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**CURRENT** Lecturer (Assist. Prof.), Monash University, Dept. of Economics, 2018 – Present

**POST** Massachusetts Institute of Technology (MIT), 2017 – 2018

**DOCTORAL  
STUDIES**

**DOCTORAL** Special Student, Harvard University, Department of Economics, 2013 – 2015

**STUDIES**

Institute for International Economic Studies, Stockholm University, 2011 – 2017  
PhD, Economics, Defended, September 5, 2017  
TITLE: “*States of Development: Essays on the Political Economy of  
Development in Asia*”

REFERENCES

*Daron Acemoglu*  
Massachusetts Institute of Technology  
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**PRIOR** M.A., Quantitative Methods in the Social Sciences, Columbia University, 2011  
**EDUCATION** B.A., Economics, University of Massachusetts - Amherst, Latin Honours, 2009

**FIELDS** Primary Fields: Political Economy, Development Economics, Economic History  
Secondary Fields: Big Data and High Dimensional Methods, Growth

**TEACHING  
EXPERIENCE**

International Economics - MBA, Monash Business School, Chief Instructor

The Challenges of World Poverty - Undergraduate, MIT, Co-instructor with Frank Schilbach (for Abhijit Banerjee and Esther Duflo)

History of Economic Growth - Undergraduate, Harvard University, TA for Melissa Dell

Econometrics II - Ph.D., Stockholm Economics Doctoral Program, TA for David Strömberg

Big Data, Analysis and Management - Ph.D., Stockholm Economics Doctoral Program, TA for Lena Hensvik, Peter Mozelius, David Strömberg

**RELEVANT  
POSITIONS**

2018, Lecturer, Monash University

2018, Co-Founder and Principal Investigator, SoDa Laboratories

2011- 2013, Institute for International Economic Studies, Stockholm University, Research Assistant

2010 - 2011, Institute for Social and Economic Research and Policy, Columbia University, Research Assistant

2010, National Bureau of Economic Research, Research Assistant

2009 - 2010, Earth Institute, Columbia University, Research Assistant

**GRANTS,  
HONORS, AND  
AWARDS**

(Under review) 2019, "Monitoring the Activity of Transnational Elites" - with Yves Zenou, Arthur Campbell, Paul Raschky, Weijia Li, and Matthew Olckers

2019, Small Research Grant (10,000 AUD), Department of Economics, Monash - "South Korean Labour Unrest" with Changkeun Lee

2018, Early Career Research Grant (30,000 AUD), Monash Business School - "Forensic Economics of Activist Assassinations."

2018, Startup Grant (5,000 AUD), Monash Business School - "Text-as-Data: Measuring labour unrest with textual data."

2017, Small Research Grant (10,000 AUD), Department of Economics, Monash - "Measuring Trade Policy: A Machine Learning Approach"

2014, Economic History Association, Exploratory Data Grant for Doctoral Students.

2013, Handelsbanken, Hedelius Scholarship

2012, Forum for Asian Studies (Stockholm University), Exploratory Research Grant

**RESEARCH  
PAPERS**

**“Manufacturing Revolutions - Industrial Policy and Industrialization in South Korea” (Working Paper)**

My project studies the impact of industrial policy on industrial development by exploring a canonical East Asian intervention. Following a political crisis in 1972, South Korea dramatically altered its development strategy with a new sector-specific policy: the Heavy Chemical and Industry (HCI) drive. With newly digitized data, I use the sharp introduction and withdrawal of the targeted policy to study its impacts. (1) I show HCI successfully promoted the evolution of directly treated industries. Next I provide evidence for two key justifications of industrial policy: network and dynamic externalities. (2) Using variation in exposure to policies through the input-output network, I show HCI indirectly benefited (non-treated) downstream industry. (3) Finally, I show both direct and indirect benefits of HCI persist even after the policy is withdrawn, following the 1979 assassination of President Park. Together, my findings suggest that the temporary push helped shift the economy into higher value-added activity.

