# **MADISON SINGELL**

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#### RESEARCH INTERESTS

# Causal Inference, Organizational Structure, Developing Shared Understandings and Narratives in Organizations

I am interested in understanding how organizations impact the causal inferences of their employees, focusing on how different characteristics of organizations may generate systematic errors in inference. I study how the choices organizations make to, for example, divide work, impose policies, and make hiring decisions, end up altering employees' understanding of cause and effect in the organization, ultimately making the formation of successful strategy difficult. Using a combination of formal modeling, computer simulation, and empirical investigation, I show how incorrect and divergent understandings in organizations can often be generated from the way organizations choose to structure work. My work has generated two publications and four working papers.

### **EDUCATION**

## Stanford University, Stanford, CA

2020 - Present

- Ph.D. in Macro Organizational Behavior (expected, 2025)
- Dissertation Committee: Amir Goldberg (Chair), Jesper Sørensen, Julien Clement, Jon Atwell

## Harvard University, Cambridge, MA

Class of 2015

- B.A. Economics, Citation in Chinese, GPA 3.7/4.0

#### **PUBLICATIONS**

- Goldberg, Amir and **Madison Singell**. "The Sociology of Interpretation." *Annual Review of Sociology*, vol 50, May 2024, <a href="https://doi-org.stanford.idm.oclc.org/10.1146/annurev-soc-020321-030515">https://doi-org.stanford.idm.oclc.org/10.1146/annurev-soc-020321-030515</a>.
- DeFilippis, Evan, Stephen Michael Impink, **Madison Singell**, Jeff Polzer, and Raffaella Sadun. "The Impact of COVID-19 on Digital Communication Patterns." *Humanities and Social Sciences Communications*, vol. 9, no. 1, May 2022, p. 180, https://doi.org/10.1057/s41599-022-01190-9.

## WORK IN-PROGRESS (FULL MANUSCRIPTS AVAILABLE)

- **Singell, Madison**. "The Proximate Cause Principle of Causality in Organizations: How the Structure of Reality Produces Incorrect and Divergent Understandings Under the Division of Labor."
  - -Job Market Paper, Theory Piece and Mathematical Model of Causal Understandings in Organizations.
- Singell, Madison. "Organizational Applications of the Ising Model."
  - Modeling paper applying the Ising Model of Physics to organizational contexts.
- **Singell, Madison**, Andrea Freund, Lindred Greer, Hayagreeva Rao, and Magaret Neale. "Does Collective Mental Time Travel Improve the Performance of New Self-Managed Teams?: Evidence from a Startup Competition."
  - Late-stage working paper on using narratives to improve start-up founder performance, methods: NLP.
- Polzer, Jeff, Evan DeFilippis, and **Madison Singell**. "When Meetings Multiply: The Consequences of Collaboration Overload."

### WORK IN-PROGRESS

- Singell, Madison and Amir Goldberg. "On the Theory of Narratives"
  - Theory development piece building on Sociology of Interpretation review and narrative theory.
- Atwell, Jon, and Madison Singell. "BERT and Cultural Representations of Meaning."
  - Early-stage working paper, with preliminary results on BERT's accuracy weighted by population consumption.

- **Singell, Madison**. "It's a Numbers Game: How Bayesian Updating Perpetuates Biased Outcomes and Gender-Dependent Noise in Promotion Markets."
  - Early-stage simulation paper advancing Altonji and Pierret's work on statistical discrimination.

### ASSISTED PUBLICATIONS

- Brodsky, A. "Slip of the Keyboard: How Unintentional Cues Convey Email-Sender Emotions." *Academy of Management Proceedings* 2014 (October 20, 2014).
- Carvalho, Paulo F., Catarina Vales, Caitlin M. Fausey, and Linda B. Smith. "Novel Names Extend for How Long Preschool Children Sample Visual Information." *Journal of Experimental Child Psychology* 168 (April 1, 2018): 1–18.
- Mody, Shilpa, and Susan Carey. "The Emergence of Reasoning by the Disjunctive Syllogism in Early Childhood." *Cognition* 154 (September 1, 2016): 40–48.

