## **Raymond Hicks**

Data Scientist, Researcher in International Political Economy, Quantitative Analyst 866 North 30<sup>th</sup> Street, Philadelphia, PA 19130 • (212) 246-2663 • <u>rh2883@columbia.edu</u>

Google scholar page: https://scholar.google.com/citations?user=9zIV3HQAAAAJ&hl=en&oi=ao

## **Expertise**

- Quantitative analysis, data management, statistical programming
- Developer of original computational tools across four programming languages for natural language processing, big data, text as data
- Manager of lab in digital humanities, bringing together expertise in computer science, digital humanities, and social sciences
- Research in international and comparative political economy
  - Empirical and substantive contributions to the study of international trade and monetary policy
  - Created original metrics for quantitatively analyzing legal and political texts

#### **Published papers**

- "Central bank independence, income inequality and poverty: What do the data say?" (with Jan-Egbert Sturm, Cristina Bodea, and Jakob de Haan). 2024. *Journal of Economic Inequality*.
- "Trading With Frenemies: How Economic Diplomacy Affects Exports" (with Don Casler and Matthew Connelly). 2024. *International Studies Quarterly* 68(3).
- "New evidence and new methods for analyzing the Iranian revolution as an intelligence failure" (with Matthew Connelly, Robert Jervis, and Arthur Spirling), 2021, *Intelligence and National Security*, 36(6): 781-806
- "Diplomatic documents data for international relations: the Freedom of Information Archive Database" (with Matthew Connelly, Robert Jervis, Arthur Spirling, and Clara Suong), 2021, *Conflict Management and Peace Science*, 38(6): 762-781.
- "Central Bank Independence Before and After the Crisis", (with Jakob De Haan, Cristina Bodea, and Sylvester C.W. Eijffinger), 2018, *Comparative Economic Studies* 60: 183-202.
- "Sovereign credit ratings and central banks: Why do analysts pay attention to institutions?" (with Cristina Bodea), 2018, *Economics and Politics* 30(3): 340-365.
- "Big Treaties, Small Effects: The Reciprocal Trade Agreements" (with Joanne Gowa), 2018, World Politics 70(2): 165-193.
- "Do We Really Know the WTO Cures Cancer?" (with Stephen Chaudoin and Jude Hayes), 2018, *British Journal of Political Science* 48(4): 903-928.
- "Conflict and Commerce: New Data about the Great War" (with Joanne Gowa), 2017, *British Journal of Political Science* 47(3): 653-674.
- "Does Enforcement Matter? Judicialization in PTAs and Trade Flows" (with Soo Yeon Kim), 2015, *World Trade Review* 14(S1): S83-S106.
- "International finance and central bank independence: Institutional diffusion and the flow and cost of capital" (with Cristina Bodea), 2015, *Journal of Politics* 77(1): 268-284
- "Trade and Methodology", chapter 5 in the Oxford Handbook of the Politics of Trade, edited by Lisa Martin.
- "Price stability and central bank independence: Discipline, credibility and democratic institutions" (with Cristina Bodea), 2015, *International Organization* 69(1): 35-61.
- "Stata and Dropbox", 2014, Stata Journal 14(3): 693-696.
- "Reputations, perceptions, and international economic agreements" (with Julia Gray), 2014, *International Interactions* 40(3): 325-249.

- "Trade Policy, Economic Interests and Party Politics in a Developing Country: The Political Economy of CAFTA" (with Helen Milner and Dustin Tingley), 2014, *International Studies Quarterly* 58(1): 106-117.
- "Politics, Institutions, and Trade between the Wars: New Data and Conventional Wisdom" (with Joanne Gowa), 2013, *International Organization* 67 (3): 439-467.
- "Reciprocal Trade Agreements in Asia: Credible Commitment to Trade Liberalization or Paper Tigers?" (with Soo Yeon Kim), 2012, *Journal of East Asian Studies* 12(1): 1-29.
- "The Most-Favored Nation Rule in Principle and Practice: Discrimination in the GATT" (with Joanne Gowa), 2012, *The Review of International Organizations* 7(3): 247-266.
- "Causal Mediation Analysis" (with Dustin Tingley), 2011, Stata Journal 11 (4): pp. 605-619.

## **Working papers**

- "KG-FRUS: a Novel Graph-based Dataset of 127 years of US Diplomatic Relations" (with Gökberk Özsoy, Luis Salamanca, Matthew Connelly, Fernando Pérez-Cruz). arXiv preprint arXiv:2311.01606
- "Opening the Doors to International Trade: New Evidence for the Effectiveness of Export Promotion" (with Matthew Connelly and Nathan Fabius) *under review*
- "Autocratic Cooperation and Threat Perceptions in US Foreign Policy" (with Julia Gray and Matthew Connelly).

#### **Teaching experience**

- "Data Science for Social Scientists" 2-week workshop at Columbia University, Spring 2018
- "Introduction to Methods for the Digital Humanities and History" 2-week workshop at the Essex Summer School In Social Science Data Analysis, Summer 2018, 2019
- "History as a Data Science" 2-week workshop for historians at Columbia University, Winter 2020
- "History as a Data Science" 2-week workshop for historians at Columbia University, Summer 2023

#### **Datasets created for co-authored publications**

- Asian PTA credibility 57 Asian PTAs signed as of the year 2007 are coded along 4 categories and 19 dimensions to create an overall score measuring the credibility of each PTA
- Interwar imports Going back to national sources on trade for the 1900-1949 period, bilateral imports from 100 countries were coded
- Central bank independence Coded the central bank laws of 80 countries based on the Cukeriman, Webb, and Neyapti index for the period 1973 to 2009
- RTAA -- Commodity-level U.S. imports by country for the period 1934 to 1946