**“The Historical State, Local Collective Action, and Economic Development in Vietnam” – *Econometrica*, 86(6), 2083–2121. with Melissa Dell (Harvard) and Pablo Querubin (NYU).**

**IN PROGRESS**

**Information is Power - Monopoly Power, Information Technology, and the Rise of the Digital State - with Weijia Li**

Once seen as a weapon of freedom, informational technology has drastically transformed state capacity—often with unintended consequences. Our study analyzes the rise of the digital state. We do so by proposing a theory of how recent trends in monopoly power fuelled the demand for information technology, and how these technologies, in turn, spilled over to the state. In our model, we show information technologies that allow monopolists to extract surplus from consumers also enable states to more efficiently exercise a monopoly of violence. Since this technology transforms the costs and consequences of repression, we study how the digitization of the state impacts preferences for (digital) democracy and (digital) autocracy. A key insight is that information may reduce the costs of autocracies to deploy repression, which in turn makes autocracy more palatable to elites and citizens. We provide empirical insights into main components of our model, using newly collected data on state technological adoption.

**Seeing the Digital State - Measuring the Digital Capacity of the State with 1 Trillion Internet Observations - with Klaus Ackerman, Simon Angus, Weijia Li, and Paul Raschky.**

State power is shaped by technology. Governments are increasingly relying on the internet and information technology to fulfill their basic functions. Our study creates new unique measure of an emergent dimension of state capacity: the digital reach of the state. We use supervised machine learning methods to combine rare data on 1) the universe of worldwide IP address and 2) all known government organizations (entities). Doing so allows us to measure the scope of IP space utilized by government entities—as well as their activity (measures via “latency”). We provide a visual representation of our measure, mapping the spatial nature of government internet activity. We next provide the determinates and characteristics associated with the expanding informational capacity of states over the past years. In doing so, we show how the organization of the digital state varies by regime-type; the extent of decentralization; and the monopoly power of the communications network. Together we demonstrate our data allows social scientists to study a rapidly transforming dimension of governance.

**Returns to Repression - Firm Asset Price Responses to Activist Assassinations in Resource Rich Economies** - with David Kreitmeir and Paul Raschky

Civil society is seen a key ingredient to political *and* economic development. Our study explores the consequences of suppressing civil society. We do so by analyzing market responses to a severe form of repression: the extra-judicial assassinations of activists in resource-rich economies. We conduct an event study using hundreds of rare, hand-coded records of activist assassinations—including the names of implicated companies. We implement our unique, large-scale asset price study, by creating firm-level measures of "exposure" to violence and comparing the cumulative abnormal returns (CARs) across firms differentially exposed to events. By analyzing outcomes before *and* after violence, we answer two questions: 1) Examining asset price movements *prior* to killings, we test for whether markets reveal prior knowledge of violence. 2) Our main analysis then explores asset price movements *after* assassinations to investigate investor responses to violence. We find extra-judicial killings lead to highly significant negative abnormal returns for companies associated with violence. These effects are also highly persistent. Next, using the rich global reach of our study, we explore how market reactions vary by measures of institutional quality. We show the extent to which firms face repercussions from violence is significantly related to the quality of state institutions. Thus, our findings indicate that markets punish firms most likely to benefit from the suppression of civil society, though less so under weak states.

**Learning the Lay of the Land: A Machine Learning Approach to Measuring Sub-National Institutions** - with Alistair Bayless and Paul Raschky

Economists often rely on national-level measures of institutional quality. Using high dimensional machine learning methods, we provide a framework for recovering sub-national measures of institutional quality where previously only national-level measures were available. Using random forest methods, we fit well-known measures of institutional quality (e.g. PRS Political Risk Scores) on millions of geocoded observations of political events. Specifically, we construct unique event data from full-text newspaper archive datasets, as well as decades of translated news from the CIA. Random forests allow us to create a highly predictive the mapping from event data to institutional quality codings. Since our event data contains sub-national geolocations, we then use our model to create (predict) sub-national indices of institutional quality using local news events. First, we substantiate this our measures, i) showing that our indices correspond to well-known separatist struggles in Indonesia and the Philippines, and ii) showing that our annual measures tracks the widely-used textual *Policy Uncertainty Index* of Baker, Bloom, and Davis (2016)). Second, using historical news data, we are able to perform out of sample prediction, effectively creating historical measures of institutions for 1950-1986, the period before the start of common institutional quality measures. Last, we demonstrate that our measure can be used to study canonical questions on the relationship between growth and institutions—but utilizing global sub-national variation.

