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, Behavioral Economics	
Supervisors	Prof. Ran Spiegler Prof. Vasiliki Skreta	
Prior Education	**MRes** in Economics, University College London **MSc** in Economics, University College London **BSc** in Business Engineering, Université Libre de Bruxelles	2018 2017 2016

Job Market Paper

Optimal Menus of Tests

I study the optimal design of menus of tests. Prior to taking a binary decision, accept or reject a privately informed agent, a decision-maker (DM) can perform one test from a restricted set. For example, the restriction can come from information processing or technological constraints. The DM wants to accept a subset of types whereas the agent always wants to be accepted. Instead of choosing the test himself, the DM let the agent choose a test from a menu. The choice itself then serves as an additional dimension for information revelation. I characterise when a menu is optimal and show that the DM does not benefit from committing to an action. Using these results, I show conditions under which the DM wants or does not want to include strictly less informative test in the menu. I also define an order on tests that characterises which tests are part of an optimal menu. Finally, I demonstrate in an application how the need to provide incentives for self-selection in a menu hinders the ability to learn from the test itself.

Working Paper

Managing the Expectations of Buyers with Reference-dependent Preferences

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.

Teaching	**Microeconomics** (MRes, UCL)	2018 – present
	Advanced Microeconomic Theory (MSc, UCL)	2018 – 2020
	Economics of Information (BSc, UCL)	2017 – 2019
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 – present
Presentations	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