

Reading List for "Neuropsychology of Face Processing" Autumn 2015:

(Don't try reading them all!)

General textbook:

Bate, S. (2013). *Face recognition and its disorders*. Palgrave Macmillan. *This is an excellent, well-written and up to date review of both normal and abnormal face processing.*

Methods and concepts:

Basic neuroanatomy is covered in sufficient detail in the following textbooks.

Banich, M.T., and Compton, R.J. (2010) *Cognitive Neuroscience (3rd edition)*. Andover: Cengage Learning.

Bruce, V. and Young, A. (2012). *Face Perception*. London: Psychology Press. *Chapter 2 is especially relevant to this course.*

Kolb, B. and Whishaw, I.Q. (2009). *Fundamentals of Human Neuropsychology, 6th. edition*. Basingstoke: Macmillan.

Ward, J. (2010, 2nd Edition). *The Students Guide to Cognitive Neuroscience*. Hove: Psychology Press.

Hole, G. and Bourne, V. (2010). *Face Processing: Psychological, Neuropsychological and Applied Perspectives*. Oxford: O.U.P. *Chapters 1-3 and 7-10 are especially relevant to this course.*

Theories of face recognition:

Burton, A.M., Bruce, V. and Johnston, R.A. (1990). Understanding face recognition with an interactive activation model. *British Journal of Psychology*, 81, 361-380.

Burton, A.M., Jenkins, R., Hancock, P.J.B., & White, D. (2005). Robust representations for face recognition: the power of averages. *Cognitive Psychology*, 51, 256–284.

Burton, A. M., Schweinberger, S., Jenkins, R., Kaufmann, J. (2015). Arguments against a 'configural processing' account of familiar face recognition. *Perspectives on Psychological Science*, in press.

Collishaw, S.M. and Hole, G.J. (2000). Featural and configurational processes in the recognition of faces of different familiarity. *Perception*, 29: 893-909.

Hancock, J.B., Bruce, V. and Burton, A.M. (2000). Recognition of unfamiliar faces. *Trends in Cognitive Sciences*, 4(9), 330-337.

Johnston, R.A. and Edmonds, A.J. (2009). Familiar and unfamiliar face recognition: a review. *Memory*, 17(5), 577-596..

Maurer, D., LeGrand, R. and Mondloch, C. (2002). The many faces of configural processing. *Trends in Cognitive Sciences*, 6(6), 255-260.

Sandford, A., and Burton, A. M. (2014). Tolerance for distorted faces: Challenges to a configural processing account of familiar face recognition. *Cognition*, 132(3), 262-268.

Agnosia and prosopagnosia:

Anaki, D., Kaufman, Y., Freedman, M., and Moscovitch, M. (2007). Associative (prosop)agnosia without (apparent) perceptual deficits: a case-study. *Neuropsychologia*, 45, 1658–1671.

Barton, J.S., Zhao, J. and Keenan, J.P. (2003). Perception of global facial geometry in the inversion effect and prosopagnosia. *Neuropsychologia*, 41, 1703–1711.

Behrmann, M., Avidan, G., Gao, F., and Black, S. (2007). Structural imaging reveals anatomical alterations in inferotemporal cortex in congenital prosopagnosia. *Cerebral Cortex*, 17, 2354-2363.

Boutsen, L. and Humphreys, G.W. (2002). Face context interferes with local part processing in a prosopagnosic patient. *Neuropsychologia*, 40, 2305-2313.

Fox, C.J., Iaria, G. and Barton, J.J.S. (2008). Disconnection in prosopagnosia and face processing. *Cortex*, 44, 996-1009.

Gauthier, I., Behrmann, M. and Tarr, M.J. (2004). Are Greebles like faces? Using the neuropsychological exception to test the rule. *Neuropsychologia*, 42, 1961–1970.

Gobbini, M. I., & Haxby, J. V. (2007). Neural systems for recognition of familiar faces. *Neuropsychologia*, 45(1), 32-41.

Hoffman, E.A. and J.V. Haxby (2000). Distinct representations of eye gaze and identity in the distributed human neural system for face perception. *Nature Neuroscience* 3(1) 80-84.

Humphreys, G. and Riddoch, M.J. (1987). "To see but not to see: a case study of visual agnosia". Lawrence Erlbaum, London. (*A detailed description of a visual agnosic's symptoms and how they affect his life, plus a theoretical analysis of what this person's problems might reveal about normal perception*).

Riddoch, M.J., Johnston, R.A., Bracewell, R.M., Boutsen, L. and Humphreys, G.W. (2008) Are faces special? A case of pure prosopagnosia. *Cognitive Neuropsychology*, 25:1,3-26.

McNeill, J.E. and Warrington, E.K. (1993). Prosopagnosia: a face-specific disorder. *Quarterly Journal of Experimental Psychology*, 46A (1), 1-10. (*About a man who could recognise sheep but not people!*)

Perception of emotional expression:

Abbott, J.D., Wijeratne, T., Hughes, A., Perre, D. and Lindell, A.K. (2014) The influence of left and right hemisphere brain damage on configural and featural processing of affective faces. *Laterality*, 19(4), 455-472.