**Democratization, Labor Repression, and Manufacturing Development in South Korea** - with Daron Acemoglu and Changkeun Lee

**The Impact of Export Promotion Policy on South Korean Industrialization** - with Changkeun Lee and Krisztina Orban

**Building a New Export Industry: Evidence from Vietnam's Electronics Industry Policy** - with Dung Le and Krisztina Orban

**Workers of the World, Unite: The Economic Effects of Labor Day Demonstrations in Europe** - with Andreas Madestam and David Yanagizawa-Drott

**PROFESSIONAL  
ACTIVITIES**

**Presentations & Talks Given**

(Invited) European Bank for Reconstruction and Development, London, 2019  
(Invited) Paris School of Economics, Economic History Seminar, 2019  
OzClio - Australian Cliometric Society Workshop, 2019  
University of Technology Sydney, Economics Seminar, 2019  
University of New South Wales, Economics Seminar, 2019  
University of Wollongong, Economics Seminar, 2019  
Melbourne University, Econometrics Seminar, 2019  
CEP Bertelsmann Stiftung Conference - Industrial Policy in Advanced Economies in the 21st Century, London School of Economics, 2019  
Industrial Policy and Blended Finance Conference, Geneva Graduate Institute, 2018  
(Invited) Asian Economic History Conference, 2018  
American University, Trade and Development Seminar, 2018  
Washington Area Economic History Seminar, George Mason University, 2018  
Seoul National University, Applied Economics Seminar, 2017  
Korean Development Institute, Workshop, 2017  
MIT, Department of Economics, Political Economy Lunch, 2017  
NEUDC, Tufts University, 2017  
Economic History Association meetings, San Jose, California, 2017  
Econometric Society European Summer Meetings, Lisbon, Portugal, 2017  
Innovation and Growth Conference, College de France, 2017  
Rethinking the Economic Role of the State Conference, Peking University, 2017  
CREDIT Seminar, University of Nottingham, 2017  
University of Sussex, Department of Economics, 2017  
NYU – Abu Dhabi, Department of Social Science, 2017  
INSEAD, Department of Economics, 2017  
Monash University, Department of Economics, 2017  
IMT School for Advanced Studies, Lucca, Italy, 2017  
Northwestern University, Kellogg School of Management, 2017  
University of Massachusetts – Amherst, Department of Economics, 2017  
University of British Columbia, Vancouver School of Economics, 2017  
Spanish Economic Association meetings, Bilbao, Spain, 2016  
Econometric Society European Winter meetings, Edinburgh, Scotland, 2016  
Stockholm School of Economics, MicroWave Seminar, 2016  
Stockholm University Brown Bag Seminar, Department of Economics, 2016  
ASWEDE Workshop, Stockholm School of Economics, 2016  
OXDEV, Centre for Studies of African Economies, Oxford University, 2016  
CIFAR, Institutions, Organizations & Growth meetings, 2015  
NBER Summer Institute, Development of the American Economy group, 2015  
Harvard Economic History Tea, Harvard University, 2015

**Refereeing**

Econometrica (2), Review of Economic Studies (3), Economic Journal, Review of Economics and Statistics, Journal of the European Economic Association (3), Journal of Development Economics (2), World Bank Economic Review (2), Journal of Industrial Economics, Review of Economic History, Scandinavian Journal of Economics, Economics of Transition (2), World Politics, Comparative Politics, Economics & Politics.