University of Mannheim)*

Studies show that autocracies apply media censorship carefully. Our findings suggest that this is because more censorship does not imply more stability. Like physical repression, censoring may induce political backlash against regimes. We argue that state censorship backfires when citizens can falsify media content based on trusted alternative sources. We empirically test our argument in an authoritarian state--the German Democratic Republic (GDR). Results demonstrate how exposed state censorship on the country's emigration problem started fueling outrage weeks before the revolutionary 1989 demonstrations. Using original weekly approval surveys on GDR state television and daily content data of West German news programs, we quasi-experimentally show that recipients disapproved censorship when they could falsify information via conflicting reports on West German television. This study helps us understand how autocracies choose from their repressive toolkits and highlights the perils of misinformation campaigns aimed at undermining people's trust in quality journalism.

Welfare State Support and Stereotypes towards Recipients

- *Simon Kühne, Dorian Tsolak (Bielefeld University)*

There is empirical evidence that support for the welfare state declines in Europe due to growing migration and ethnic heterogeneity. The U.S. literature argues that attitudes towards the welfare state are dependent upon stereotypes of 'typical' welfare recipients. We apply this approach to the German context. For our analysis we use Twitter data consisting of over 200 Million German Tweets. After defining relevant concepts and keywords based on the existing research on stereotypes, we categorize the Tweets using topic modeling based on word embeddings. We then add meta-information about Twitter users, timestamps, and geographic location of Tweets into our analysis in order to learn about the origin, dissemination, and acceptance of stereotypes and negative attitudes towards the welfare state. Our research project expands the current literature on welfare state attitudes by adding a computational social science perspective.

Environmental Applications of Digital Data

16:30 – 18:00 at A704, Chair: Thomas Wöhler

Using Large Scale Register Based Data to Analyse Environmental Inequality: Different Measures, Different Scales - Same Results?

- *Tobias Rüttenauer (TU Kaiserslautern, University of Oxford)*

Using large-scale register-based data with geo-information, previous studies have shown that minorities are disproportionately affected by environmental pollution. However, results may depend on the specific measures and methods used to allocate pollution to geographic units, and results may vary by the geographic scale of the data. Thus, the current study investigates the topic of environmental inequality by using two distinct measures of environmental pollution and by comparing results across different levels of spatial aggregation. The results reveal relatively mixed results. In a German-wide comparison, conclusions highly depend on the measure of pollution, resulting from large regional differences. Within communities, in contrast, results show a stable disadvantage of minorities across all pollution measures. Still, the size of the disadvantage changes with the level of aggregation, thereby highlighting the importance of comparing conclusions from large spatial register data across different spatial scales.

Leveraging Mobile Phones to Attain Sustainable Development

- *Valentina Rotondi¹, Ridhi Kashyap², Luca Maria Pesando³, Simone Spinelli¹, Francesco C. Billari¹*

(¹Bocconi University, ²Oxford University, ³University of Pennsylvania)

Although mobile phones have diffused rapidly even in remote parts of the world with otherwise poor infrastructure, digital divides persist. This study provides large-scale evidence that the expansion of mobile phones has bolstered sustainable development by narrowing gender inequalities, enhancing contraceptive use, and reducing maternal and child mortality, with

biggest payoffs among the poorest countries and disadvantaged groups such as women. The ownership of mobile phones has narrowed the information gap about reproductive and sexual health, and empowered women to make independent decisions. Boosting mobile-phone access and coverage and overcoming digital divides within and among the poorest countries has thus immense implications for global development. Findings from this study speak to scholars and policymakers interested in the effect of technology diffusion on social development.

The Impacts of the Digitalization of the Labour Market on Commuting Behaviour in Switzerland: Evidence from the Swiss Mobility and Transport Microcensus

- Axel Franzen, Fabienne Wöhner (*University of Bern*)

Switzerland has committed itself to the Paris Climate Agreement, which aims to reduce global greenhouse gas (GHG) emissions. Since individual transport is a substantial source of GHG, we investigate whether the digitalization of the labour market contributes to reductions in traffic. Digitalization allows increasingly flexible working time and home office-based work. Hence, more and more employees are able to reduce commuting to the workplace, or can manage avoiding rush hours, which relieves traffic congestions at peak times. We analyse the two newest available Swiss Mobility and Transport Microcensuses (MTMC) from 2010 and 2015. The data contains detailed information about respondents' mobility behaviour and their use of flexible working time and home-based work. The MTMC allows investigating who performs home-office, provides insights into whether individuals working flexible use different modes of transportations and answers the question of whether home-based work is associated with a reduction of individuals' mobility behaviour in Switzerland.

