

Philosophy of Perception and The Perceptual Sciences

Instructor: Brandon Ashby

1. Textbooks and reading materials

Required:

Alva Noë & Evan Thompson, (2002) *Vision and Mind: Selected Readings in the Philosophy of Perception*

All other required reading will be made available as PDFs on the course website.

2. What is The Philosophy of Perception?

This course deals with a range of philosophical issues concerning the nature and scope of perception, and it deals with many of the more theoretical aspects of the perceptual sciences. We will ask (among other things): Is perception limited to representing relatively basic properties, like colors and shapes? Or can it engage in more sophisticated sorts of representation, such as representing causal relations or the intentions of other agents? Does perception even engage in representation, or is perception in some sense more direct than that? How best can we computationally model different aspects of perception? And can these models make any progress in explaining not only how perception functions, but also why our experiences feel the way that they do? Vision will be the most discussed sensory modality in the class. However, the course will also touch upon the auditory, haptic, proprioceptive, and kinesthetic sense modalities, as well as multi-modal perception.

3. Assignments

- Micro-exams, worth 40% of your final grade.
- Essays, worth 50% of your final grade.
- Syllabus quiz, worth 2.5% of your final grade.
- Discussion forum questions, worth 7.5% of your final grade.

3.1 Micro-exams:

You will have a micro-exam every week. Micro-exams can cover any course material (lectures, readings, in-class discussions) presented in the last four weeks of the course. You will have two attempts to take each micro-exam. You will receive the highest score of your two attempts. I drop your two lowest micro-exam scores. Micro-exams will be worth 40% of your final grade. Micro-exams will be administered online via the course website. You will be able to see what questions you got wrong on a micro-exam, but you will not be told the answers to the questions.

3.2 Essays:

You will have three essays over the course of the term. Each will be 1500 words in length. You will have the option of submitting a draft of each paper before you submit it for a final grade. The essays are worth 50% of your final grade and are evenly weighted. I do not drop any essay scores. However, if you are satisfied with the grade that you receive on your first two essays, then you have the option of applying your combined score on your first two essays to your third essay. In other words, do well-enough on

your first two essays and you don't have to do the third. I do this to encourage you to work hard on your first two essays and polish them.

3.3 Syllabus quiz:

You will have a quiz on the syllabus and the structure of the course at the end of your first week of term. It is worth 2.5% of your final grade.

3.4 Discussion forum questions:

The class will be divided into two groups. You'll get your group number on the first day of class. For every reading, one of the two groups will be required to post or upvote three questions about that reading on the course website. Discussion forum questions will be worth 7.5% of your final grade. Your questions must be uploaded before 11:59PM the day before we discuss that reading in class. Your questions will be listed anonymously. Only I will be able to see your names attached to the questions. So, do not worry about asking "dumb" questions in front of the other students.

4. Course Schedule

Graded assignments are listed in red and are underlined.

Readings that are listed in footnotes are recommended but are not required.

Week 1: Philosophy of Perception: Traditional Philosophical Perspectives

- Course website: Selections from A. J. Ayer, (1974) *The Central Questions of Philosophy*, London: Weidenfeld and Nicolson.
- Textbook: P. F. Strawson, 'Perception and Its Objects' pp. 91-111.
- Course website: Selections from A. J. Ayer, (1979) 'Replies' in G. F. MacDonald (ed.) *Perception and Identity: Essays Presented to A. J. Ayer with his Replies to Them*, London: The MacMillan Press.
- Textbook: Maurice Merleau-Ponty, 'Selections from *Phenomenology of Perception*' pp. 15-35.
- Micro-exam 1

Week 2: The Standard Approach to Vision Science

- Textbook: David Marr, 'Selections from *Vision*' 229-266.
- Textbook: Richard L. Gregory, 'Perceptions as Hypotheses' pp. 111-134.
- Course website: Stephen E. Palmer, (1999) 'Color Vision: A Microcosm of Vision Science', in his *Vision Science: From Photons to Phenomenology*, Cambridge, MA: MIT Press, pp. 94-142.
- Micro-exam 2

Week 3: Ecological, Embodied, Enacted, Extended Perception

- Textbook: James J. Gibson, 'A Theory of Direct Visual Perception' pp. 77-90.
- Textbook: Alva Noë & J. Kevin O'Regan, 'On the Brain-Basis of Visual Consciousness: A Sensorimotor Account', pp. 567-598.
- Course website: Ned Block, (2005) 'Review of Alva Noë *Action in Perception*', *The Journal of Philosophy*, 102(5): 259-272.
- Micro-exam 3