#### **PRESENTATIONS**

- "Caught in the Middle of Causality: How the Structure of Reality Produces Incorrect and Divergent Understandings in Organizations." Theoretical Organizational Models Society Conference, June, 2024.
- "Caught in the Middle of Causality: How the Structure of Reality Produces Incorrect and Divergent Understandings in Organizations." CCC Doctoral Student Colloquium, May, 2024.
- Student Keynote Speaker, Stanford Graduate School of Business Admit Day, March, 2024.
- "The Persistence of Divergent Causal Narratives in Organizations." Berkeley Culture Conference, January, 2024.
  - Finalist for the Edgar Schein Best Paper Award. (Earlier Draft of Job Market Paper)
- "Back to the Future: A "Lab-in-the-Field" Experiment." Academy of Management Conference, August, 2023.
- "Organizational Applications of the Ising Model." Theoretical Organizational Models Society Conference, August, 2023.
- 'Back to the Future: A 'Lab-in-the-Field' Experiment.' SCANCOR Seminar Series, September, 2022.
- "Where is the story? Spatial Richness Impacts Narrative Prediction." Diverse Intelligence Summer Institute, July, 2022.
- "When Meetings Multiply: The Consequences of Collaboration Overload." Academy of Management Conference, August, 2020.
- "For-Profit Universities' Education Incentive: Targeting Low- Income and Minority Students for Revenue Generation." Federal Trade Commission (FTC) Poster Session, April 2015.

### **AWARDS & GRANTS**

- Finalist for Edgar Schein Best Paper Award, "The Persistence of Divergent Causal Narratives in Organizations.", Berkeley Culture Conference, January, 2024. (Earlier draft of Job Market Paper)
- Selected to attend HBS Summer School in Computational Organization Science, August, 2023.
- Recipient of The Charles W. Bonner Fellowship and The Theodore Sutter Fellowship, receiving \$50,000+ in funding, August, 2023.
- Recipient of The Sakurako & William Fisher Family GSB Fellowship, receiving \$50,000+ in funding, August, 2022.
- Member of Diverse Intelligence Summer Institute, selected for month long fully paid program at St. Andrews with other scholars focusing on studying diverse intelligence. Presented work on: "Where is the story? Spatial Richness Impacts Narrative Prediction.", July, 2022.
- Recipient of The Donald E. Petersen Fellowship, receiving \$50,000+ in funding, August, 2021.
- Recipient of The R. Michael Shanahan Fellowship, receiving \$50,000+ in funding, August, 2020.

## LEADERSHIP & SERVICE EXPERIENCE

# Theoretical Organizational Modeling Society Brown Bag, Research Group Facilitator

9/2021-Present

- Lead 4-6 PhD student research seminar and present work at monthly meetings.

# IDDEAS@Stanford (Introduction to Diversity in Doctoral Education and Scholarship), Mentor

4/2024-Present

- Mentor IDDEAS scholars, including day-long research clinic to help develop students' research.

# No Theory Thursday, Seminar Leader

1/2024-Present

- Organized weekly seminar meetings with PhD students across Stanford (GSB, Sociology, Education etc.) to discuss new methodologies and solve empirical research questions.

### Stanford Macro OB Seminar, Student Organizer

9/2023-Present

- Selected to manage weekly department seminar with all faculty and students in Macro OB.

### PhD Association, Social Chair

9/2021-8/2022

- Elected official of the PhD Association responsible for \$10,000 social budget for all GSB PhD students.

### RESEARCH EXPERIENCE

### Organizational Behavior Research Associate, Harvard Business School

7/2018-7/2020

- Specialize in people analytics and data analysis, working with Professor Jeffrey T. Polzer.
- Co-author of three papers researching: the impact of country culture on meeting and email behavior, how physical presence at the office influences team outputs, and Bayesian updating leading to statistical discrimination in promotion markets.
- Source, manage, clean and analyze large datasets using SQL and R, resulting in two full paper analyses.
- Create course content as Teaching Assistant for People Analytics MBA and Executive Analytics courses.
- Build and foster relationships with corporate partners to source data and develop grounded research.

# Negotiation, Organization, and Marketing Research Assistant, Harvard Business School

1/2013-5/2013

- Designed study on emotional interpretations of email in the workplace.
- Partnered with doctoral student Andrew Brodsky to produce paper on time allocation and down time.

# Psychology Research Assistant, Indiana University Smith Lab

6/2012-8/2012

- Organized logistics and conducted study on children's ability to process and remember new information.
- Participated in writing and research workshops for academic papers in the lab.