#### **Original Software**

- poet Stata command to run sensitivity analysis (as described in Chaudoin, Hicks, and Hays 2018)
- dropbox Stata command to find user's Dropbox directory
- mediation Stata package for conducting causal mediation analysis and sensitivity analysis, with Dustin Tingley.
- *ccode* Stata program for converting between various country codes from various sources, including the Correlates of War, the IMF, the World Bank, and a generic country label.
- histlabpi Packages for both R and Stata that interaction with the History Lab's API and returns queried data

## **Conference papers and presentations**

- "Trade and Economic Diplomacy." (with Matthew Connelly and Nathan Fabius). Presented at the 2019 International Studies Association Conference.
- "Intelligence Failure? The State Department and the Iranian Revolution." (with Matthew Connelly, Robert Jervis, and Arthur Spirling.) Presented at the 2019 International Studies Association Conference and the 2019 European Political Science Association Conference.
- "Money Laundering as an Unintended Consequence of Preferential Trade Agreements" (with Julia Gray), presented at the 2017 International Studies Association conference and the 2017 European Political Science Association conference
- "Central Banks, Economic Growth, and Inequality" (with Cristina Bodea), presented at the 2016 American Political Science Association conference
- "Big Treaties, Small Effects" (with Joanne Gowa), presented at the 2016 American Political Science Association conference

#### **Computer Languages and Software**

Advanced: Stata, Python, R

Intermediate: PHP, MySQL, LaTeX, SPSS

#### **Professional activities**

Visiting Fellow - Department of Political and Social Sciences of the European University Institute, 2020-2021

Conferences organized - Monetary Policy and Central Banking: Historical analysis and contemporary approaches (with Cristina Bodea, Harold James, and Helen Milner, February 6-7, 2015); The Politics of Preferential Trade Agreements: Theory, Measurement, and Empirical Applications (with Soo Yeon Kim and Helen Milner, April 30-May 1, 2010)

International Political Economy Society – Computer and web person for IPES. Responsible for maintaining the IPES website and running the IPES mailing list. Named Managing Director as of January 1, 2013.

Virtual IPES - Co-founder of virtual IPES. Online workshop for about 8 papers a year.

Reviewer – Journal of Peace Research; International Organization; Journal of East Asian Studies; World Politics; British Journal of Political Science; Review of International Organizations; International Interactions; International Studies Review; Sustainability

#### **Work Experience**

#### 9/17- COLUMBIA UNIVERSITY, History Lab

Associate Research Scholar (from 7/22)

Research manager

- Develop and deploy original analysis tools, including Python and SQL to extract metadata from large collections of historical documents
  - o Trained and utilized NER model in Python to perform Named Entity Recognition
  - o Created knowledge base of entities for use with an Named Entity Linking pipeline
  - O Used gensim (Python) and STM (R) packages to run topic modeling on documents
- Responsible for maintaining database of more than 3 million documents, codebase, and virtual servers
- Work with five other team members across computer science, history, and political science as well as outside consultants to identify, acquire, and process new document collections
- Manage lab of undergraduates in the digital humanities and computer science in NLP and machine learning work
- Identify and pursue grant funding opportunities
- Author papers on existing data within the database

# 7/05-8/17 PRINCETON UNIVERSITY, Woodrow Wilson School, Niehaus Center for Globalization and Governance

Statistical programmer

- Wrote statistical packages for use in quantitative social science analysis
  - O Stata packages for mediation analysis (*medeff*), sensitivity analysis (*poet*), finding Dropbox accounts (*dropbox*), and converting between different country codes (*ccode*)
- Chief consultant for faculty, fellows, and graduate student on data analysis and statistical programs
  - Techniques include: event history, time-series, cross-sectional analysis, logit, propensity score matching, heckman, and correcting for autoregression in panel data
  - Consult with students, faculty, and fellows and answer questions on statistical methods and packages
- Created several datasets used in my own or others' publications
  - Created original, highly cited dataset on legal central bank independence for 80 countries over the years 1973 to 2010
  - o Created database of PTAs and ratification dates
  - Analyzed legal texts of 57 Asian PTAs for strength of their commitment to create original quantitative dataset
  - Created dataset of bilateral trade flows for 1900-1949 from national publications for about 100 countries
  - Created Stata database of more than 3000 diplomatic exchanges between U.S. policymakers and foreign dignitaries from html files
  - Compiled dataset of immigration flows and naturalization statistics for OECD countries
- Responsible for maintaining and updating the Center's website
  - Create pages with links to data sources of interest to fellows and associates of the Center
  - Developed an online registration website using PHP for a conference that NCGG was helping sponsor
  - Used PHP to maintain NCGG fellows application website

#### 1/13-12/16 INTERNATIONAL POLITICAL ECONOMY SOCIETY

Managing director

- Responsible for organization and administration of annual two-day conference bringing together 125 participants and 75 papers
  - o Created and maintained the International Political Economy Society website
  - $\circ\quad$  Used PHP to create and manage online proposal and paper submission
  - o Maintain IPES mailing list

#### **Education**

**Ph.D.** Emory University, Political Science, 2004

**B.A.** The College of William and Mary, Economics and Government, 1993

## References

Joanne Gowa, Professor of Politics, Princeton University (<u>igowa@princeton.edu</u>) Christina Davis, Professor of Politics, Princeton University (<u>cldavis@princeton.edu</u>) Helen Milner, Professor of Politics, Princeton University (<u>hmilner@princeton.edu</u>)

Cristina Bodea, Associate Professor of Political Science, Michigan State University (bodeaana@msu.edu)