

YANG CHEN (JADEN)

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PERSONAL

Born on July 22, 1995

Citizenship: China

EDUCATION

Cornell University

Ph.D. in Economics

August 2016 - Present

Peking University

B.A. in Economics B.S. in Mathematics

September 2012 - June 2016

RESEARCH INTEREST

Microeconomic Theory

WORKING PAPERS

1. Sequential Learning under Informational Ambiguity, *R&R at Econometrica*

Abstract: This paper studies a sequential learning problem where individuals are ambiguous about other people's signal structures. It finds that ambiguity has an important impact on social learning and provides new insights on the mechanism behind herding behavior. This paper claims that whether an information cascade occurs is a result of individuals' ambiguity level instead of specific statistical features of the actual signal processes as suggested by previous literature. When there is sufficient ambiguity, for *all* possible data-generating processes, an information cascade occurs almost surely. Moreover, a slight degree of ambiguity suffices to produce a cascade when signals are bounded and destroys full learning when signals are unbounded. As an extension, this paper also investigates the case where there is an outside option. It finds that an information cascade occurs on this outside option when there is sufficient ambiguity and individuals are ambiguity-averse.

2. Biased Learning under Ambiguous Information, *accepted at Journal of Economic Theory*

Abstract: This paper proposes a model of how biased individuals update beliefs in the presence of model uncertainty. Individuals are ambiguous about the actual signal-generating process and interpret signals according to the model that can best support their biases. This paper provides a complete characterization of the limit beliefs under this rule. The presence of model ambiguity has the following effects. First, it destroys correct learning even if infinitely many informative signals can be observed. When the ambiguity is sufficiently high, individuals can self-confirm their biases, leading to belief extremism and polarization. Second, an ambiguous individual can exhibit greater confidence than a Bayesian individual with *any* feasible model perception. This phenomenon comes from a novel complementary effect of different models in the belief set. As an extension, this paper also discusses the case where the bias can change with beliefs.

3. Naive Social Learning with Heterogeneous Model Perceptions

Abstract: This paper studies a social learning problem where individuals observe a sequence of signals and repeatedly communicate their beliefs with neighbors. Individuals follow a naive rule when learning from others and may incorrectly interpret their own information. This paper provides a set of characterizations for limit beliefs in this learning problem. One key feature of the characterizations is that

the society has a tendency to settle on a state that minimizes the weighted relative entropy between the true and the perceived data-generating processes, and the weight describes the network's centrality. This paper further notes that it is possible that beliefs fail to converge or converge to multiple limits, which can be characterized by a variant of the weighted relative entropy. One implication is that group irrationality can arise. The society may settle on a state that is against every member's private information. Even if every individual is able to identify the true state independently, the society may end up learning incorrectly after communications.

TEACHING EXPERIENCE

TA for Prof. David Easley, Microeconomics I Ph.D.	<i>Fall 2018</i>
TA for Prof. Larry Blume, Microeconomics II Ph.D.	<i>Spring 2018, Spring 2019, Spring 2020</i>
TA for Prof. Mukul Majumdar, Mathematical Economics Ph.D.	<i>Fall 2019</i>
TA for Prof. Stephanie Thomas, Introductory Microeconomics	<i>Fall 2017</i>

PRESENTATIONS

ASSA Meeting (scheduled)	<i>2022</i>
North America Winter Meeting (poster), Oxford-Nuffield College	<i>2021</i>
Delhi Winter School, 15th Economics Graduate Student Conference, 12th World Congress	<i>2020</i>
Midwest Economic Theory Conference	<i>2019</i>

AWARDS

Ernest Liu 64 Ta-Chung and Ya-Chao Liu Memorial Fellowship	<i>2020</i>
Michael Brunn Family Goldman Sachs Scholarship, Cornell University	<i>2020</i>
Tapan Mitra Economics Prize, Cornell University	<i>2019</i>
The Louis Walinsky Outstanding Teaching Award, Cornell University	<i>2019</i>
Sage fellowship, Cornell University	<i>2016</i>
Outstanding Graduate, Peking University	<i>2016</i>
National Scholarship, Chinese Ministry of Education	<i>2015</i>
Pacemaker to Merit Student, Peking University	<i>2015</i>
Woori Bank Scholarship, Peking University	<i>2014</i>
Mingde Scholarship, Peking University	<i>2012-2016</i>

REFERENCES

David Easley (chairperson) Henry Scarborough Professor of Social Science Department of Economics Cornell University dae3@cornell.edu	Lawrence Blume Distinguished Professor of Arts and Sciences in Economics Department of Economics Cornell University lb19@cornell.edu	Tommaso Denti Assistant Professor; Salvatore Faculty Fellow Department of Economics Cornell University tjd237@cornell.edu
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