Data-Driven Coordination between Human Driver and Partially Automated Car. Measurement Challenges of Human-Machine-Interaction

- Marco Hellmann, Jan Schlüter (TU Dortmund)

Cars become increasingly automated by Advanced Driver Assistance Systems. While humans were responsible for nearly all driving tasks in the past, today more workload is redistributed to technology. Therefore, new mechanisms are needed to constitute a clear allocation of responsibilities and coordination of interactions between the human driver and partially automated cars. Thus, the aim of the project “MoFFa” is to adapt the transfer process of driving tasks to the drivers’ needs. Therefore, driving behavior and subjective evaluations of the driving situation will be measured in simulator experiments. This approach combines traditional sociological methods with new methods of big data processing as well as the technical analysis of behavior data by machine learning algorithms. This combination approach aims to use sociological methods to evaluate the trained artificial neural network, to compare survey data with real-time data to validate both types of data two-way and interpret them comprehensively.

Friday, September 27

Gender and Ethnic Biases

09:00 – 10:30 at A701, Chair: Sebastian Schnetzler

Measuring Global Gender Inequality Indicators Using Large-Scale Online Advertising Data

- *Ridhi Kashyap (Invited Speaker; University of Oxford)*

Ridhi Kashyap's talk will highlight how real-time aggregated demographic information about the user base of online platforms, usually made available to advertisers, can be repurposed by researchers as a type of 'digital census' to measure global development and gender inequality indicators.

Digital Manifestations of Gender Bias

- *Claudia Wagner (Invited Speaker; University of Koblenz-Landau, GESIS)*

Contemporary and historic gender inequalities and bias manifest on the web. Measuring these biases and inequalities is important since we need to raise awareness and avoid that algorithms reinforce biases and inequalities. This talk is firstly about measuring the manifestations of gender bias and inequality in a widely used online information system (Wikipedia) and secondly about measuring one root of the problem, sexist attitudes. I will describe the methodological challenge we face when trying to measure psychological or sociological constructs like attitudes based on platform-generated digital traces of humans.

Whose Ideas are Worth Spreading? The Representation of Women and Ethnic Groups in TED Talks

- *Carsten Schwemmer, Sebastian Jungkunz (University of Bamberg)*

We investigate the representation of women and ethnic groups in TED talks, which reach a large online audience on YouTube with science-related content and topics on societal change. We argue that gaps in representation

can create a misleading perception of science and the respective topics discussed in these talks. We validate annotations from an image recognition algorithm for identifying speaker ethnicity and gender to compile a data set of 2,333 TED talks and 1.2 million YouTube comments. Our validation suggests that image-based classification of sociodemographic attributes can outperform name-based approaches. However, image recognition also introduces ethical challenges that need to be considered by researchers using such digital methods. Findings of our analysis show that more than half of all TED talks were given by white male speakers. While the share of women increased over time, it is constantly low for non-white speakers. Topic modeling further shows that the share of talks addressing inequalities which affect both groups is low, but increasing over time. However, talks about inequalities and those given by female speakers receive substantially more negative sentiment on YouTube than others. Our findings highlight the importance of speaker and topic diversity on digital platforms to reduce stereotypes about scientists and science-related content.

Open Session on Replication & Publication Bias

09:00 – 10:30 at A703, Chair: Katrin Auspurg

Will the True Causal Effect Please Stand Up? – A Critique of Using Fixed-Effects Regression to Estimate the Effects of Personal Contacts on Wages

- *Gerhard Krug, Benjamin Fuchs (Institute for Employment Research – IAB)*

There is an ongoing controversy about whether the correlation between job finding via personal contacts and wages reflects a causal effect. Critics such as Mouw (2003) argue that controlling for unobserved confounders, preferably by fixed-effects regressions, removes spurious correlations and reveals the actual null effect of personal contacts. More recently, however, McDonald (2015) applied fixed effects regressions and found a significantly positive effect. In this paper, we argue that both the Mouw (2003) and McDonald (2015) results are subject to sample selection. Results are potentially biased because their fixed effects estimators exclude those persons who use only one job search method. We propose difference-in-differences matching as an alternative estimator that does not induce the same sample selection bias. Re-analyzing the data used in Mouw (2003) and McDonald (2015), we find that in both cases, this alternative estimator is unbiased by unobserved confounders as well as by sample selection and gives us a causal null effect, which supports Mouw's (2003) original argument.

