

# Xun Pang

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## Education

Ph.D., Political Science, Washington University in St. Louis, USA  
M.A., International Politics, Peking University, Beijing, China  
B.A., Economics and International Politics, Peking University, Beijing, China

## Current & Past Positions

Professor, Department of International Relations, School of Social Sciences, Tsinghua University, 2014-now  
*Y. Yangtze Professor, Tsinghua University, 2016-now*  
*Founding Director, Tsinghua International Relations Data and Computing Lab, 2017-now*  
*Vice Dean, Institute for International Relations, 2016-2020*  
*Vice Chair, Department of International Relations, 2015-2018*

Visiting Associate Research Scholar, the Niehaus Center for Globalization and Governance, the Woodrow Wilson School, Princeton University, 2019-now

Associate Professor, Department of International Relations, School of Social Sciences, Tsinghua University. 2012-2014

Assistant Professor, Department of Politics, Princeton University, 2010-2012

## Professional Activities

Associate Editor, *Political Analysis*, 2018-now

Associate Editor, *Japanese Journal of Political Science*, 2019-now

Chair of the John T. Williams Prize Committee, the Society for Political Methodology, 2018-now

Committee Member, Organizing Committee of Annual Conference of Asian Political Methodology, 2013-now

Committee Member, Gosnell Prize Committee, the Society for Political Methodology. 2013-2015

Associate Editor, *World Politics*, 2011-2013

Committee Member, Diversity Committee, the Society for Political Methodology. 2011-2013

Committee Member, Poster Award Committee, the Society for Political Methodology. 2010-2011

Statistical Consultant, Social Science Computing Facility, Washington University in St. Louis. 2006-2009

## Research

### Monographs

*BRICS Cooperation: Reforming Global Governance of Development Aid*, World Affairs Press, 2016 (In Chinese).

### Peer-Reviewed Publications

“Spatial-Temporal Patterns of Terrorist Attacks in Africa: A Big Data Analysis with GIS Techniques and Split Population Duration Modeling,” (with Chong CHEN), *Foreign Affairs Review* (in Chinese), No.2, 2020.

“China-US Relations In Massive Machine-Coded Event Data: Influence of Reciprocity, Domestic Politics, and Russia,” (with Ziyi Liu) *World Economy and Politics* (in Chinese), No.5, pp.53-79, 2019.

“The International Political Significance of Chinese and US Foreign Aid: As Seen in United Nations General Assembly Voting,” (with Shuai Wang) *Social Sciences in China*, Vol.39, No.1, pp.5-33, 2018.

“The International Political Implications of Chinese and American Foreign Aid: The Case of Voting in the United Nations General Assembly,” (with Shuai Wang) *Social Sciences in China* (in Chinese), No.3, pp.181-203, 2017.

“Selective Failure of Indicator Power in Global Governance: A Causal Analysis of the IEG Aid Effectiveness Ratings,” *World Economy and Politics* (in Chinese), No.11, pp.130-155, 2017.

“Risks and Solutions in Social Prediction Using Quantitative Methods: A Reanalysis of PITF Project,” *Quarterly Journal of International Politics* (in Chinese), Vol.2, No.3, pp.1-32, 2017.

“China's Network Strategy for Seeking Great Power Status,” (with Lida Liu and Stephanie Ma) *The Chinese Journal of International Politics*, 2017, Volume 10, Issue 1, pp.1-29.

“Shared Challenges and Solutions: The Common Future of Comparative Politics and Quantitative Methodology,” *Chinese Political Science Review*, Vol.1, No.3, pp. 472-488, 2016.

“Path-Dependence and Analysis of Political Dynamic Processes,” *Social Science Research*, Vol.1, Issue. 1, 2016.

“International Systems and Domestic Politics: Linking Complex Theories with Empirical Models in International Relations,” (with Stephen Chaudoin and Helen V. Milner) *International Organization*, Volume 69, Issue 2 (Spring), pp 275-309, 2015.

“Power Versus Institution: How Does the United States Manipulate and Control Regional Development Banks,” (with He Yikun) *World Economics and Politics* (in Chinese), No.9, 2015.

“Return to Relational Context of Power: Network Analysis and Measurement of National Social Power,” (with Quan Jiayun) *World Economics and Politics* (in Chinese), No. 6, 2015.

“Varying Responses to Common Shocks and Complex Cross-Sectional Dependence: Dynamic Multilevel Modeling with Multifactor Error Structures for Time-Series Cross-Sectional Data.” *Political Analysis*, Vol. 22, Issue 4, pp.464-496, 2014.

