

PATRICK SEWELL

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EDUCATION

Universitat Pompeu Fabra , Spain PhD Economics	2022 - 2027
UC Berkeley , USA Visiting Research Scholar	Spring 2026
University of Sydney , Australia Visiting Research Scholar	June-July 2024
Universitat Pompeu Fabra , Spain MRes, Economics (PhD Track)	2021 - 2022
Barcelona School of Economics , Spain M.S., Economics (PhD Track)	2020 - 2021
University of Evansville , USA B.S., Cognitive Science, Economics (Double Major), <i>Summa Cum Laude</i>	2016 - 2020
Turku School of Economics , Finland Exchange Semester	Spring 2018

REFERENCES

Prof. **José Apesteguia** (Advisor)
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Prof. **Ryan Oprea**
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WORKING PAPERS

Attention Allocation under Scarcity

[Job Market Paper](#)

Scarcity is fundamental to economics: limited resources force trade-offs. However, can simply *feeling* scarce affect economic behavior beyond these constraints? I study this question theoretically and empirically. I develop a model that formalizes *perceived scarcity* and show how it leads individuals to optimally reallocate limited attention toward the scarce domain and away from competing tasks. The model explains how seemingly conflicting positive, negative, and null effects on task performance observed in the literature can arise from a common mechanism of attention allocation. I test the model in a preregistered experiment with 501 participants, exposing them to different consumption budgets before giving everyone the same budget. Despite facing identical constraints, participants accustomed to higher budgets are substantially more likely to feel scarce (77% versus 45%). They devote 10 percentage points more attention to consumption and search more extensively, yet do not make significantly better consumption decisions. Meanwhile, their performance in a competing productive task declines, and their total earnings are 15% lower. I also find suggestive evidence consistent with the model's predictions in Hungarian administrative data on job search behavior. These findings show that scarcity can affect economic behavior not only through resource constraints but also through how scarce those resources feel.

Brain Stimulation Increases Strategic Risk-Taking and Coordination

First author; *R&R at PNAS*

with Jose Apesteguia (UPF), Eva Díez-Rodríguez, Vanessa Soto-León, Antonio Oliviero (FENNSI)

Coordination failures are pervasive in economic and social life, yet their behavioral determinants remain difficult to isolate because beliefs, risk attitudes, and other traits often move together. We study these determinants using transcranial static magnetic stimulation (tSMS) over the left dorsolateral prefrontal cortex (DLPFC) in two randomized, placebo-controlled, double-blind experiments (N=112). Modulating the left DLPFC increased selection of the risky action required for efficient coordination in repeated Stag Hunt games, raising the rate of choosing this action by 16-17 percentage points. The effect was concentrated among participants with pessimistic beliefs about their partner's future actions, indicating a greater willingness to bear strategic risk. This interpretation is supported by an independent lottery task, in which stimulated participants also became more risk tolerant. By contrast, we do not find evidence that the treatment affected measured reciprocity, patience, or cognitive reflection.

Extracting Models from Data: A Cost-Benefit Framework

with Andrea Salvanti (UPF)

We develop a theoretical framework for analyzing how learning occurs directly from data in the absence of prior information. We interpret learning as the process through which decision makers identify a model, defined as the set of variables that matter for the outcome, and use those variables to form behavioral rules. The comparative statics show that extraction of the optimal rule depends not only on its own value, but also on how clearly it outperforms competing alternatives. Differences in cognitive costs then make agents respond differently to changes in relative rule values, generating systematic and predictable disagreement even when they face the same data. Finally, the framework makes rule-specific costs identifiable from behavior, allowing us to determine which observable measures of complexity can be interpreted as entering the cost function. We test the framework in our experiment and in a reanalysis of data from Kendall and Oprea (2024), finding strong support for its predictions in both settings.

WORK IN PROGRESS

The Elementary Costs of Choice: Mental Operations and Heuristics

with Ryan Oprea (UC Berkeley)

Improving Matching with Response Times

with Brenden Eum (U Toronto)

RESEARCH INTERESTS

Behavioral Economics, Experimental Economics, Neuroeconomics

PRESENTATIONS & EVENTS ATTENDED

2026: *Internal Theory Seminar Caltech, Krajbich Lab UCLA, 2nd Berlin PhD conference, ESA Europe UPF, Behavioral Economics Spring School UCSD* (poster), *FUR Alicante, EEA-ESEM Dublin, BSPA Harvard Kennedy School* (poster)

2025: *NeuroPsychoEconomics Dublin; ASFEE Nancy; Cognitive Foundations of Decision-Making SS Ghent; Lindau Nobel Laureates Meeting in Economic Sciences; Society for Neuroeconomics Boston* (poster)

2024: *Summer Institute in Theory-Based Experiments Caltech; FUR University of Queensland; Neuroeconomics of Disadvantage Workshop Sydney; Society for Neuroeconomics Cascais* (poster)

2023: *Neuroeconomics Summer School UPenn* (poster); *Summer Institute on Bounded Rationality Max Planck Institute Berlin* (poster); *The 33rd Advanced School in Economic Theory Jerusalem* (poster)

2022: *European Association for Decision Making UPF* (poster); *International Behavioural Public Policy Conference LSE* (attended); *International Rationality Summer Institute IRSI3* (attended)

MERITS AND AWARDS

- REACT Grant for “Attention Allocation under Scarcity” Experiment (4.940€), *Universitat Pompeu Fabra*
- REACT Grant for “Misspecified Model Extraction” Experiment (4.980€), *Universitat Pompeu Fabra*
- Young Scholar Lindau Nobel Laureate Meetings on Economic Sciences 2025, *Germany*
- Full Scholarship for Neuroeconomics Summer School (\$2.000), *University of Pennsylvania*
- 3rd place for Research in 4 Minutes (300€), *Universitat Pompeu Fabra*
- PhD Teaching Prize 2022-2023 (1.000€), *Universitat Pompeu Fabra*
- FPI grant (2023-2026), *Agencia Estatal de Investigación*
- Full Tuition Scholarship, *University of Evansville*
- First place in the GIC 2020 Policy Hack, *GIC Conference*
- MSc thesis selected among the best master’s thesis and published in BSE Voice

TEACHING EXPERIENCE

Barcelona School of Economics

- TA, Behavioral Decision Making (Master’s level) Winter 2024/2025
- TA, Development Economics (Master’s level) Winter 2023

Universitat Pompeu Fabra

- TA, Introduction to Microeconomics Fall 2022/2023/2024/2025

University of Evansville

- TA, Regression Analysis Fall 2019
- TA, Principles of Microeconomics Fall 2017, Spring 2019, Fall 2019
- TA, Principles of Macroeconomics Fall 2018

ACADEMIC WORK

- Research Assistant** for Gianmarco Leon, UPF 2022/23
Universal Basic Income program in Catalunya (field experiment)
- Research Assistant** for Jose Apesteguia and Francesco Cerigioni, UPF 2022
Choice by Association to Concepts
- Research Assistant** for Helena Ramalhinho Lourenço, UPF 2021
Healthcare Mobility
- Research Assistant** for Anthony Beavers, University of Evansville 2018
Remodeling Kallipolis, an Agent-Based Modelling Approach

SERVICE

Refereeing: The Economic Journal, Journal of Economic Interaction and Coordination
Organizer: ESA Europe 2026 social events; Beeronomics Faculty-Student meet-up (2024,2025); UPF PhD social events (2024)

LANGUAGES

English (native), **Portuguese** (native), **Spanish** (fluent), **French** (intermediate)