Simon Mathias Hoellerbauer

CONTACT INFORMATION	Mathematics and Statistics Department Vassar College Rockefeller Hall 206 Poughkeepsie, NY 12604	https://hoellers.github.io/ hoellerbauers@gmail.com shoellerbauer@vassar.edu	
EDUCATION	The University of North Carolina, Chapel Hill, North Carolina, USA		
	Ph.D., Political Science, Statistics Minor	Summer 2022	
	 Thesis: "Three Papers on Model-Based Survey Methodology" Committee: Graeme Robertson (chair), Lucy Martin, Brigitte Seim, Sa tiago Olivella, Ted Enamorado 		
	Kenyon College, Gambier, Ohio, USAB.A., Political Science and Modern Languages and Literatures (High Honors), summa cum laude, May 2014		
Professional Experience	Postdoctoral Fellow of Data Science and Society, Vassar College August 2022 – Present		
RESEARCH INTERESTS	Civil society, development, measurement of democracy and civil society, survey methodology, data quality, machine learning, data science, data science education		
Refereed Journal Articles	URNAL Impact Community Engagement," (2023), Journal of Experimental		
	"A Mixture Model Approach to Assessing Measurem Reinterviews," (2023), Forthcoming at the <i>Journ Methodology</i> , DOI: 10.1093/jssam/smad037		
Working Papers	"Enumerators as Treatment Versions: Enumerator-Induced Treatment Heterogeneity and its Consequences," with Jing Qian and Brandon de la Cuesta (Dissertation Paper)		
	"Modeling Civic Engagement with Organizations: A Novel Application of Conjoint Survey Experiments" (Dissertation Paper)		
	"Marketing Taxation? Experimental Evidence on Enforcement and Bargaining in Malawian Markets," with Lucy Martin, Brigitte Seim, and Luis Camacho		
	"The Effect of Government Repression on the Open NGOs," with Jeremy Springman, Maria Nagawa Erik Wibbels		
	"Reconceptualizing Civil Society and its Strength"		

Updated: October 5, 2023

RESEARCH IN PROGRESS

- "How Many Is Too Many? Outcome Questions in Conjoint Survey Experiments"
- "Post Hoc Synthetic Purposive Sampling for Evaluating the Representativeness of Convenience and Purposive Samples," with Isabel Laterzo
- "Machine Learning and Marginal Structural Models," with Matt Blackwell and Santiago Olivella
- "Measuring Local-Level Patronage: A Mixed-Membership Approach," with Kate McKiernan
- "Democracy vs Dictatorship or Something More? Using Unsupervised Learning to Cluster Regimes"
- "Investigating Tax Policy Preferences Among Citizens in Weak-State Contexts," with Lucy Martin and Brigitte Seim

Conference Presentations

"Enumerators as Treatment Versions: Enumerator-Induced Treatment Heterogeneity and its Consequences," with Jing Qian and Brandon de la Cuesta, Paper presented at the Annual Conference of the Midwest Political Science Association, Chicago, IL, April 2023.

"Enumerators as Treatment Versions: Enumerator-Induced Treatment Heterogeneity and its Consequences," with Jing Qian and Brandon de la Cuesta, Paper presented at Pre-APSA Workshop on External Validity, Montreal, CAN, September 2022.

"How Many Is Too Many? Outcome Questions in Conjoint Survey Experiments," Poster presented at the 39th Annual Meeting of the Society for Political Methodology, St. Louis, MO, July 2022.

"Mixture Models and Survey Quality," Lightning Talk presented at 2021 St. Louis Area Methods Meeting (SLAMM! 2021, Virtual).

"Marketing Taxation? Experimental Evidence on Enforcement and Bargaining in Malawian Markets," with Lucy Martin and Brigitte Seim. Paper presented at the Annual Conference of the American Political Science Association, September 2020.

"Distances in Latent Space: A Novel Approach to Analyzing Conjoints." Poster presented at the 37th Annual Meeting of the Society for Political Methodology (Virtual), July 2020.

"Using Mixture Models to Assess Enumerator and Survey Quality: An Extension of Probabilistic Record Linkage." Poster presented at the 36th Annual Meeting of the Society for Political Methodology, Cambridge, MA, July 2019.

"Foreign Aid's Impact on the Demand Side of Civil Society in Developing Countries." Paper presented at the Annual Conference of the Midwest Political Sci-

ence Association, Chicago, IL, April 2019.

"Populism as a Determinant of Foreign Aid Allocation," with Jacob Smith. Paper presented at the Annual Conference of the Midwest Political Science Association, Chicago, IL, April 2018.

