

RYAN P. THOMBS

Curriculum Vitae (Updated October 8, 2024)

Department of Agricultural Economics, Sociology, and Education
Penn State University
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University Park, PA 16802

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EMPLOYMENT

Assistant Professor, Department of Agricultural Economics, Sociology, and Education, 2024-Present
Penn State University

Research Scientist, Department of Earth & Environment, Boston University 2024

AFFILIATIONS

Co-Fund, Social Science Research Institute, Penn State University 2024-Present

Faculty Associate, Population Research Institute, Penn State University 2024-Present

Institute of Energy & the Environment, Penn State University 2024-Present

Climate & Society Lab, The University of British Columbia 2024-Present

EDUCATION

Boston College, PhD 2023

- Concentrations: Environmental Sociology and Quantitative Methods
- Dissertation: “Resource Dependency and Sustainability in the United States”
- Committee: Andrew Jorgenson (Chair), Juliet Schor, and Sarah Babb

The George Washington University, MPP 2017

- Concentrations: Urban and Environmental Political Economy

Otterbein University, BA 2015

- Economics and Political Science (with Distinction)

RESEARCH AND TEACHING INTERESTS

Climate Change, Environmental Health, Social Dimensions of Energy, Political Economy, Quantitative Methods

JOURNAL ARTICLES

[21] Jorgenson, Andrew, Taekyeong Goh, **Ryan P. Thombs**, Yasmin Koop-Monteiro, Mark Shakespear, Nicolas Viens, and Grace Gletsu. 2024. “[Economic Growth and Income Inequality Increase the Carbon Intensity of Human Well-Being for Canada’s Provinces.](#)” *npj Climate Action* 3(58).

[20] Jorgenson, Andrew K., Brett Clark, **Ryan P. Thombs**, Jeffrey Kentor, Jennifer E. Givens, Xiaorui Huang, Hassan El Tinay, Daniel Auerbach, and Matthew C. Mahutga. 2023. “[Guns versus Climate: How](#)

Militarization Amplifies the Effect of Economic Growth on Carbon Emissions.” *American Sociological Review* 88(3): 418-453.

- Honorable Mention in the ASA Political Economy of the World System Paper Award Competition.
- Focus of *Contexts* 22(4):8 “Up Front In Brief” titled “The War on Climate.”
- Featured on the *American Sociological Review* podcast.

[19] **Thombs, Ryan P.** 2022. “The Asymmetric Effects of Fossil Fuel Dependency on the Carbon Intensity of Well-Being: A U.S. State-Level Analysis, 1999-2017.” *Global Environmental Change* 77: 1-11.

[18] **Thombs, Ryan P.** 2022. “A Framework for Analyzing Large N , Large T Panel Data.” *Socius* 8: 1-15.

[17] **Thombs, Ryan P.**, Xiaorui Huang, and Jared Berry Fitzgerald. 2022. “What Goes Up Might Not Come Down: Modeling Directional Asymmetry with Large N , Large T Data.” *Sociological Methodology* 52(1): 1-29.

[16] Kelly, Orla, **Ryan P. Thombs**, and Andrew K. Jorgenson. 2021. “The Unsustainable State: GHG Emissions, Inequality, and Human Well-Being in the United States, 1913 – 2017.” *Socius* 7: 1-14.

[15] **Thombs, Ryan P.**, Dennis L. Thombs, and Colleen A. Mahoney. 2021. “Trade and Health: A Cross-National Study of Global Economic Integration, Smoking Prevalence, and Gender, 2000 – 2015.” *Sociology of Development* 7(1): 98-116.

[14] **Thombs, Ryan P.**, Xiaorui Huang, and Andrew K. Jorgenson. 2021. “It’s About Time: How Recent Advances in Time Series Analysis Techniques Can Enhance Energy and Climate Research.” *Energy Research & Social Science* 72: 101882.

