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DOCTORAL STUDIES Massachusetts Institute of Technology (MIT)
 PhD, Economics, 2017-2023
 DISSERTATION: "Essays in Economic Theory"

DISSERTATION COMMITTEE AND REFERENCES

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PRIOR EDUCATION Bocconi University:
 Bachelor of Science, *summa cum laude* 2014
 Master of Science, *summa cum laude* 2016

CITIZENSHIP Italian **GENDER:** Male

LANGUAGES Italian, English, Spanish

FIELDS Primary Fields: Theory
 Secondary Fields: Behavioral, Networks

MIT Economics

GIACOMO LANZANI

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TEACHING EXPERIENCE	Graduate Topics in Game Theory Teaching Assistant to Professor Drew Fudenberg Undergraduate Economic Applications of Game Theory Teaching Assistant to Professor Muhamet Yildiz	2019-22 2020
FELLOWSHIPS AND AWARDS	Decision Analysis Society Best Student Paper Award Guido Cazzavillan Ph.D. Fellowship, full-tuition and stipend scholarship Bocconi Merit Awards, full-tuition scholarship	
PROFESSIONAL ACTIVITIES	<u>Refereeing:</u> <i>American Economic Review, Quarterly Journal of Economics, Review of Economic Studies, American Economic Review: Insights, Theoretical Economics, Journal of Economic Theory, Mathematics of Operations Research, Management Science, Games and Economic Behavior, Economic Theory, Mathematical Social Sciences, European Journal of Operational Research</i> <u>Presentations:</u> 2022: <i>Barcelona School of Economics Summer Forum, Advances in Decision Analysis, Risk Uncertainty and Decision, D-Tea</i> , 2021: <i>Asian Summer Meeting of the Econometric Society, D-Tea</i> , 2020: <i>World Congress of the Econometric Society, Congress of the European Economic Association</i> , 2019: <i>Summer Institute of Theoretical Economics (Stanford), Workshop on the Cognitive Foundations of Economic Behavior (NYU, Invited), Advances in Decision Analysis, Bayesian Crowd Conference, Workshop on Attention and Choice (University of Zurich), EAYE workshop on Social Networks (Paris School of Economics), European Winter Meeting of the Econometrics Society</i> 2018: <i>North American Summer Meeting of the Econometric Society, European Summer Meeting of the Econometric Society</i>	
PUBLICATIONS	“Correlation Made Simple: Applications to Salience and Regret Theory” <i>Quarterly Journal of Economics</i> , 2022 “Limit Points of Endogenous Misspecified Learning” (with D. Fudenberg and P. Strack), <i>Econometrica</i> , 2021 “Which Misspecifications Persist?” (with D. Fudenberg), <i>Theoretical Economics</i> , Forthcoming “Learning and Self-confirming Long-Run Biases” (with P. Battigalli, A. Francetich, and M. Marinacci), <i>Journal of Economic Theory</i> , 2019 “Ambiguity Attitudes and Self-Confirming Equilibrium in Sequential Games” (with P. Battigalli, E. Catonini, and M. Marinacci), <i>Games and Economic Behavior</i> , 2019	

RESEARCH PAPERS

“Dynamic Concern for Misspecification” (Job Market Paper)

Decision Analysis Society Best Student Paper Award

We consider an agent who posits a set of probabilistic models for the payoff relevant outcomes. The agent has a prior over this set but fears the actual model is omitted and hedges against this possibility. The concern for misspecification is endogenous: If a model explains the previous observations well, the concern attenuates. We show that different preferences under uncertainty can arise in the long run, depending on how quickly the agent becomes unsatisfied with unexplained evidence and whether they are misspecified. The misspecification concern's endogeneity naturally induces behavior cycles, and we characterize the limit action frequency. This model rationalizes the empirical evidence on monetary policy cycles and labor supply choices in the face of complex tax schedules. Finally, we axiomatize in terms of observable choices this decision criterion and how quickly the agent adjusts their misspecification concern.

“Dynamic Opinion Aggregation: Long-run Stability and Disagreement”

(with S. Cerreia-Vioglio and R. Corrao)

Revise and Resubmit at the Review of Economic Studies

This paper proposes a model of non-Bayesian social learning in networks that accounts for heuristics and biases in opinion aggregation. The updating rules are represented by nonlinear opinion aggregators from which we extract two extreme networks capturing strong and weak links. We provide graph-theoretic conditions on these networks that characterize opinions' convergence, consensus formation, and efficient or biased information aggregation. Under these updating rules, agents may ignore some of their neighbors' opinions, reducing the number of effective connections and inducing long-run disagreement for finite populations. For the wisdom of the crowd in large populations, we highlight a trade-off between how connected the society is and the nonlinearity of the opinion aggregator. Our framework bridges several models in the social learning literature, thereby providing a unifying approach to the field.

“Pathwise Concentration Bounds for Bayesian Beliefs,”

(with D. Fudenberg and P. Strack)

Revise and Resubmit at Theoretical Economics

We show that the probability that Bayesian posteriors assign to the outcome distributions that do not “best fit” the empirical distribution in terms of Kullback-Leibler divergence converges to zero at a uniform and exponential rate, even when the prior does not have full support. This extends the uniform convergence result of Diaconis and Freedman (1990), which assumes a full support prior, and lets us provide a rate of convergence for Berk (1966)'s result that the posterior concentrates around the Kullback-Leibler minimizers with respect to the true data generating process. Our analysis bounds the error in the “anticipated-utility” models used in macroeconomics. We also extend our analysis to the case where outcomes are perceived to have a Markov structure.

“(Un-)Common Preferences, Ambiguity, and Coordination”

(with S. Cerreia-Vioglio and R. Corrao)

We study the "common prior" assumption and its implications when agents have preferences beyond SEU. We consider interim preferences consistent with the same ex-ante evaluation and characterize the latter in terms of higher-order expectations. Agents are mutually dynamic consistent with the same ex-ante evaluation if and only if all the higher-order expectations limits coincide, extending beyond SEU the characterization of the common prior in Samet (1998). We characterize the equilibrium prices in financial beauty contests in terms of the agents' information, coordination motives, and attitudes toward uncertainty. Differently from the SEU case, the limit price does not coincide in general with the common ex-ante expectation. Moreover, when the agents share the same benchmark probabilistic model, high-coordination motives eliminate their concern for misspecification in equilibrium, exposing them to a divergence between the market price and the fundamental value of the security.

“Selective Memory Equilibrium”

(with D. Fudenberg and P. Strack)

We study agents who are more likely to remember some experiences than others, but update beliefs as if the experiences they remember are the only ones that occurred. If the agent's behavior converges, their limit strategy is a selective memory equilibrium. We illustrate how selective memory equilibrium can be used to understand the long-run effects of several well-documented memory biases, such as ego-boosting bias, associativeness, interference, and extreme experience bias. We then extend our analysis to cases where the expected number of recalled experiences is bounded and experiences that are recalled once are more likely to be recalled again. Here the frequency of recalled experiences does not converge, but we characterize the long-run action frequencies that can arise.