Week 4: Two Visual Streams

- Textbook: A. David Milner & Melvyn A. Goodale, 'The Visual Brain in Action', pp. 515-530.
- Course website: Martha J. Farah, (2004) 'Visual Form Agnoia' in her *Visual Agnosia*, 2nd edition, Cambridge, MA: MIT Press, pp. 11-26.
- Course website: Cristiana Cavina-Pratesi, Jason D. Connolly, & A. David Milner, (2013) 'Optic Ataxia as a Model to Investigate the Role of Posterior Parietal Cortex in Visually Guided Action: Evidence From Studies of Patient M.H.', *Frontiers in Human Neuroscience*, 7: 336.
- Course website: Lawrence Weiskrants, (2009) 'Is Blindsight Just Degraded Normal Vision', *Experimental Brain Research*, 192(3): 413-416.
- Course website: Morten Overgaard, (2011) 'Visual Experience and Blindsight: A Methodological Review', *Experimental Brain Research*, 209(4): 473-479.
- Course website: Lawrence Weiskrantz, Alan Cowey, & Iona Hodiott-Hill, (2002) 'Prime-sight in a Blindsight subject', *Nature Neuroscience*, 5: 101-102.
- [Micro-exam 4](#)

Week 5: Perceptual Content Internalism and Externalism

- Course website: Tyler Burge, (1986) 'Individualism and Psychology', *The Philosophical Review*, 95(1): 3-45.
- Course website: Gabriel Segal, (1989) 'Seeing What is Not There', *The Philosophical Review*, 98(2): 189-214.
- Course website: Martin Davies, (1991) 'Individualism and Perceptual Content', *Mind*, 100(4): 461-84.
- [First essay is due.](#)
- [Micro-exam 5](#)

Week 6: Content and Perception

- Course website: Terence Horgan's and John Tiesnson's 'The Intentionality of Phenomenology and the Phenomenology of Intentionality' in D. Chalmers *Philosophy of Mind: Classical and Contemporary Readings*, Oxford: Oxford University Press, pp. 520-533.
- Textbook: Michael Tye's 'A Representational Theory of Pains and their Phenomenal Character', pp. 329-340.
- Course website: Ned Block (1990) 'Inverted Earth', *Philosophical Perspectives*, 4: 53-79.
- [Micro-exam 6](#)

Week 7: Non-Conceptual and Non-Propositional Content

- Textbook: John McDowell, 'The Content of perceptual Experience' 443-459.
- Course website: Chris Peacocke, (1992) 'Scenarios, Concepts and Perception', in T. Crane (ed.), *The Contents of Experience*, Cambridge: MIT Press, pp. 105-135.
- Course website: Tim Crane, (2009) 'Is Perception a Propositional Attitude?' *Philosophical Quarterly*, 59(236): 452-469.
- [Micro-exam 7](#)

Week 8: Perceptual Consciousness

- Textbook: Christopher Peacocke, 'Sensation and the Content of Experience: A Distinction', pp. 267-288.
- Course website: Daniel J. Simons & Christopher F. Chabris, (1999) 'Gorillas in Our Midst: Sustained Inattentional Blindness for Dynamic Events', *Perception*, 28(9): 1059-1074.
- Textbook: Daniel C. Dennett's 'Seeing is Believing—Or is it?', pp. 481-496.
- Textbook: Fred Dretske, 'Consciousness and Experience', pp. 419-443.
- [Micro-exam 8](#)

Week 9: The Haptic, Auditory, and Olfactory Senses

- Course website: Matthew Fulkerson, (2011) 'The Unity of Haptic Touch', *Philosophical Psychology*, 24(4): 493-516.
- Course website: Casey O'Callaghan, (2008) 'Object Perception: Vision and Audition', *Philosophy Compass*, 3(4): 803-829.
- Course website: Clare Batty, (2010) 'Olfactory Experience I: The Content of Olfactory Experience', *Philosophy Compass*, 5(12): 1137-1146.
- Course website: Clare Batty, (2010) 'Olfactory Experience II: Objects and Properties', *Philosophy Compass*, 5(12): 1147-1156.
- [Micro-exam 9](#)

Week 10: Multi-Modal Perception, Part 1

- Textbook: Gareth Evans, (1985) 'Molyneux's Problem', pp. 319-350.
- Course website: Judith Jarvis Thomson, (1975) 'Molyneux's Problem' *The Journal of Philosophy*, 71(October): 637-650.
- Course website: Marc O. Ernst & Heinrich H. Bühlhoff, (2004) 'Merging the Senses into a Robust Percept', *Trends in Cognitive Science*, 8(4): 162-9.
- Course website: Marc O. Ernst, (2007) 'Learning to Integrate Arbitrary Signals from Vision and Touch', *Journal of Vision*, 7(5): 1-14.
- [Second essay is due.](#)
- [Micro-exam 10](#)

