

Dr. Pablo Fernandez Velasco

Research interests

I am particularly interested in spatial cognition, environmental experience, and the role that affective processes play in evaluating and regulating cognition. I explore all of these themes in collaboration with researchers across neuroscience, computer science, psychology, geography, anthropology and architecture. This interdisciplinary ethos is reflected in the diverse methodologies involved in my work, which span phenomenology, cognitive ethnography, brain imaging, gamified experiments, survey instruments and thematic analysis. For my British Academy project, I will be exploring ecological grief, the sense of loss that arises from experiencing environmental destruction. The plan is to combine phenomenological methods with recent advances in the cognitive sciences to develop an integrative theory of ecological grief that serves as the basis of future interdisciplinary research into the psychological effects of environmental destruction.

Employment

Research Fellow

Senior researcher

Philosophy

University of York

Sally Baldwin Buildings Block A, York

1 Sept 2023 → 9 Apr 2025

Research outputs

London taxi drivers exploit neighbourhood boundaries for hierarchical route planning

Griesbauer, E.-M., Fernandez Velasco, P., Coutrot, A., Wiener, J. M., Morley, J. G., McNamee, D., Manley, E. & Spiers, H. J., 1 Mar 2025, In: *Cognition*. 256, 14 p., 106014.

Predicting real-world navigation performance from a virtual navigation task in older adults

Goodroe, S., Fernandez Velasco, P., Gahnstrom, C. J., Wiener, J., Coutrot, A., Hornberger, M. & Spiers, H. J., 27 Jan 2025, In: *PLOS ONE*. 20, 1, 15 p., e0317026.

Expert navigators deploy rational complexity-based decision precaching for large-scale real-world planning

Fernandez Velasco, P., Griesbauer, E.-M., Brunec, I. K., Morley, J., Manley, E., McNamee, D. C. & Spiers, H. J., 23 Jan 2025, In: *Proceedings of the National Academy of Sciences of the United States of America*. 122, 4, e2407814122.

The Nature of Grief: Implications for the Neurobiology of Emotion

Ratcliffe, M. J. & Fernandez Velasco, P., 17 Dec 2024, In: *Neuroscience of consciousness*. 2024, 1, 9 p., niae041.

Social and temporal disorientation during the Covid-19 pandemic: An analysis of 3306 responses to a quantitative questionnaire

Fernandez Velasco, P., Perroy, B., Gurchani, U. & Casati, R., 1 Nov 2024, In: *British journal of psychology*. 115, 4, p. 577-598 22 p.

Self-location in perceptual experience: A top-down account

Fernandez Velasco, P., 5 Aug 2024, In: *Mind and Language*. 17 p.

Ecological grief as a crisis in dwelling

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The relationship between object-based spatial ability and virtual navigation performance

Garg, T., Velasco, P. F., Patai, E. Z., Malcolm, C. P., Kovalets, V., Bohbot, V. D., Coutrot, A., Hegarty, M., Hornberger, M. & Spiers, H. J., 9 May 2024, In: *PLOS ONE*. 19, 5, e0298116.

Expert Navigators Deploy Rational Hierarchical Prioritization Over Predictive Maps For Large-Scale Real-World Planning

Fernandez Velasco, P., Griesbauer, E.-M., Brunec, I., Morley, J., Manley, E., McNamee, D. & Spiers, H., 29 Mar 2024, *biorxiv*, (bioRxiv).

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Metacognitive Feelings: A Predictive-Processing Perspective
Fernández Velasco, P. & Loev, S., 29 Jan 2024, (E-pub ahead of print) In: Perspectives on Psychological Science. 23 p., 17456916231221976.

Mental maps, practical mastery and environmental experience: an analysis of the wayfinding culture of Evenki reindeer herders and hunters
Velasco, P. F. & Gleizer, A., 26 Jan 2024, In: The Journal of Navigation. 76, 4-5, p. 590-601 12 p.

Wayfinding across ocean and tundra: what traditional cultures teach us about navigation
Fernandez-Velasco, P. & Spiers, H. J., 2 Jan 2024, In: Trends in Cognitive Sciences. 28, 1, p. 56-71 16 p.

Group navigation and procedural metacognition
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Lost in pandemic time: A phenomenological analysis of temporal disorientation during the Covid-19 crisis
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Experiencing a slow passage of time was an indicator of social and temporal disorientation during the Covid-19 pandemic
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Come Closer, Famous Odysseus

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The collective disorientation of the COVID-19 crisis

Velasco, P. F., Perroy, B. & Casati, R., 1 May 2021, In: Global Discourse. 11, 3, p. 441-462 22 p.

Making and breaking our shared world: a phenomenological analysis of disorientation as a way of understanding collective emotions in distributed cognition

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A Unified Theory of Disorientation

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The many faces of disorientation: a response to Daniel R. Montello

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