

## PSYC3209: Cognitive Neuroscience

[View Online](#)

This reading list belongs to the advanced undergraduate level Psychology course named "Cognitive Neuroscience" (PSYC3209). The course is also taken by Masters students (PSYCG209/PSYCM209). The associated Moodle page is <https://moodle.ucl.ac.uk/course/view.php?id=22137>

---

Adolphs, R. (2003). Cognitive neuroscience: Cognitive neuroscience of human social behaviour. *Nature Reviews Neuroscience*, 4(3), 165–178. <https://doi.org/10.1038/nrn1056>

Bandettini, P. A. (2009). What's New in Neuroimaging Methods? *Annals of the New York Academy of Sciences*, 1156(1), 260–293. <https://doi.org/10.1111/j.1749-6632.2009.04420.x>

Bechara, A., Damasio, H., & Damasio, A. (2000). Emotion, Decision Making and the Orbitofrontal Cortex. *Cerebral Cortex*, 10(3), 295–307. <https://doi.org/10.1093/cercor/10.3.295>

Behrens, T. E. J., Fox, P., Laird, A., & Smith, S. M. (2013). What is the most interesting part of the brain? *Trends in Cognitive Sciences*, 17(1), 2–4. <https://doi.org/10.1016/j.tics.2012.10.010>

Benton, A. L. (1994). Neuropsychological Assessment. *Annual Review of Psychology*, 45(1), 1–23. <https://doi.org/10.1146/annurev.ps.45.020194.000245>

Bueti, D., & Walsh, V. (2009). The parietal cortex and the representation of time, space, number and other magnitudes. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 364(1525), 1831–1840. <https://doi.org/10.1098/rstb.2009.0028>

Burgess, P., Alderman, N., Volle, E., Benoit, R., & Gilbert, S. (2009). Mesulam's frontal lobe mystery re-examined. *Restorative Neurology and Neuroscience*, 27(5), 493–506. <https://doi.org/10.3233/RNN-2009-0511>

Butterworth, B., & Walsh, V. (2011). Neural basis of mathematical cognition. *Current Biology*, 21(16), R618–R621. <https://doi.org/10.1016/j.cub.2011.07.005>

Cappelletti, M., Chamberlain, R., Freeman, E. D., Kanai, R., Butterworth, B., Price, C. J., & Rees, G. (2013). Commonalities for Numerical and Continuous Quantity Skills at Temporo-parietal Junction. *Journal of Cognitive Neuroscience*, 1–14. [https://doi.org/10.1162/jocn\\_a\\_00546](https://doi.org/10.1162/jocn_a_00546)

Cognitive Neuroscience: The Biology of the Mind. (n.d.). W. W. Norton & Company; 5th International student edition edition (5 Nov 2013). [https://www.amazon.co.uk/Cognitive-Neuroscience-Biology-Michael-Gazzaniga/dp/0393667812/ref=sr\\_1\\_3?crid=1TP7LE7TAQUZF&keywords=gazzaniga+cognitive+neuroscienc](https://www.amazon.co.uk/Cognitive-Neuroscience-Biology-Michael-Gazzaniga/dp/0393667812/ref=sr_1_3?crid=1TP7LE7TAQUZF&keywords=gazzaniga+cognitive+neuroscienc)

e+the+biology+of+the+mind&qid=1579090487&srefix=gazza%2Caps%2C146&sr=8-3

Cohen, N., Pell, L., Edelson, M. G., Ben-Yakov, A., Pine, A., & Dudai, Y. (2014). Peri-encoding predictors of memory encoding and consolidation. *Neuroscience & Biobehavioral Reviews*. <https://doi.org/10.1016/j.neubiorev.2014.11.002>

Coles, Michael G. H. & Rugg, M. D. (1995). Event-related brain potentials: an introduction. Chapter 1 in *Electrophysiology of mind: event-related brain potentials and cognition*: Vol. Oxford psychology series. Oxford University Press.

Corkin, S. (2002). TIMELINE What's new with the amnesic patient H.M.? *Nature Reviews Neuroscience*, 3(2), 153–160. <https://doi.org/10.1038/nrn726>

Cyranoski, D. (2011). Neuroscience: Thought experiment. *Nature*, 469(7329), 148–149. <https://doi.org/10.1038/469148a>

Decision making. Chapter 24 of *Principles of cognitive neuroscience*. (2008). Sinauer Associates.

Devlin, J. T., & Watkins, K. E. (2007). Stimulating language: insights from TMS. *Brain*, 130(3), 610–622. <https://doi.org/10.1093/brain/awl331>

Duncan, J. (2001). An adaptive coding model of neural function in prefrontal cortex. *Nature Reviews Neuroscience*, 2(11), 820–829. <https://www.nature.com/articles/35097575>

Duncan, K. J., Pattamadilok, C., & Devlin, J. T. (2010). Investigating Occipito-temporal Contributions to Reading with TMS. *Journal of Cognitive Neuroscience*, 22(4), 739–750. <https://doi.org/10.1162/jocn.2009.21207>

Duverne, S., Motamedinia, S., & Rugg, M. D. (2009). Effects of Age on the Neural Correlates of Retrieval Cue Processing are Modulated by Task Demands. *Journal of Cognitive Neuroscience*, 21(1), 1–17. <https://doi.org/10.1162/jocn.2009.21001>