Week 11: Multi-Modal Perception, Part 2: Multi-Modal Illusions

- Course website: Cassey O'Callaghan, (2008) 'Seeing What You Hear: Cross-Modal Illusions and Perception', *Philosophical Studies*, 18(1): 316-338.
- Course website: David Alais & David Burr, (2004) 'The Ventriloquist Effect Results from Near-Optimal Bimodal Integration', *Current Biology*, 14(3): 257-262.
- Course website: Ladan Shams, Yukiyasu Kamitani, & Shinsuke Shimojo, (2002) 'Visual Illusion Induced by Sound', *Cognitive Brain Research*, 14(1): 147-152.
- Course website: Kirsten Hötting & Brigitte Röder, (2004) 'Hearing Cheats Touch, But Less in Congenitally Blind than Sighted Individuals', *Psychological Science*, 15(1): 60-4.
- Course website: Charles Spence & Tim Bayne, (2015) 'Is Consciousness Multisensory?' in D. Stokes & M. Matthen (eds.), *Perception and its Modalities*, Oxford: Oxford University Press, pp. 95-132.
- [Micro-exam 11](#)

Week 12: Somatic Perception: Rubber Hands and Phantom limbs

- Course website: V. S. Ramachandran & William Hirstein, (1998) ‘The Perception of Phantom Limbs’, *Brain*, 121: 1603-1630.
- Course website: Matthew Botvinick & Jonathan Cohen, (1998) ‘Rubber Hands ‘Feel’ Touch That Eyes See’, *Nature*, 391: 756.
- Course website: M. P. M. Kammers, F. de Vignemont, L. Verhagen, & H. C. Dijkerman, (2009) ‘The Rubber Hand Illusion in Action’, *Neuropsychologia*, 47(1): 204-211.
- Course website: Andreas Kalckert & H. Henrik Ehrsson, (2014) ‘The Moving Rubber Hand Illusion Revisited: Comparing Movements and Visuotactile Stimulation to Induce Illusory Ownership’, *Consciousness and Cognition*, 26: 117-132.
- [Micro-exam 12](#)

Week 13: Biological and Social Perception

- Course website: Nikolaus F. Troje, (2013) ‘What is Biological Motion? Definition, Stimuli, and Paradigms’, in M. D. Rutherford & V. A. Kuhlmeier (eds.), *Social Perception: Detection and Interpretation of Animacy, Agency, and Intention*, Cambridge, MA: MIT Press, pp. 13-36.
- Course website: Brian J. Scholl & Tao Gao, (2013) ‘Perceiving Animacy and Intentionality: Visual Processing or Higher-Level Judgement?’ in M. D. Rutherford & V. A. Kuhlmeier (eds.) *Social perception: Detection and Interpretation of Animacy, Agency, and Intention*, Cambridge, MA: MIT Press, pp. 197-230.
- Course website: Karin Wittinghofer, Marc H. E. Lussanet, & Markus Lappe, (2010) ‘Category-Specific Interference of Object Recognition with Biological Motion perception’, *Journal of Vision*, 10(13): 1-11.
- [Micro-exam 13](#)

Week 14: Kind Perception

- Course website: Susan Siegel’s (2005) ‘Which Properties are Represented in Perception’ in T. S. Gendler and J. Hawthorne (eds.) *Perceptual Experience*, Oxford: Oxford University Press, pp. 481-503.
- Course website: Jesse Prinz’ (2013) ‘Siegel’s Get Rich Quick Scheme’, *Philosophical Studies*, 163(3): 827-835.
- Course website: Tim Bayne’s (2009) ‘Perception and the Reach of Phenomenal Content’ *Philosophical Quarterly*, 59(236): 385-404.
- [Micro-exam 14](#)

Week 15: Artificial Senses

- Textbook: David Lewis, ‘Veridical Hallucination and Prosthetic Vision’, 135-150.
- Textbook: Paul Bach-Y-Rita, ‘Sensory Substitution and Qualia’, pp. 497-514.
- Course website: Laurie von Melchner, Sarah L. Pallas, & Mriganka Sur, (2000) ‘Visual Behavior Mediated By Retinal Projections Directed to the Auditory Pathway’, *Nature*, 404: 871-876.
- Course website: Douglas O. Frost, Denis Boire, Guy Gingras, & Maurice Ptito, (2000) ‘Surgically Created Neural Pathways Mediate Visual Pattern Discrimination’, *Proceedings of the National Academies of the Sciences*, 97(20): 11068-11073.

- Course website: Ophelia Deroy & Malika Auvray, (2015) 'A Crossmodal Perceptive on Sensory Substitution', in D. Stokes & M. Matthen (eds.), *Perception and its Modalities*, Oxford: Oxford University Press, pp. 327-349.

- Third essay is due.

- Micro-exam 15

Week 16: Fall/Spring Break [MOVE TO APPROPRIATE LOCATION]

- No new assignments.