[13] Jorgenson, Andrew, **Ryan P. Thombs**, Brett Clark, Jennifer Givens, Terrence Hill, Xiaorui Huang, Orla Kelly, and Jared Fitzgerald. 2021. “Income Inequality Amplifies the Negative Association Between Life Expectancy and Air Pollution: A Cross-National Longitudinal Study.” *Science of the Total Environment* 758: 143705.

[12] Jorgenson, Andrew, Jared Fitzgerald, **Ryan P. Thombs**, Terrence Hill, Jennifer Givens, Brett Clark, Juliet Schor, Xiaorui Huang, Orla Kelly, and Peter Ore. 2020. “The Multiplicative Impacts of Working Hours and Fine Particulate Matter Concentration on Life Expectancy: A Longitudinal Analysis of US States.” *Environmental Research* 191: 110117.

[11] **Thombs, Ryan P.**, Dennis L. Thombs, Andrew K. Jorgenson, and Taylor Harris Braswell. 2020. “What is Driving the Drug Overdose Epidemic in the United States?” *Journal of Health and Social Behavior* 61(3): 275-289. (Lead Article).

- Featured Coverage: *Journal of Health and Social Behavior* Policy Brief, and *Journal of Health and Social Behavior* podcast.

[10] **Thombs, Ryan P.** 2020. “In-and-Beyond State Power: How Political Equality Moderates the Economic Growth-CO₂ Emissions Relationship, 1990 – 2014.” *The Sociological Quarterly* 62(3): 1-20.

[9] Jorgenson, Andrew, Terrence Hill, Brett Clark, **Ryan P. Thombs**, Peter Ore, Kelly Balistreri, and Jennifer Givens. 2020. “Power, Proximity, and Physiology: Does Income Inequality and Racial Composition Amplify the Impacts of Air Pollution on Life Expectancy in the United States?” *Environmental Research Letters* 15(2): 024013.

- [8] **Thombs, Ryan P.** and Andrew K. Jorgenson. 2020. “The Political Economy of Renewable Portfolio Standards in the United States.” *Energy Research & Social Science* 62, 101379: 1-6.
- [7] **Thombs, Ryan P.** and Andrew K. Jorgenson. 2019. “Manufacturing the Urban Rift: A Cross-National Study of Urbanization, Manufacturing, and CO₂ Emissions, 2000 – 2013.” *Human Ecology Review* 25(2): 143-161.
- [6] **Thombs, Ryan P.** and Xiaorui Huang. 2019. “Uneven Decoupling: The Economic Growth-CO₂ Emissions Relationship in the Global North, 1870 – 2014.” *Sociology of Development* 5(4): 410-427.
- [5] **Thombs, Ryan P.** 2019. “When Democracy Meets Energy Transitions: A Typology of Social Power and Energy System Scale.” *Energy Research & Social Science* 52: 159-168.
- [4] **Thombs, Ryan P.** and Allen Prindle. 2018. “Ohio LEED Schools and Academic Performance: A Panel Data Study, 2006 – 2016.” *Sustainability* 10(10), 3783.
- [3] **Thombs, Ryan P.** 2018. “Has the Relationship Between Non-Fossil Fuel Energy Sources and CO₂ Emissions Changed Over Time? A Cross-National Study, 2000-2013.” *Climatic Change* 148(4): 481-490.
- [2] **Thombs, Ryan P.** 2018. “The Transnational Tilt of the Treadmill and the Role of Trade Openness on Carbon Emissions: A Comparative International Study, 1965-2010.” *Sociological Forum* 33(2): 422-444.
- Received the Severyn T. Bruyn Award for Outstanding Scholarship in Social Economy and Social Justice, Sociology, Boston College.
- [1] **Thombs, Ryan P.** 2017. “The Paradoxical Relationship Between Renewable Energy and Economic Growth: A Cross-National Panel Study, 1990-2013.” *Journal of World-Systems Research* 23(2): 540-564.