Not Seeing the Forest for the IVs

- *Nico Sonntag (University of Wuppertal)*

In their paper "Pre-reformation Roots of the Protestant Ethic" (2017, Econ. J.) Andersen and colleagues test the hypothesis that the diffusion of "Cistercian work ethics" among the lay population led to more economic growth in medieval and early modern England. The Cistercians were known

for their austerity and severity of their discipline. Andersen's et al. research design is based on the correlation between the presence of Cistercian monasteries and population growth (as a proxy for economic development) at the level of historical English counties (N = 40). The locations of royal forests are used as an IV to identify the causal effect on population growth. Replicating the analysis with additional historical data, I am unable to find robust evidence in favour of the proposed hypothesis. A critical re-examination of the theoretical arguments casts doubt on the asserted diffusion of Cistercian cultural values.

Are Really Most of our Research Findings False? An Empirical Estimation of Trends in Statistical Power, Publication Bias and the False Discovery Rate in Psychological Journals (1975-2017)

- *Andreas Schneck (LMU)*

In the recent years the scientific integrity has been heavily under pressure from the replicability crisis or cases of fraud that came to light. The analysis at hand examined three measures of scientific integrity empirically: statistical power, publication bias, and the false discovery rate (FDR) based on all empirical papers in Psychology published by the American Psychological Association from 1975-2017. The statistical power in the examined literature was with 46.2% very low but increased over time. In contrast, publication bias that could be found in the literature, turning 22.7% of the non-significant studies into significant ones, showed no change over time. Taken together these results show that about one third of all statistically significant findings actually are only statistical artefacts rather than substantial results (FDR of 31.3%). In conclusion three interventions are discussed: mandatory pre-study power analysis, pre-registration of studies as well as clear reporting guidelines for statistical results.

Publication Bias and Academic Age: Evidence from Meta-Studies in Economics

- *Katarina Zigova*¹, *Thomas Hinz*¹, *Chris Doucouliagos*²
(¹*University of Konstanz*, ²*Deakin University*)

The objective of this study is to identify individual researcher characteristics that are causally related to the prevalence and magnitude of publication biases, i.e. to reveal which group of authors are more prone to specification search. We use three existing meta-analytic studies, where a significant publication bias was uncovered. We additionally code individual properties of the underlying authorship and test which of these properties affect the publication bias in a meta-regression framework. In the foreground of our interest is the effect of academic age to publication bias. The incentives to publish are stronger for younger researcher as compared to more senior academic staff as their reputation has to be established. On the other hand, established senior researchers are more skilled in writing papers and get their paper easier published. The latter statement seems to be supported by our results, i.e. publication bias increases with academic age. This result holds, however became weaker, when other combination of moderator variables is included.

Open Session on Integration of Immigrants

11:00 – 12:30 at A701, Chair: Claudia Diehl

Covert Discrimination is Unaffected by Immigrants' Socioeconomic Status

- *Johanna Gereke (MZES)*

Discrimination against immigrants and ethnic minorities remains widespread across Western societies. Such discrimination is especially pernicious as it often takes "subtle" or covert forms, but nonetheless constitutes a major impediment to immigrants' social and cultural integration. Against this backdrop, several prominent lines of research have suggested that improvements in immigrants' socioeconomic status may contribute to reduced prejudice and discrimination. However, empirical tests of this proposition have been limited by a reliance upon attitudinal and self-reported measures which do not adequately account for differences in individuals' sensitivity or potential exposure to discrimination. To address these issues, we present findings from a randomized field experiment examining subtle interactions involving high- and low-status immigrants in Milan, Italy. Our experiment captures natives' physical avoidance of immigrants as an unobtrusive measure of covert discrimination. Contrary to the hypothesis that discrimination decreases with immigrants' socioeconomic status, we find that natives are equally averse to contact with high- and low-status immigrants. Further exploratory analysis reveals this effect to be driven by native women avoiding immigrant men. We link these results to an understanding of contemporary discrimination rooted in theories of intergroup anxiety. We further discuss the implications of these findings for improving interethnic relations in multicultural societies.

Uncovering Hidden Opinions: The Contagion of Anti-immigrant Views

- *Amalia Alvarez Benjumea*

(Max Planck Institute for Research on Collective Goods)

Hateful comments towards refugees, but not towards other minority groups increased as a result of the attacks. The experiment compares the effect of the terrorist attacks in contexts where a descriptive norm against the use of hate speech is emphasized to contexts in which the norm is ambiguous because participants observe also anti-minority comments.

