

Nathan Hancart

Department of Economics, University of Oslo

nathan.hancart@econ.uio.no
nathanhancart.com

Employment	Assistant Professor in Economics , University of Oslo	2023 –
Working Paper	Designing the Optimal Menu of Tests A decision-maker must accept or reject a privately informed agent. The agent always wants to be accepted, while the decision-maker wants to accept only a subset of types. The decision-maker has access to a set of feasible tests and, prior to making a decision, requires the agent to choose a test from a menu, which is a subset of the feasible tests. By offering a menu, the decision-maker can use the agent's choice as an additional source of information. I show that the DM does not benefit from commitment in this context. I use this result to show in various environments when the DM benefits from offering a menu. When the domain of feasible tests contains a most informative test, I characterise when only the dominant test is offered and when a dominated test is part of the optimal menu. I also characterise the optimal menu when types are multidimensional or when tests vary in their difficulty. Managing the Expectations of Buyers with Reference-dependent Preferences <i>R&R at Journal of Economic Theory</i> I consider a model of monopoly pricing where a firm makes a price offer to a buyer with reference-dependent preferences without being able to commit to it. The reference point is the ex-ante probability of trade and the buyer exhibits an attachment effect: the higher his expectations to buy, the higher his willingness-to-pay. When the buyer's valuation is private information, a unique equilibrium exists where the firm plays a mixed strategy and its profits are the same as in the reference-independent benchmark. The equilibrium always entails inefficiencies: even as the firm's information converges to complete information, it mixes on a non-vanishing support and the probability of no trade is greater than zero. Finally, I show that when the firm can design a test about the buyer's valuation, it can do strictly better than in the reference-independent benchmark by leveraging the uncertainty generated by a noisy test. The (No) Value of Commitment I provide a sufficient condition under which a principal does not benefit from commitment in economic situations. I focus on situations described by a constrained maximisation problem. I show that commitment has no value when the <i>marginal</i> contribution of the constraints is null in the problem with commitment. This condition also has bite when constraints are binding. I then apply this condition in a mechanism design setting. I show that a designer does not benefit from being able to contract over actions when his preferences are partially aligned with the agent's. Verifying the condition does not necessitate verifying explicitly that the strategy under commitment is a best-response to the information revealed in the economic problem.	
Education	PhD in Economics , University College London MRes in Economics, University College London MSc in Economics, University College London BSc in Business Engineering, Université Libre de Bruxelles	2018 – 2023 2018 2017 2016
Teaching	Microeconomics (MRes, UCL) Econometrics (BSc, University of London - External Program) Advanced Microeconomic Theory (MSc, UCL) Economics of Information (BSc, UCL)	2018 – 2022 2022 – 2023 2018 – 2020 2017 – 2019
Honors & Awards	Award for best Teaching Assistant on an MRes module, UCL Nominated for Inspiring Teaching Delivery, Student Choice Award, UCL	Jun 2022 Jun 2020

Referee Service Theoretical Economics

Professional Experience	Research assistant for Prof. Ran Spiegler	Apr 2018 – 2022
	Research assistant for Prof. Vasiliki Skreta	2019 – 2022
	Student Representative for PhD students at the Economics Department	2017 – 2022

Presentations Theory Seminar (Center for the Study of Rationality, HU Jerusalem, 2022), Economic Theory Workshop (Tel-Aviv University, 2022), Internal Theory Workshop (Penn State, 2022), Asian School in Economic Theory (National University of Singapore/Econometric Society, 2022), International Conference on Game Theory (Stony Brook, 2022), Brown-bag theory seminar (UCL, 2022/2021), World Congress Game Theory Society (Budapest, 2021), Applied Theory Workshop (Toulouse School of Economics, 2020)

Languages French (Native), English (Fluent), Dutch (Basic), Hebrew (Basic)

Software Skills Mathematica, Matlab