



Dr Christopher Benton
M.Sc.(Manc.), Ph.D.(Lond.)

Senior Lecturer

Area of research

Visual Perception

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Summary

I'm interested in visual perception, in particular motion perception and face perception. I've also recently developed an interest in applying psychophysical methods to areas of research in which such techniques have not widely been used. In terms of motion perception I've spent much of my career looking at the hierarchical organisation of motion processing mechanism – in other words, what types of mechanisms do we need to account for our perception of motion over a wide variety of stimuli. Much of my current motion work tries to tease apart the contributions and interactions involved in the processing of local and global motion. In face perception I've been looking at face adaptation, specifically using face adaptation to investigate the nature of our underlying representation of facial identity and facial expression.

Recent and current grants

- 2011 ESRC: The visual representation of facial expression and facial identity. £80,878
- 2007 EPSRC & DSTL (Defense Science and Technology Laboratory): Natural dynamic scenes and human vision. £313,391 – with Tom Troscianko (PI) & Iain Gilchrist.
- 2007 Alcohol Education & Research Council: Are you looking at me II? Effects of alcohol consumption on the processing of perceptual cues of emotional expression. £41,970 – with Marcus Munafo (PI) and Ian Penton-Voak.
- 2006 Alcohol Education & Research Council: Effects of alcohol consumption on processing of perceptual cues of emotional expressions. £4,530 – with Marcus Munafo (PI) and Ian Penton-Voak.
- 2005 EPSRC: Understanding biological motion using moving light displays. £354,778 – with Neill Campbell (PI) and Nick Scott-Samuel.
- 2005 The British Academy: Testing for viewpoint dependence in the encoding of facial expressions. £7,128 – with Stavri Nikolov.
- 2005 The Nuffield Foundation: Do the cerebral hemispheres contribute differently to body image and its disturbances? £5,780 – with Dr Christine Mohr (PI).
- 2004 Wellcome Trust Vacation Scholarship: Adaptive Mechanisms for the Encoding of Facial Expression. £1,280
- 2003 DTC Postgraduate Studentship: Fusing Motion Information with Static images. £54,000 – with Dr Nick Scott-Samuel and Stavri Nikolov.

Biography

I graduated in 1988 with a degree in Psychology from the University of Manchester. After some time away from academia I returned in 1992 and did a masters degree in Cognitive Science (again at the University of Manchester). My Master's thesis involved modelling the acquisition of the plural morpheme using neural nets. From 1994 to 1997 I worked as an RA in the Department of Psychology at University College London under the supervision of Professor Alan Johnston. During this period I also completed my PhD which was awarded early in 1998. For my PhD work I looked at the perception of second-order motion. I continued working with Alan as a postdoctoral researcher for the following 3 years before taking up a lectureship here at Bristol in 2001.

Teaching

Experimental Psychology:

- Year 2 Perception
- Year 2 Labs

PhD students supervised

- Andy Skinner – face perception.
- Peter Etchells – motion and eye movements.
- Martin Thirkettle – biological motion.
- Jian Li – real-time optical flow and motion based image fusion.

Keywords

- Perceived duration
- our perception of Faces
- Motion perception
- Psychophysics etc...

Expertise

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- visual perception
- motion perception
- face perception
- motion processing mechanism
- local motion
- global motion
- facial identity

Memberships

Organisations

[School of Experimental Psychology](#)

Other sites

- [Neuroscience](#)

Psychological Science staff

- [Psychological Science academic staff](#)

Research themes

- [Cognitive science](#)

Research groups

- [Cognitive science > Tactile action perception group](#)
- [Cognitive science > Visual perception group](#)

Links

-  [Link to resources](#)

Recent publications

- Redfern, AS & Benton, C, 2019, '[Representation of facial identity includes expression variability](#)'. *Vision Research*, vol 157., pp. 123-131
- Redfern, A & Benton, C, 2017, '[Expression dependence in the perception of facial identity](#)'. *i-Perception*, vol 8.
- Beattie, L, Curran, W, Benton, C, Harris, J & Hibbard, P, 2017, '[Perceived duration of brief visual events is mediated by timing mechanisms at the global stages of visual processing](#)'. *Royal Society Open Science*, vol 4.
- Redfern, A & Benton, C, 2017, '[Expressive Faces Confuse Identity](#)'. *i-Perception*, vol 8., pp. 1-21
- Rhodes, G, Pond, S, Jeffery, L, Benton, C, Skinner, A & Burton, N, 2017, '[Aftereffects Support Opponent Coding of Expression](#)'. *Journal of Experimental Psychology: Human Perception and Performance*, vol 43., pp. 619-628
- Benton, CP, Thirkettle, M & Scott-Samuel, NE, 2016, '[Biological movement and the encoding of its motion and orientation](#)'. *Scientific Reports*, vol 6.
- Benton, C & Redfern, A, 2016, '[Perceived duration increases with contrast, but only a little](#)'. *Frontiers in Psychology*, vol 7.
- Curran, W, Benton, CP, Harris, J, Hibbard, P & Beattie, L, 2016, '[Adapting to time: Duration channels do not mediate human time perception](#)'. *Journal of Vision*, vol 16.
- Benton, CP & Skinner, AL, 2015, '[Deciding on race: A diffusion model analysis of race-categorisation](#)'. *Cognition*, vol 139., pp. 18-27
- Kent, C, Skinner, AL, Weeds, C & Benton, CP, 2014, '[Proximal-distal, not medial-lateral, movement across an edge increases discrimination of edge sharpness](#)'. *PERCEPTION*.

[View complete publications list](#) in the University of Bristol publications system