

CONTACT INFORMATION	Data Analytics and Computational Social Science University of Massachusetts Amherst Thomson Hall Amherst, MA 01003	https://hoellers.github.io/ hoellerbauers@gmail.com shoellerbaue@umass.edu
EDUCATION	The University of North Carolina , Chapel Hill, North Carolina, USA Ph.D., Political Science, Statistics Minor Summer 2022 <ul style="list-style-type: none"> • Thesis: “Three Papers on Model-Based Survey Methodology” • Committee: Graeme Robertson (chair), Lucy Martin, Brigitte Seim, Santiago Olivella, Ted Enamorado Kenyon College , Gambier, Ohio, USA B.A., Political Science, Modern Languages and Literatures May 2014	
PROFESSIONAL EXPERIENCE	Lecturer of Data Analytics and Computational Social Science, UMass Amherst September 2024 – present Postdoctoral Fellow of Data Science and Society, Vassar College August 2022 – June 2024	
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	“Why Join? How Civil Society Organizations’ Attributes Signal Congruence and Impact Community Engagement,” (2023), <i>Journal of Experimental Political Science</i> , 10 (1): 88-99, DOI: 10.1017/XPS.2021.27 “A Mixture Model Approach to Assessing Measurement Error in Surveys Using Reinterviews,” (2023), Forthcoming at the <i>Journal of Survey Statistics and Methodology</i> , DOI: 10.1093/jssam/smad037	
ARTICLES UNDER REVIEW	“Marketing Taxation? Experimental Evidence on Enforcement and Bargaining in Malawian Markets,” with Lucy Martin, Brigitte Seim, and Luis Camacho, <i>R&R at APSR</i> “Finding the Win Set: Evidence on citizen tax preferences in Malawi,” with Lucy Martin and Brigitte Seim “The Effect of Government Repression on the Operational Decisions of Local NGOs,” with Jeremy Springman, Maria Nagawa, Graeme Robertson, and Erik Wibbels	
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)

“Reconceptualizing Civil Society and its Strength”

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”

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 Conjoint.” 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 Science 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

University of Massachusetts Amherst:

DACSS 601: Data Science Fundamentals **FA 2024**

DACSS: Machine Learning for Social Science **FA 2024**

Vassar College:

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

MATH/CMPU 280: Intermediate Data Science **SP 2023, SP 2024**

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**

NON-ACADEMIC
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 - Spring 2024)
 - Coordinator, Data Science and Society Colloquium Series (Fall 2022 - Spring 2024)
 - 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)
- Removing 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 L ^A T _E X, version control with Git, linear programming with AMPL	
COMMUNICATING IN THE PUBLIC FORUM	<p>“Armenia and the Velvet Revolution: The Merits and Flaws of a Protest-based Civil Society,” Foreign Policy Research Institute’s <i>Geopoliticus</i> Blog, February 19, 2019</p> <p>“Baltic Energy Sources: Diversifying Away from Russia,” Foreign Policy Research Institute’s <i>Baltic Bulletin</i>, June 15, 2017</p> <p>“Why Did Russia Let Ukraine’s Joan of Arc Go?,” with Julian Nundy and Rashad Mammadov, <i>News Decoder</i>, June 9, 2016</p> <p>“No End to Information War in Ukraine,” <i>News Decoder</i>, May 27, 2016</p> <p>“Lithuania Moves to Bolster Electricity Security,” Foreign Policy’s <i>Baltic Bulletin</i>, March 23, 2016</p> <p>“What on Earth Just Happened in Ukraine?,” Foreign Policy Research Institute’s <i>Geopoliticus</i>, February 19, 2016</p> <p>“The West Needs to Stop Obsessing About Putin,” with Melinda Haring, Foreign Policy Research Institute’s <i>Geopoliticus</i>, November 25, 2015</p> <p>“The human rights situation in Crimea today is deplorable,’ German MP Says,” Atlantic Council’s <i>New Atlanticist</i>, November 30, 2015, translation of speech given by German MP Dr. Christoph Bergner at the Konrad-Adenauer-Stiftung on October 21, 2015</p> <p>“The Eurasian Economic Union’s growth is not good for democracy in the region,” Foreign Policy Research Institute’s <i>Geopoliticus</i>, September 22, 2015</p> <p>“The West Should Press for Democracy in Western Ukraine, Leave East to Putin for Now,” Foreign Policy Research Institute’s <i>Geopoliticus</i>, July 22, 2015</p> <p>“Remembering Roman,” with Melinda Haring, Atlantic Council’s <i>New Atlanticist</i>, May 19, 2015</p> <p>“Do sanctions on Russia create more problems than they solve?,” Foreign Policy Research Institute’s <i>Geopoliticus</i>, March 31, 2015</p>	

LANGUAGES German: Native Speaker
 Spanish: Advanced Proficiency
 Russian: Proficient
 French: Basic Proficiency