

Prof. Ian M Thornton

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I was born and brought up in North East London, went to Lancaster for my undergrad and then on to Cambridge for an MPhil. I left the UK in late Eighties, travelling first to Japan, where I taught English, and then on to Australia. For four years I was a research assistant at Sydney University while completely failing to learn to surf. I then moved to the West Coast of the US, starting my PhD with Jennifer Freyd, at the University of Oregon, Eugene. I took my second year out to visit the lab of Maggie Shiffrar at Rutgers University, Newark, NJ. Returning to Eugene for two more years, I graduated in 1997. I did a post-doc in Boston, working at the now-vanished Cambridge Basic Research labs, split between MIT & Harvard. I had the good fortune to work with a number of inspiring colleagues, including Ron Rensink, Patrick Cavanagh, Simon Rushton & Rob Gray. In 2000, I moved back to Europe, joining Heinrich Buelthoff's group at the Max Planck Institute for Biological Cybernetics in Tuebingen, Germany. In 2005 I became Professor of Cognitive Psychology at Swansea University. Since 2013 I have been Professor of Cognitive Science at the University of Malta.

In my research, I'm interested in understanding how the brain represents information that changes over time. Much work on vision in Cognitive Science continues to concern itself with stable states. Often this is simple because static experimental stimuli have traditionally been more available and/or conceptually tractable. In my research I try to explore the role that time plays in mental representation. I do this by adapting standard experimental methods/techniques for use with dynamic stimuli.

Research interests

- Cognitive Science
- Dynamic Representations
- Attention
- Biological Motion
- Faces & Bodies
- Virtual Reality
- Mobile Devices

Publications

Kristjánsson, T., Thornton, I.M. & Kristjánsson, Á. 2018, "Time limits during visual foraging reveal flexible working memory templates.", *Journal of Experimental Psychology: Human Perception and Performance*, vol. 44, no. 6, pp. 827.

Thornton, I.M. 2018, "Stepping into the genetics of biological motion processing", *Proceedings of the National Academy of Sciences*, , pp. 201722625.

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Jóhannesson, Ó.I., Kristjánsson, Á. & Thornton, I.M. 2017, "Are foraging patterns in humans related to working memory and inhibitory control?", *Japanese Psychological Research*, vol. 59, no. 2, pp. 152-166.

Pilz, K.S. & Thornton, I.M. 2017, "Idiosyncratic body motion influences person recognition", *Visual Cognition*, vol. 25, no. 4-6, pp. 539-549.

Jenkins, A., Eslambolchilar, P., Lindsay, S., Hare, M., Thornton, I.M. & Tales, A. 2016, "Attitudes towards Attention and Aging: What Differences between Younger and Older Adults Tell Us about Mobile Technology Design", *International Journal of Mobile Human Computer Interaction (IJMHCI)*, vol. 8, no. 2, pp. 47-68.

Jenkins, A., Lindsay, S., Eslambolchilar, P., Thornton, I.M. & Tales, A. 2016, "Administering cognitive tests through touch screen tablet devices: potential issues", *Journal of Alzheimer's Disease*, vol. 54, no. 3, pp. 1169-1182.

Johannesson, O.I., Thornton, I.M., Smith, I.J., Chetverikov, A. & Kristjánsson, A. 2016, "Visual foraging with fingers and eye gaze", *i-Perception*, vol. 7, no. 2, pp. 2041669516637279.

Caniard, F., Bühlhoff, H.H. & Thornton, I.M. 2015, "Action can amplify motion-induced illusory displacement", *Frontiers in human neuroscience*, vol. 8, pp. 1058.

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Kristjánsson, Á., Jóhannesson, Ó.I. & Thornton, I.M. 2014, "Common attentional constraints in visual foraging", *PloS one*, vol. 9, no. 6, pp. e100752.

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Steenfeldt-Kristensen, C. & Thornton, I.M. 2013, "Haptic choice blindness", *i-Perception*, vol. 4, no. 3, pp. 207-210.

Pilz, K.S., Vuong, Q.C., Bühlhoff, H.H. & Thornton, I.M. 2011, "Walk this way: Approaching bodies can influence the processing of faces", *Cognition*, vol. 118, no. 1, pp. 17-31.

Thornton, I.M., Mullins, E. & Banahan, K. 2011, "Motion can amplify the face-inversion effect", *Psihologija*, vol. 44, no. 1, pp. 5-22.

Chandrasekaran, C., Turner, L., Bühlhoff, H.H. & Thornton, I.M. 2010, "Attentional networks and biological motion", *Psihologija*, vol. 43, no. 1, pp. 5-20.

Knoblich, G., Thornton, I., Shiffrar, M. & Grosjean, M. 2006, *Human body perception from the inside out*, Oxford University Press.

Pilz, K.S., Thornton, I.M. & Bühlhoff, H.H. 2006, "A search advantage for faces learned in motion", *Experimental Brain Research*, vol. 171, no. 4, pp. 436-447.

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Thornton, I.M. 2002, "The onset repulsion effect", *Spatial vision*, vol. 15, no. 2, pp. 219-243.

Thornton, I.M. & Kourtzi, Z. 2002, "A matching advantage for dynamic human faces", *Perception*, vol. 31, no. 1, pp. 113-132.

Thornton, I.M., Rensink, R.A. & Shiffrar, M. 2002, "Active versus passive processing of biological motion", *Perception*, vol. 31, no. 7, pp. 837-853.

Cavanagh, P., Labianca, A.T. & Thornton, I.M. 2001, "Attention-based visual routines: sprites", *Cognition*, vol. 80, no. 1-2, pp. 47-60.

Gray, R. & Thornton, I.M. 2001, "Exploring the link between time to collision and representational momentum", *Perception*, vol. 30, no. 8, pp. 1007-1022.

Thornton, I.M. & Fernandez-Duque, D. 2001, "An implicit measure of undetected change", *Spatial vision*, vol. 14, no. 1, pp. 21-44.

Thornton, I.M., Pinto, J. & Shiffrar, M. 1998, "The visual perception of human locomotion", *Cognitive Neuropsychology*, vol. 15, no. 6-8, pp. 535-552.

Learning portfolio

- [CGS5000](#) - Perception and Action: A Practical Approach
- [CGS5061](#) - Future Directions in Cognitive Science
- [CGS5065](#) - Applied Methods in Cognitive Science
- [CGS5091](#) - Cognitive Neuroscience