BOOK CHAPTERS

Jorgenson, Andrew, Hassan El Tinay, Jared Fitzgerald, Jennifer Givens, Taekyeong Goh, Xiaorui Huang, Orla Kelly, Annika Rieger, and **Ryan P. Thombs**. Forthcoming. “Advances in Research on Anthropogenic Drivers of Climate Change.” In *Routledge Handbook of Climate Change and Society*, 2nd ed., edited by Stephen Brechin and Seungyun Lee. London: Routledge Press.

OTHER SCHOLARLY PUBLICATIONS

Thombs, Ryan P. 2023. Review of *Environmental Econometrics Using Stata*, by Christopher F. Baum and Stan Hurn. *Stata Journal*.

SOFTWARE PROGRAMS

Thombs, Ryan P. 2024. **lrplot** — Plot long-run effects over time. **Stata**.

Thombs, Ryan P. 2022. **lreff** — Compute long-run effects after estimating a dynamic model. **Stata**.

Thombs, Ryan P. 2022. **xtasysum** — Generate, summarize, and visualize partial sums for modeling asymmetry with panel data. **Stata**.

Thombs, Ryan P. 2021. **eiwb** — Generate a variable for the ecological intensity of well-being. **Stata**.

Thombs, Ryan P. In progress. **xtdefet** — Estimate a dynamic fixed effects regression with time interactions. **Stata**.

TECHNICAL REPORTS

Thombs, Ryan P. 2020. *What is Driving the Drug Overdose Epidemic in the United States?* Journal of Health and Social Behavior Policy Brief.

Cheng, Yihan, David Meni, Lily Robin, **Ryan Thombs**, Maria Wimsatt, and Zhao Zhai. 2017. *A Program Evaluation and Policy Analysis of the Supermarket Tax Exemption Act of 2000*. Washington, DC: Office of the Deputy Mayor for Planning and Economic Development.

Halbert, Hannah, **Ryan Thombs**, and Chris Hileman. 2013. *Trade Adjustment Assessment 2013: Changes Loom as Number of Certified Workers Ticks Up*. Policy Matters Ohio.

Patton, Wendy and **Ryan Thombs**. 2013. *Federal Sequester Keeps Hitting Ohio: Cuts to Head Start, Summer Lunches, Senior Services, R&D*. Policy Matters Ohio.

POPULAR PRESS

Ryan P. Thombs. 2020. “Journal of Health and Social Behavior Podcast – Interview with Julia Slater.” *Journal of Health and Social Behavior*.

Ryan Thombs. 2016. “The Right to the City: Participatory Cooperatives, Housing and Budgets.” *Truthout*.

Ryan Thombs. 2015. “Worker Self-Directed Enterprises – A New Way of Thinking About the Workplace.” *George Washington University’s Trachtenberg School of Public Policy and Public Administration Brief Policy Perspectives Blog*.

PRESENTATIONS

Thombs, Ryan P., Xiaorui Huang, and Andrew K. Jorgenson. 2020. “The Growth Question: What the Past Tells us About the Future and the Possibility of Green Growth.” Presented at the Global Political Economy Workshop: Formal Comparative Studies of the Causes and Effects of Global Inequality, Institute for Research on World-Systems, University of California-Riverside.

Thombs, Ryan P. and Xiaorui Huang. 2019. “Uneven Decoupling: The Economic Growth CO₂ Emissions Relationship in the Global North, 1870-2014.” Presented at the Annual Meetings of the American Sociological Association, New York City, New York.

Braswell, Taylor H., **Ryan P. Thombs**, and Jessica L. Bolin. 2019. “The Production of Space: The Social Determinants of Walkability in Fordist and Post-Fordist Cities in the United States.” Presented at the Annual Meetings of the Eastern Sociological Society, Boston, Massachusetts.

Thombs, Ryan P. and Xiaorui Huang. 2019. “The Economic Growth-CO₂ Nexus in the Global North, 1870-2014.” Presented at the Annual Meetings of the Eastern Sociological Society, Boston, Massachusetts.

Thombs, Ryan P. 2018. “Manufacturing the Urban Rift: A Cross-National Study of Urbanization, Manufacturing, and CO₂ Emissions, 2000-2013.” Presented at the Annual Meetings of the Eastern Sociological Society, Baltimore, Maryland.

