Nathan Hancart

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Current Position	**PhD Candidate in Economics**, University College London Expected Completion: 2023	2018 – present
Fields	Primary: Microeconomic Theory Secondary: Information Economics, Behavioural Economics	
Placement Details	Placement Director: Prof. Franck Portier Graduate Coordinator: Daniella Harper	f.portier@ucl.ac.uk economics.jobmarket@ucl.ac.uk

References

Prof. Ran Spiegler
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Prof. Vasiliki Skreta
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Prior Education

MRes in Economics, University College London	2018
MSc in Economics, University College London	2017
BSc in Business Engineering, Université Libre de Bruxelles	2016

Job Market 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 characterise the decision-maker's optimal menu for arbitrary type structures and feasible tests. I then apply this characterisation to various environments. 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.

Working Paper

Managing the Expectations of Buyers with Reference-dependent Preferences

R&R at Journal of Economic Theory

I consider a model of monopoly pricing where a risk-neutral firm makes an offer to a buyer with reference-dependent preferences. 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 obtain costless signals on the buyer's valuation, it can do strictly better than in the reference-independent benchmark by leveraging the uncertainty generated by a noisy learning strategy. However, this advantage vanishes as the attachment effect grows large.

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 *marginal* 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.

Teaching	**Microeconomics** (MRes, UCL)	2018 – 2022
	Econometrics (BSc, University of London - External Program)	2022 – 2023
	Advanced Microeconomic Theory (MSc, UCL)	2018 – 2020
	Economics of Information (BSc, UCL)	2017 – 2019
Honors & Awards	Award for best Teaching Assistant on an MRes module, UCL	Jun 2022
	Nominated for Inspiring Teaching Delivery, Student Choice Award, UCL	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, Scheduled 2022), Economic Theory Workshop (Tel-Aviv University, Scheduled 2022), Internal Theory Workshop (Penn State, Scheduled 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	