Batty, M. and Taylor, M.J. (2003). Early processing of the six basic facial emotional expressions. *Cognitive Brain Research*, 17, 613–620.

Calder, A.J., Young, A.W., Keane, J. and Dean, M. (2000). Configural information in facial expression perception. *Journal of Experimental Psychology*, 26 (2), 527-551.

Calvo, M.G. and Beltran, D. (2014). Brain lateralization of holistic versus analytic processing of emotional facial expressions. *Neuroimage*, 92, 237-247.

Graham, R., Devinsky, O. and LaBar, K.S. (2007). Quantifying deficits in the perception of fear and anger in morphed facial expressions after bilateral amygdala damage. *Neuropsychologia*, 45, 42–54.

Ruffman, T., Henry, J.D., Livingstone, V., and Phillips, L.H. (2008). A meta-analytic review of emotion recognition and aging: implications for neuropsychological models of aging. *Neuroscience and Biobehavioral Reviews*, 32, 863-881.

Tamietto, M., Adenzato, M., Geminiani, G. and de Gelder, B. (2007). Fast recognition of social emotions takes the whole brain: interhemispheric cooperation in the absence of cerebral asymmetry. *Neuropsychologia*, 45, 836–843.

Vuilleumier, P. and Pourtois, G. (2007). Distributed and interactive brain mechanisms during emotion face perception: evidence from functional neuroimaging. *Neuropsychologia*, 45, 174–194.

Vytal, K. and Stephan Hamann, S. (2010). Neuroimaging support for discrete neural correlates of basic emotions: a voxel-based meta-analysis. *Journal of Cognitive Neuroscience*, 22(12), 2864-2885.

Neuropsychological studies of normal people (ERP, fMRI, divided-field, selective adaptation, etc.):

Anaki, D., Boyd, J., and Moscovitch, M. (2007). Temporal integration in face perception: evidence of configural processing of temporally separated face parts. *Journal of Experimental Psychology: Human Perception and Performance*. 33 (1), 1–19.

Brooks, B.E. and Cooper, E.E. (2006). What types of visual recognition tasks are mediated by the neural subsystem that subserves face recognition? *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 32 (4), 684–698.

Carbon, Strobach, Langton, Harsányi, Leder and Kovács (2007). Adaptation effects of highly familiar faces: immediate and long lasting. *Memory and Cognition*, 35 (8), 1966-1976.

Cooper, T.J., Harvey, M., Lavidor, M., and Schweinberger, S.R. (2007). Hemispheric asymmetries in image-specific and abstractive priming of famous faces: evidence from reaction times and event-related brain potentials. *Neuropsychologia*, 45, 2910-2921.

Epstein, R.A. Higgins, J.S., Parker, W., Aguirre, G.K., and Cooperman, S. (2006). Cortical correlates of face and scene inversion: a comparison. *Neuropsychologia*, 44, 1145–1158

Gauthier, I., Skudlarski, P., Gore, J.C. and Anderson, A.W. (2000). Expertise for cars and birds recruits brain areas involved in face recognition. *Nature Neuroscience* 3(2) 191-197.

Hills, P.J., Elward, R.L. and Lewis, M.B. (2010). Cross-modal face identity aftereffects and their relation to priming. *Journal of Experimental Psychology: Human Perception and Performance*, 36(4), 876-891.

Hole, G. (2011). Identity-specific face adaptation effects: evidence for abstractive face representations. *Cognition*, 119, 216-228.

Leopold, D. A., O'Toole, A. J., Vetter, T., and Blanz, V. (2001). Prototype-referenced shape encoding revealed by high-level aftereffects. *Nature Neuroscience*, 4(1), 89-94.

Maurer, D., O'Craven, K.M., Le Grand, R., Mondloch, C.J., Springer, M.V., Lewis, T.L. and Grady, C.L. (2007). Neural correlates of processing facial identity based on features versus their spacing. *Neuropsychologia*, 45, 1438–1451.

Meinhardt-Injac, B., Persike, M. and Meinhardt, G. (2013). Holistic face processing is induced by shape and texture. *Perception*, 42, 716-732.

Rossion, B. (2013). The composite face illusion: a whole window into our understanding of holistic face perception. *Visual Cognition*, 21(2), 139-253.

Rossion, B., Gauthier, I., Goffaux, V., Tarr, M.J. and Crommelinck, M. (2002). Expertise training with novel objects leads to left-lateralized facelike electrophysiological responses. *Psychological Science*, 13(3), 250-257.

Schweinberger, S.R., Baird, L.M., Blümle, M., Kaufmann, J.M., Mohr, B. (2003). Interhemispheric cooperation for face recognition but not for affective facial expressions. *Neuropsychologia*, 41, 407–414.

Xu, Y., Liu, J. and Kanwisher, N. (2007). The M170 is selective for faces, not for expertise. *Neuropsychologia*, 43, 588–597.

Yamashita, J.A., Hardy, J.L., De Valois, K.K. and Webster, M.A. (2005). Stimulus selectivity of figural aftereffects for faces. *Journal of Experimental Psychology: Human Perception and Performance*, 31(3), 420-437.