FELLOWSHIPS, GRANTS, AWARDS

Dissertation Fellowship, Boston College	2023
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Open Access Publishing Fund, Boston College	2022
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Benedict S. Alper Fellowship, Sociology, Boston College	2022
Ritchie P. Lowry Research Fellowship, Sociology, Boston College	2021
Summer Research Fellowship, Sociology, Boston College	2021
Summer Research Fellowship, Sociology, Boston College	2020
Summer Research Fellowship, Sociology, Boston College	2019
Graduate Research Expense Grant, Sociology, Boston College	2019
Severyn T. Bruyn Award for Outstanding Scholarship in Social Economy and Social Justice, Sociology, Boston College	2018
Open Access Publishing Fund, Boston College	2018
Summer Research Fellowship, Sociology, Boston College	2018
Graduate Research Expense Grant, Sociology, Boston College	2018
Center for Washington Area Studies Research Fellowship, George Washington University Institute of Public Policy	2016-2017

TEACHING

Boston College (Undergraduate):

Environmental Sociology (In-Person)	Fall 2022
Environmental Sociology (Asynchronous Online)	Summer 2021, Summer 2022, Summer 2023
Introductory Sociology (Synchronous Online)	Fall 2020
Society and Environmental Transformations (In-Person)	Fall 2021, Spring 2022, Spring 2023

Northeastern University (Graduate):

Introduction to Statistics in Health and Behavioral Science (In-Person)	Summer 2023
Introduction to Statistics in Health and Behavioral Science (Asynchronous Online)	Summer 2024

Other:

Longitudinal Data Analysis Workshop. Boston College.	Summer 2022
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REVIEWER FOR (NUMBER OF TIMES)

American Journal of Sociology (1); *American Sociological Review* (1); *Atmospheric Pollution Research* (1); *Climatic Change* (1); *Energy and Climate Change* (1); *Energy & Environment* (3); *Energy Research & Social Science* (5); *Energy Sources, Part B: Economics, Planning, and Policy* (1); *Environmental Research: Health* (1); *Environmental Sociology* (2); *Global Transitions* (1); *International Journal of Comparative Sociology* (2); *Journal of Cleaner Production* (1); *Journal of Environmental Studies and Sciences* (1); *Journal of Health and Social Behavior* (7); *Journal of Racial and Ethnic Health Disparities* (1); *Journal of World-Systems Research* (2); *Nature and Culture* (2); *npj climate action* (2); *Oxford Bibliographies* (1); *PLOS ONE* (2); *Policy Sciences* (1); *Research in Social Stratification and Mobility* (1); *Social Forces* (2); *Social Problems* (1); *Sociological Forum* (1); *Sociological Inquiry* (1); *Sociological Perspectives* (1); *Sociology of Development* (10); *Social Science Quarterly* (1); *Socius* (2); *SSM-Population Health* (1); *Social Science Research* (2); *Structural Change and Economic Dynamics*

(1); *Sustainable Cities and Society* (1); *Sustainability: Science, Practice, and Policy* (1); *Sustainability Science* (1); *The Energy Journal* (2); *The Sociological Quarterly* (1)

CONFERENCE SERVICE

Co-organizer, Sociology of Development Roundtable Presentations, Annual Meetings for the American Sociological Association, New York City, New York.	2019
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ADDITIONAL METHODOLOGICAL AND PROGRAMMING TRAINING

NetCourse 251: Writing Your Own Stata Commands, Stata (Online).	2022
Advanced Topics in Dynamic Panel Models, ICPSR Summer Program in Quantitative Methods (Vancouver, BC).	2019

PROFESSIONAL MEMBERSHIPS

American Sociological Association
 American Association of Geographers
 Eastern Sociological Society

TECHNICAL SKILLS

Stata (expert), Mata (proficient), R (proficient), L^AT_EX(proficient), GitHub (proficient), Python (beginner), Julia (beginner)