“Ethnic Minority Rule and Civil War: A Bayesian Dynamic Multilevel Analysis,” in Ivan Jeliazkov and Xin-She Yang ed. *Bayesian Inference in the Social Sciences*. ISBN: 978-1-118-77121-1. John Wiley & Sons, Inc. pp. 39-66, 2014.

“Conflict Between Macro Policy and Micro Decision-Making: Bureaucratic Politics of US Aid.” (with He Yikun) *Foreign Affairs Review* (in Chinese), No. 3, pp.107-135, 2014.

“Quantitative Methods: Definition, Rules, and Practice.” *World Economics and Politics* (in Chinese), No.1, pp.5-25, 2014.

“Emerging Donors: A Vertical Paradigm of Foreign Development Aid.” *World Economics and Politics* (in Chinese), No.5, pp.31-54, 2013.

“Endogenous Jurisprudential Regimes.” (with Barry Friedman, Andrew D. Martin and Kevin M. Quinn) *Political Analysis*, Vol. 20, No.3, pp. 417-436, 2012.

“Collective Action Problems in Global Public Goods Provision,” *World Economics and Politics* (in Chinese), No.7, pp.24-42, 2012.

“Modeling Heterogeneity and Serial Correlation in Binary TSCS Data: A Bayesian Multilevel Model with AR(p) Errors.” *Political Analysis*, Vol.18, No.4, pp.470-498, 2010.

“International Political Environment and Energy Security” *Quarterly Journal of International Politics* (in Chinese), No.2, , pp.64-89, 2007.

“National Role and Foreign Policy Making: A Dynamic Analytical Framework” *International Politics Quarterly* (in Chinese), No. 1, pp.133-143, 2006

“Risk-Taking Willingness: Decision Making in International Crises” *World Economics and Politics* (in Chinese), No.1, pp.89-97, 2005.

“Comparative Studies on Modern Western IR Theories and Chinese Ancient Diplomatic Thoughts.” (with Ye, Zicheng) *World Economics and Politics* (in Chinese), No.12, 2001.

#### Work in Process

“The Strategic Logic of Conflicting Economic Statecrafts: US-China Aid Spending Rivalry and UNGA Voting”

“A Bayesian Group-Multifactor Spatio-Temporal Model for Identifying and Explaining Social Effects With Longitudinal Network Data,” with Licheng Liu

“A Bayesian Approach for TSCS Causal Inference: Dealing With Unobserved Confounders From Dynamic, Heterogeneity, and Clustering,” with Licheng Liu and Yiqing Xu.

“Economic Interdependence and Conflict on International Rivers in the Era of GVC,” with Qingqian He

“Measuring Globalization From Perspective of Global Value Chains: A Decomposition Method For Global Input-Output Table,” with Shuai Wang

“Economy-On-Industry Dependency in Global Value Chains and Protection of Direct Foreign Investment,” with Shuai Wang

“Agricultural Aid and Deforestation: A Subnational Causal Analysis Based on Remotely Sensed Data of Sierra Leone,” with Qingqian He and Yaqian He

Quantitative Research Methods for Social Sciences (Monograph), contracted with Higher Education Press.

Theory and Methods: Predicting Geopolitical Risk in the Era of Globalization (Monograph)

## Grants & Honors

#### Grants

PI of the Grants on Area Studies, the Ministry of Education, “International Security: A Big Data Approach”, 2017-2018, RMB100,000

PI of the Major Research Plan of National Social Science Foundation of China, “Theory and Methods for Predicting Geo-Political Risks”, 2017-2022, RMB600,000

PI of the Tsinghua University Grant to Basic Research, 2012-2017, RMB500,000

PI of *Humanities and Social Science Research Fund, China's Ministry of Education* (Grant #13YCGJW009), \ BRICS' Development Aid: Modalities, Strategies, and Cooperation," 2013-2017, RMB80,000.

PI of *Research institute of Petroleum Exploration & Development Research* Grant for "Oversea Direct Investment Risk Evaluation for Energy Industry." 2013-2014, RMB200,000.

PI of *Carnegie-Tsinghua Center for Global Policy Research* Grant for "Emerging Economies and Shifting Paradigm in World Development." 2013-2015, RMB 200,000.

PI of *The Mamdouha S. Bobst Center for Peace and Justice*, Princeton University, Faculty Research Grant, December 2010-December 2011, USD7,000.

Co-PI of *National Science Foundation Grant SES-0918320*, "Doctoral Dissertation Research: Discrete Time-Series Cross-Section Models of Political Economy," September 2009-August 2010, USD7,000.