The Story after Immigrants' Ambitious Educational Choices: Real Improvement or Back to Square One?

- *Jörg Dollmann, Markus Weißmann (MZES)*

The finding on immigrants' ambitious educational choices has established itself in the literature in recent years. However, less is known about whether immigrants can actually benefit from these optimistic choices or whether they have a higher risk of dropping out from the more demanding tracks. This contribution investigates the actual role optimistic choices play in the generation of inequalities in educational outcomes, focussing on adolescents with and without immigrant background at the end of lower and during upper secondary education in Germany. As will be shown, immigrants' optimistic choices help reduce ethnic disadvantages regarding participation rates in upper secondary education. However, immigrant students also face higher risks of dropping out. For some groups, ethnic differences in upper secondary completion rates reproduce the disadvantage patterns observed prior to their positive choices. However, we further demonstrate how immigrants' ambitions contribute to an increase in upper secondary completion rates within the immigrant population.

"With a Little Help from my Educated Friends": Revisiting the Role of Social Capital for New and Long-Term Immigrants' Labour Market Integration in Germany

- *Julia Rüdell, Jan-Philip Steinmann (University of Göttingen)*

We investigate the impact of different forms of social capital on labour market integration of recent and long-term immigrants in Germany. We revise the common distinction between intra- and inter-ethnic contact by arguing that the ethnic identity of a social contact is not decisive for immigrants' economic success alone. Instead, we develop an alternative approach, which additionally considers the social status of the contact persons. We empirically test our more nuanced understanding of social capital, using a Heckman selection model based on panel data of recently arrived (SCIP) and long-term immigrants (SOEP). Our main finding indicates that ties to high-status people are beneficial regardless of their ethnicity, while ties to low-status people can even hinder successful labour market integration. We conclude that being connected with others whose social positions provide access to valuable information and resources is more important for immigrants' labour market outcome than having ties to ethnic others.

Special Events

Dissertation Award Ceremony

Wednesday, September 25

16:30 - 17:15, A701

Hanno Kruse (University of Cologne) is the first AS dissertation award winner. He started his study (BA in economics) at Humboldt University Berlin, earned a Master degree at University of Mannheim (sociology) where he received his doctoral degree in 2017. His dissertation thesis has the title “Close Neighbors, Separate Lives. An Investigation of Residential Barriers and Bridges to the Social Integration of Young Immigrants in Germany”. Hanno Kruse’s research interests cover migration and integration, segregation, school choice, social networks, and analytical sociology. He already published with co-authors in Social Networks and European Sociological Review. Papers in the American Journal of Sociology and Social Forces will appear soon. Hanno Kruse is currently a post-doctoral researcher at the Institute of Sociology and Social Psychological at the University of Cologne.

Learn more about Hanno Kruse at www.hannokruse.com

Anette Fasang (Humboldt University) and Sebastian Schnettler (University of Oldenburg) have organized the award process and will disclose the award-winning dissertation.

Academy of Sociology Business Meeting

Wednesday, September 25

17:30 - 19:30, A701

According to its statute, the Academy of Sociology holds its biannual business meeting on the occasion of the conference. Among other topics on the agenda: a report about first (baby) years' activities, the election of the board, and a revision of the mission statement. Although it could be considered as members' business only, AS welcomes interested guests, particularly members to-be.

Early Career Researcher Reception (ECRR)

Wednesday, September 25

20:00, Constanzer Wirtshaus

Spanierstraße 3, 78467 Konstanz

Conferences are ideal for networking, at least what many colleagues strive for. Digitalsocieties2019 stimulates real F2F contacts among conference participants. All attendees are invited to join for a buffet meal at Constanzer Wirtshaus downtown, and early career researchers get one drink for free. This is why the general welcome becomes an ECRR! Elephant Talk, a local jazz combo, will provide the entertainment.

Presentation Open Science Initiative

Thursday, September 26

18:15 - 19:15, A701

The Academy of Sociology aims to foster Open Science practices in the social sciences. In this discussion we will take stock on the challenges that are still ahead: particularly fostering FAIR data, research transparency, and replications. We will analyze why and to what extent current incentive structures in academia block the principles of transparent and reproducible research, and we will discuss institutional changes that may be necessary to promote Open Science practices. The goal is to identify and stimulate activities that advance the credibility of social science research. Organization: AS board members Katrin Auspurg and Josef Brüderl (LMU Munich)

Conference Dinner

Thursday, September 26

20:00, il Boccone

Bodanstraße 20-26, 78462 Konstanz

The conference dinner at an Italian restaurant can be booked separately during registration for 50€. Meal options are meat, fish, vegetarian or vegan.