TEACHING EXPERIENCE

Vassar College:

MATH/CMPU 144: Foundations of Data Science FA 2022, FA 2023

MATH/CMPU 280: Intermediate Data Science SP 2023

MATH 290: Community-Engaged Learning: Political Data Analysis FA 2022

LACOL: Applied Machine Learning SU 2023

The University of North Carolina at Chapel Hill (as full instructor):

POLI 291: Undergraduate Learning Assistant Practicum FA 2021

POLI 281: Data in Politics I SP 2021, FA 2021

POLI 784: Regression Models Lab SP 2019, SP 2020

POLI 130: Intro to Comparative Politics SSII 2018, SSII 2019, FA 2019, FA 2020

Professional Experience

Associate Scholar, Foreign Policy Research Institute's Eurasia Program

Apr. 2016 - Present

- Write articles for FPRI on a variety of topics, focusing on Eurasia
- Write opinion pieces on political developments in Eurasian countries
- Communicate with the FPRI scholarly community

Contractor, NORC at the University of Chicago, on NORC Project 7554.030.99 (Impact Evaluation of USAID/Malawi's Local Government Accountability and Performance Activity (LGAP))

December 2017 - December 2019

- Co-author with Lucy Martin and Brigitte Seim of Impact Evaluation Final Report
- Performed econometric analysis (OLS, GLM, hierarchical, instrumental variables, spillover) of large-scale randomized control trial in Malawi in R and Stata
- Analyzed survey data, including developing operationalizations of key concepts using survey questions
- Managed information exchange with survey partner (IPA) and project implementer (DAI)
- Constructed survey instruments
- Traveled to Malawi in order to help facilitate rollout of endline survey in October 2018

Consultant, The Cloudburst Group, on USAID Project LER II Armenia CB.003

Dec. 2018 – July 2019

- With Graeme Robertson drafted the Civil Society and Media Evidence in Armenia Review for USAID Armenia
- With Graeme Robertson provided feedback on draft versions of the Civil Society in Armenia Field Assessment, including adding additional intervention recommendations

SERVICE Departmental:

- Vassar College
 - Executive Committee Member, Data Science and Society Steering Committee (Fall 2022 Present)
 - Coordinator, Data Science and Society Colloquium Series (Fall 2022 Present)
 - International Friendship Program Host (2023-2024)

UNC - Chapel Hill

- Member of search committee to hire in quantitative methods (Fall 2021)
- Coordinator, Methods and Design Workshop (Fall 2020 Spring 2022)
- Methods Graduate Student Representative (Fall 2020 Spring 2022)
- Inequities in Political Science Working Group (2020 2022)

Referee:

- AJPS
- Journal of Modern African Studies
- APSR

AWARDS AND SCHOLARSHIPS	Liberal Arts Collective for Digital Collaboration Course Development Grant for Applied Machine Learning (\$25,000) 2023	
	Thomas M. Uhlman Summer Research Fellowship (\$3,000)	2022
	Graduate School Summer Research Fellowship (\$5,000)	2021
	Thomas M. Uhlman Summer Research Fellowship ($\$3,250$)	2020
	Pi Sigma Alpha, Political Science Honors Society	2014
	Spanish Prize, Kenyon College	2014
	Phi Beta Kappa	Fall 2013 Inductee
	Kenyon Honors Scholarship	2010
	National Merit Scholarship	2010
TECHNICAL SKILLS	Statistical computing in R, Python, and Stata, Bayesian inference with Stan, typesetting in IATEX, version control with Git, linear programming with AMPL	

IN THE PUBLIC FORUM

COMMUNICATING "Armenia and the Velvet Revolution: The Merits and Flaws of a Protest-based Civil Society," Foreign Policy Research Institute's Geopoliticus Blog, February 19, 2019

> "Baltic Energy Sources: Diversifying Away from Russia," Foreign Policy Research Institute's Baltic Bulletin, June 15, 2017

> "Why Did Russia Let Ukraine's Joan of Arc Go?," with Julian Nundy and Rashad Mammadov, News Decoder, June 9, 2016

"No End to Information War in Ukraine," News Decoder, May 27, 2016

"Lithuania Moves to Bolster Electricity Security," Foreign Policy's Baltic Bulletin, March 23, 2016

"What on Earth Just Happened in Ukraine?," Foreign Policy Research Institute's Geopoliticus, February 19, 2016

"The West Needs to Stop Obsessing About Putin," with Melinda Haring, Foreign Policy Research Institute's Geopoliticus, November 25, 2015

"The human rights situation in Crimea today is deplorable,' German MP Says,", Atlantic Council's New Atlanticist. November 30, 2015, translation of speech given by German MP Dr. Christoph Bergner at the Konrad-Adenauer-Stiftung on October 21, 2015

"The Eurasian Economic Union's growth is not good for democracy in the region," Foreign Policy Research Institute's Geopoliticus, September 22, 2015

"The West Should Press for Democracy in Western Ukraine, Leave East to Putin for Now," Foreign Policy Research Institute's Geopoliticus, July 22, 2015

"Remembering Roman," with Melinda Haring, Atlantic Council's New Atlanticist, May 19, 2015

"Do sanctions on Russia create more problems than they solve?," Foreign Policy Research Institute's Geopoliticus, March 31, 2015

LANGUAGES

German: Native Speaker Spanish: Functionally Fluent Russian: Advanced Proficiency French: Basic Proficiency