*National Science Foundation Travel Support Award*, annual conference of the Society for Political Method-ology, University of Iowa, Iowa City, July, 2010

*National Science Foundation Travel Support Award*, UseR annual conference, Rennes, France, July 8th-11th, 2009.

*National Science Foundation Travel Support Award*, annual conference of the Society for Political Method-ology, University of Michigan, Ann Arbor, July, 2008.

*Dissertation Fellowship*, Washington University in St. Louis, 2009-2010.

## Honors

*Y. Yangtze Chair Professorship*, the Ministry of Education, China, 2016-now

*The John T. Williams Dissertation Prize by the Society for Political Methodology* for the best dissertation proposal in political methodology, for "A Bayesian Probit Hierarchical Model with AR(p) Errors and Non-nested Clustering: Studying Sovereign Creditworthiness and Political Institutions." 2009.

*The Society for Political Methodology Poster Award for the Best Poster* presented at the Annual Meet-ing of the Society for Political Methodology, for "Binary and Ordinal Time Series with AR(p) Errors: Bayesian Model Determination for Latent High-Order Markov Processes." 2009.

## Conference Presentations and Invited Talks

"The Strategic Logic of Conflicting Economic Statecrafts: US-China Aid Spending Rivalry and UNGA Voting," Princeton University, November 25, 2019.

"The Strategic Logic of Conflicting Economic Statecrafts: US-China Aid Spending Rivalry and UNGA Voting," Duke University, November 12, 2019.

"Bayesian Predictive Synthesis For Causal Inference with Time-Series Cross-Section Data: A Factor Model Approach with Hierarchical Shrinkage," Harvard University, Oct. 30, 2019.

"A Bayesian Group-Multifactor Spatio-Temporal Model for Identifying and Explaining Social Effects With Longitudinal Network Data," Massachusetts Institute of Technology, Oct. 29, 2019.

"A Bayesian Group-Multifactor Spatio-Temporal Model for Identifying and Explaining Social Effects With Longitudinal Network Data," Princeton University, Oct. 18, 2019.

"Bayesian Predictive Synthesis For Causal Inference with Time-Series Cross-Section Data: A Factor Model Approach with Hierarchical Shrinkage," Washington University in St. Louis, Oct. 2, 2019.

“A Bayesian Multilevel Model with Time-Varying Spatial Autoregressive Coefficient,” (with Licheng Lu) 2019 Annual Meeting of the American Association of Political Science (Washington D.C., USA)

“Economic Interdependence and Conflict on International Rivers in the Era of GVC,” (with Qingqian He) 2019 Annual Meeting of the American Association of Political Science (Washington D.C., USA)

“TSCS Causal Inference Using Bayesian Dynamic Multilevel State-Space Models,” (with Licheng Lu) 2019 Annual Meeting of the American Association of Political Science (Washington D.C., USA)

“Measuring Globalization From Perspective of Global Value Chains: A Decomposition Method For Global Input-Output Table,” 2019 Annual Meeting of Asian Political Methodology (Kyoto, Japan)

“Economy-On-Industry Dependency in Global Value Chains and Protection of Direct Foreign Investment,” 2018 Annual Meeting of the American Association of Political Science (San Francisco, USA)

“Agricultural Aid and Deforestation: A Causal Analysis Using Remotely Sensed Data of Sierra Leone,” 2017 Asian. Political Methodology Meeting (Seoul, South Korea).

“China's Network Strategy for Seeking Great Power Status,” 2016 Asian. Political Methodology Meeting (Sydney, Australia).

“Modeling Evolution of Connectivity and Interdependence: A Bayesian Multilevel Spatial Model with a Dynamic Spatial Autoregressive Coefficient,” 2016 Asian. Political Methodology Meeting (Beijing, China).

“Consequence of Chinese Aid to Africa: How American Aid Becomes Less Effective in UNGA Vote Buying,” (with Wang Shuai), 2016 Asian. Political Methodology Meeting (Beijing, China).

“Common Shocks and Spatial Dependence: A Dynamic Hierarchical Model with a Multifactor Error Structure. ” Annual Summer Meeting of the Society for Political Methodology and APSA Methods Section, the University of Georgia, July, 2014.

“Dissimilarity of Trade Network Positions and Foreign Policy Divergence: Structure Or Strategy?” At the conference on “Is the Rise of China a Threat to its Neighbors and the World?” Tsinghua University, Beijing, China, July, 2014.

“An Extended Spatial Model For Explaining How Connectivity of a System Changes Over Time.” 2014 Asian. Political Methodology Meeting (Tokyo, Japan).

“A Bayesian Dynamic Factor-Residual Model for Spatial Dependence in Longitudinal Data.” 2011 annual meeting of the APSA (Seattle, WA).