### Psychology Research Assistant, Harvard University Carey Lab

9/2011-6/2012

- Developed study to test children's ability to use logic in an elimination task.
- Assisted in preparation and execution of a doctoral thesis in developmental psychology.

# Neuroscience Research Assistant, University of Oregon Institute of Neuroscience

9/2007-6/2011

- Conducted lab study for determining the difference of information processing in bilingual children.
- Cleaned and organized EEG cap data from study, removing saccades and other disturbances.

### TEACHING EXPERIENCE

# Teaching Assistant, From Startup to Scaleup, Stanford Graduate School of Business

1/2022-4/2023

- Presented original research and led class discussion for section of 85 MBAs.
- Taught review sessions and ran by-appointment office hours covering topics in statistics, coding in R and data management.
- Managed discussions with speakers, start-up founders, and VC investors.
- Teaching Rating: 4.9

### Teaching Assistant, Organizational Analytics, Stanford Graduate School of Business

3/2023-6/2023

- Wrote and edited course material code on organizational design topics in Python.
- Ran review sessions and office hours covering topics in statistics, coding in Python and computational modeling.

## Teaching Assistant, Negotiations, Stanford Graduate School of Business

7/2024-9/2024

- Managed 6 negotiation sessions with debriefs for 40 MBAs.
- Provided in depth feedback on core negotiation concepts including bargaining zones, trust, principal-agent problems, disputes, ethics, and culture.
- Held 1-on-1 and group feedback sessions for answering questions and to solidify course learnings.

## Teaching Assistant, Managing Groups and Teams, Stanford Graduate School of Business

7/2024-9/2024

- Ran course exercises including Lego Man and Star Power for incoming MBA class.
- Reviewed and provided feedback on core management concepts such as teams, diversity, coordination, hierarchy, power, and expertise.

### Teaching Assistant, People Analytics, Harvard Business School

1/2019-5/2019

- Created course content code in R and managed use of Domino data science platform for students.
- Co-taught review sessions and ran by-appointment office hours covering topics in statistics, coding in R and data management.
- Adapted MBA course work for Executives enrolled in Harvard Business Analytics Program.

### RELEVANT WORK EXPERIENCE

## AppNexus (Customer Success, New York Office)

8/2016-7/2018

Solutions Consultant (January 2018 – July 2018)

- Managed technical integrations and partner on strategic decisions for Microsoft account.
- Served as thought-partner for account initiatives, creating impact analyses using SQL.
- Headed Public Service Announcement Program, providing over 60 billion free advertisements to non-profit causes.

# Capability Specialist (December 2016 - December 2017)

- Led capability team as the primary specialist for all pricing, billing, clearing and invoicing initiatives.
- Designed capability strategic plan and presented results quarterly and yearly to management and executives.
- Developed and implemented product specs for dashboard monitoring project, creating automated reports and risk models system for key platform financial metrics.

# Product Support Specialist (August 2016 - December 2016)

- Managed technical support and troubleshooting for six named support clients with over six million in spend.
- Selected as an Inventory Quality SME, analyzing log level data and reporting directly to the CEO.

## NERA Economic Consulting (Securities Practice, New York Office)

7/2015-8/2016

Associate Analyst (July 2016 - August 2016)

Research Associate (July 2015 - July 2016)

- Drafted data analysis, methodology, and conclusion sections for two expert reports, presenting results to counsel and regulatory agencies.
- Calculated alleged damages and settlements for Securities Class Action cases, filing sixteen expert reports.
- Presented and lead monthly panel discussion on current topics in economics for 100 researchers and seniors.

## **SKILLS**

Language Skills: French (Fluent), Chinese (Advanced), Portuguese (Beginner), Spanish (Beginner)

Technical Skills: Python (Advanced), R (Advanced), SQL (Advanced), Microsoft Office Excel, Stata (Proficient)

Interests/Activities: Volunteer Youth Teacher and Mentor, Dog Owner/Enthusiast, Yoga Practitioner, Runner

### REFERENCES

Amir Goldberg (Stanford GSB – Macro OB): amirgo@stanford.edu

Jesper B. Sørensen (Stanford GSB – Macro OB): sorensen@stanford.edu

Julien Clement (Stanford GSB – Macro OB): iclement@stanford.edu

Jon Atwell (Stanford GSB – Macro OB): atwell@stanford.edu

Daniel A. McFarland (Stanford GSB – Macro OB by courtesy): dmcfarla@stanford.edu