Why an Academy of Sociology?

It was summer 2017 when around 50 scholars, mostly representing German sociology (but some from other disciplines and countries), came together at the University of Mannheim to found a new academic association. Meanwhile the Academy has grown to around 250 members who support analytical empirical sociology in Germany and other countries. No question that such orientation of sociology can contribute to a better understanding of social phenomena and societies. AS aims to better represent the analytical-empirical sociology in discussions with colleagues from other disciplines, in scientific organizations and in the broader public.

In short, there are (at least) four good reasons to support the Academy of Sociology:

- Analytical empirical sociology has great potential in solving challenging research questions by applying rigorous, suitable, and innovative methods. We will strengthen this potential wherever we can.
- Answers to many sociological research questions should be discussed in a broad(er) audience, including media, politics, economy, business, and civil society. We will promote reliable research and help to translate it beyond academics.

- Science and its methods are changing rapidly. We need a considerate and stimulating discussion on how we are doing social sciences in our times. AS supports all efforts to keep social science transparent, replicable and independent.
- More than ever, early career researchers get a thorough and excellent education, and contribute immensely to our research. Yet, the job market for highly qualified younger researchers is still insecure. We will advocate for better career prospects of early career researchers and support them to the best of our capacities.

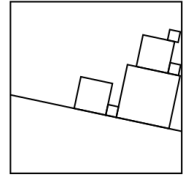
Learn more about AS, and become a member at:

www.akademie-soziologie.de

Or follow the AS on Twitter: @akadsoz

The Academy of Sociology holds a business meeting in course of the conference. If interested, you are welcome to join as guests – communication at this meeting will be in German.

The Politics of Inequality



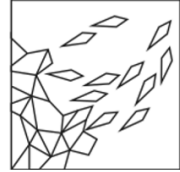
The Politics of Inequality

This research cluster studies the feedback cycle that is formed by the perception of unequally distributed resources, political mobilisation resulting from perceived inequality, the policy measures undertaken to deal with them, and their impact on the underlying distribution of resources. Besides inequality of economic resources (income and wealth), we are interested in unequally distributed access to information, the effects of education and language, and the effects of group membership with pertaining rights and privileges (or the lack thereof).

The cluster is a joint project of researchers from political science, sociology, economics, linguistics, psychology and education studies.

More information is available at:

www.exc.uni-konstanz.de/en/inequality/



Centre for the Advanced Study **of Collective Behaviour**

The Centre for the Advanced Study of Collective Behaviour aims to create a global hotspot for the integrated study of collective behaviour across a wide range of species and across scales of organisation. As a collaboration between the University of Konstanz and the co-located Max Planck Institute of Animal Behaviour, the centre harnesses substantial expertise to create a synergistic, interdisciplinary environment for the study of collective behaviour. Combining trans-disciplinary research with emerging technologies, the centre is creating a crucible in which the ideas and methods of tomorrow will be forged. You are invited to discover the people and ideas in this hub for collective behaviour at:

www.exc.uni-konstanz.de/collective-behaviour/

The centre's research is interdisciplinary in scope – combining biology, social psychology, behavioural economics, sociology, physics, and computer science – but united in a quantitative approach that involves extensive collection and sophisticated analysis of empirical data. It is built on new tools – including an Imaging Hanger for the design of virtual and reactive environments, and a space-borne animal tracking system (ICARUS) – enabling the study of collectives in unparalleled depth.

Gesellschaft braucht Wissenschaft.



Wissenschaft **braucht Daten.**

8| Konferenz für Sozial- und Wirtschaftsdaten

02.-03. März 2020 in Berlin, www.ratswd.de/kswd

Die **8. Konferenz für Sozial- und Wirtschaftsdaten (8|KSWD)** ist das Austauschforum für empirische Wirtschafts- und Sozialforschung. Erhebungs- und Analysemethoden, Datenquellen und Dateninfrastrukturen stehen zur Debatte.

■ **Schwerpunkte der Konferenz**

Evidenzbasierte Politikberatung, FAIRe Registerdaten, Big Data, Datafizierung der Gesellschaft, Kriminalstatistik, Online-Erhebungen, Innovative Zugänge zu sensiblen Daten, Datenerhebung mit Smartphone & Co

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Wahl der Vorschläge

aus der Wissenschaft für die
7. Berufungsperiode (2020–2023) des RatSWD

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■ www.ratswd.de/wahl

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