“Spike and Slab Prior Distributions for Simultaneous Bayesian Hypothesis Testing, Model Selection, and Prediction, of Nonlinear Outcomes.” (coauthored with Je Gill) University of Rochester, April 8, 2011

“A Bayesian Dynamic Factor-Residual Model for Spatial Dependence in Longitudinal Data.” New Methodologies and Their Applications in Comparative Politics and International Relations, 2011, Princeton, NJ.

“Local Shocks and Cross-Sectional Dependencies in TSCS Data: A Bayesian Semi-Parametric Analysis.” 2010 annual meeting of the APSA (Washington, D. C. ).

“Bayesian Semi-Parametric Analysis: Spillover Effect.” 2010 summer conference of the Society for Political Methodology (Iowa City).

“Modeling Units' Sensitivity to System: Time-Specific Unit-Varying Effects in Generalized Linear Multilevel Models.” 2010 annual meeting of the MPSA (Chicago).

“Endogenous Jurisprudential Regimes” (with Andrew Martin, Barry Friedman, and Kevin Quinn). 2010 St. Louis Area Methods Meeting (St. Louis).

“Modeling Unbalanced Discrete Time-Series Cross-Sectional Data: Serial Dependence, Heterogeneity and Spatial Correlation.” 2009 APSA Annual National Conference (Toronto).

“Spike and Slab Priors for Bayesian Generalized Linear Models” (with Je Gill). Annual Summer Meeting of the Society for Political Methodology and APSA Methods Section, Yale University, July, 2009.

“Specifying Spike and Slab Prior Distributions for Bayesian Hypothesis Testing of Nonlinear Models” (with Je Gill). 2009 annual meeting of the MPSA Annual National Conference (Chicago).

“Intertemporal and Contemporaneous Dependence in Binary Time-Series Cross-Sectional Data: Bayesian Hierarchical Model with AR(p) Errors and Non-nested Clustering.” 2009 annual meeting of the MPSA Annual National Conference (Chicago).

“IEA Energy Cooperation and Global Oil-Supply Disruption: Bayesian Probit-AR(p) versus Probit Model.” 2008 APSA Annual National Conference (Boston).

“Binary Time Series with AR(p) Errors: Bayes Factor for Lag Order Determination and Model Selection.” 2008 summer conference of the Society for Political Methodology (Ann Arbor).

“Stability of Cronyism and Sovereign Creditworthiness.” 2008 MPSA Annual National Conference (Chicago).

## Software

GLMMarp: a CRAN R package for implementing the GLMM-AR(p) model developed in the dissertation project Dynamic Multilevel Analysis of Binary Time-Series Cross-Sectional Data in Political Economy.  
<http://cran.r-project.org/web/packages/GLMMarp/index.html>

SpikeSlab: an R package for implementing spike and slab priors for variable selection, model comparison and Bayesian model averaging in both linear and generalized linear setups. (With Je Gill, In Process)

## Teaching Experience

### Courses

Research Design and Thesis Writing in International Relations (graduate level, in English, co-instructor), Tsinghua University

Introduction to International Political Economy (graduate level), Tsinghua University

Political Economy of Development Aid (graduate level, in English), Tsinghua University

Research Methods for International Relations (undergraduate level), Tsinghua University

Applied Quantitative Analysis V: Multilevel Modeling (graduate level), Princeton University, 2011, Fall

Applied Quantitative Analysis I: Probabilities and Statistics (graduate level), Princeton University, 2011, Fall

Quantitative Analysis in International Relations (undergraduate level), Princeton University, 2011, Fall

Applied Quantitative Analysis II: Linear and Generalized Linear Models (undergraduate level), Princeton University, 2011, Spring

Applied Quantitative Analysis IV: Bayesian Statistics (graduate level), Princeton University, 2011, Spring

International Politics, Washington University College summer course, 2009, May-June.

## Workshops

July 2014, Limited Outcome Variables and Nonlinear Models, Tsinghua Summer Methods Camp

July 2013, Causal Inference in Political Science, Tsinghua Summer Methods Camp

August 2009, R Bootcamp, School of Medicine, Washington University

November 2008, BUGS workshop, Center for Applied Statistics, Washington University

September 2008, R workshop, Center for Applied Statistics, Washington University September 2008,

L<sup>A</sup>T<sub>E</sub>X workshop, Center for Applied Statistics, Washington University

March 2008, L<sup>A</sup>T<sub>E</sub>X workshop, Center for Applied Statistics, Washington University

## Professional Memberships

American Political Science Association

Society for Political Methodology

Last updated: May 19, 2020