Frith, U., & Happé, F. (2005). Autism spectrum disorder. *Current Biology*, 15(19), R786–R790. <https://doi.org/10.1016/j.cub.2005.09.033>

Functional magnetic resonance imaging. Chapter 9 in *Methods in Mind (Cognitive Neuroscience)*. Bandettini, P. A. (n.d.). MIT Press (18 Sep 2009). <http://www.amazon.co.uk/Methods-Mind-Cognitive-Neuroscience-Senior/dp/0262513439>

Galli, G., Gebert, A. D., & Otten, L. J. (2013). Available processing resources influence encoding-related brain activity before an event. *Cortex*, 49(8), 2239–2248. <https://doi.org/10.1016/j.cortex.2012.10.011>

Gazzaniga, Ivry and Mangun. (n.d.). A Brief History of Cognitive Neuroscience. Chapter 1 of the textbook. In *A brief history of cognitive neuroscience*. Chapter 1 in *Cognitive Neuroscience: The Biology of the Mind* [Paperback] (pp. 2–21). W. W. Norton & Company; 5th International student edition edition (5 Nov 2013).

Gazzaniga, M. S., Ivry, R. B., & Mangun, G. R. (2014a). Cognitive Control. Chapter 12 of *Cognitive Neuroscience: The Biology of the Mind* [Paperback]. In *Cognitive Neuroscience:*

The Biology of the Mind. W. W. Norton & Co.; 4th International student edition.

Gazzaniga, M. S., Ivry, R. B., & Mangun, G. R. (2014b). Language. Chapter 11 of Cognitive Neuroscience: The Biology of the Mind [Paperback]. In Cognitive Neuroscience: The Biology of the Mind. W. W. Norton & Company; 4th International student edition.

Gazzaniga, M. S., Ivry, R. B., & Mangun, G. R. (2014c). Memory. Chapter 9 of Cognitive Neuroscience: The Biology of the Mind [Paperback]. In Cognitive Neuroscience: The Biology of the Mind. W. W. Norton & Company; 4th International student edition.

Gazzaniga, M. S., Ivry, R. B., & Mangun, G. R. (2014d). Social cognition. Chapter 13 of Cognitive Neuroscience: The Biology of the Mind [Paperback]. In Cognitive Neuroscience: The Biology of the Mind. W. W. Norton & Company; 4th International student edition.

Gilbert, S. J., Bird, G., Brindley, R., Frith, C. D., & Burgess, P. W. (2008). Atypical recruitment of medial prefrontal cortex in autism spectrum disorders: An fMRI study of two executive function tasks. *Neuropsychologia*, 46(9), 2281–2291.  
<https://doi.org/10.1016/j.neuropsychologia.2008.03.025>

Gilbert, S. J., & Burgess, P. W. (2008). Executive function. *Current Biology*, 18(3), R110–R114. <https://doi.org/10.1016/j.cub.2007.12.014>

Gilbert, S. J., Spengler, S., Simons, J. S., Steele, J. D., Lawrie, S. M., Frith, C. D., & Burgess, P. W. (2006). Functional Specialization within Rostral Prefrontal Cortex (Area 10): A Meta-analysis. *Journal of Cognitive Neuroscience*, 18(6), 932–948.  
<https://doi.org/10.1162/jocn.2006.18.6.932>

Gratton, G., & Fabiani, M. (2001). Shedding light on brain function: the event-related optical signal. *Trends in Cognitive Sciences*, 5(8), 357–363.  
[https://doi.org/10.1016/S1364-6613\(00\)01701-0](https://doi.org/10.1016/S1364-6613(00)01701-0)

Gruber, M. J., & Otten, L. J. (2010). Voluntary Control over Prestimulus Activity Related to Encoding. *Journal of Neuroscience*, 30(29), 9793–9800.  
<https://doi.org/10.1523/JNEUROSCI.0915-10.2010>

Harvey, B. M., Klein, B. P., Petridou, N., & Dumoulin, S. O. (2013). Topographic Representation of Numerosity in the Human Parietal Cortex. *Science*, 341(6150), 1123–1126. <https://doi.org/10.1126/science.1239052>

Hutchinson, J. B., Uncapher, M. R., & Wagner, A. D. (2009). Posterior parietal cortex and episodic retrieval: Convergent and divergent effects of attention and memory. *Learning & Memory*, 16(6), 343–356. <https://doi.org/10.1101/lm.919109>

Johnsrude, I., & Hauk, O. (2005). Neuroimaging: techniques for examining human brain function. Chapter 4 in Cognitive psychology: a methods companion. Oxford University Press in association with the Open University.

Kim, H. (2011). Neural activity that predicts subsequent memory and forgetting: A meta-analysis of 74 fMRI studies. *NeuroImage*, 54(3), 2446–2461.  
<https://doi.org/10.1016/j.neuroimage.2010.09.045>

Klein, C. (2010). Philosophical Issues in Neuroimaging. *Philosophy Compass*, 5(2), 186–198.

<https://doi.org/10.1111/j.1747-9991.2009.00275.x>

Kosslyn, S. M. (n.d.). If neuroimaging is the answer, what is the question?  
<http://rstb.royalsocietypublishing.org/content/354/1387/1283.full.pdf>

Landmarks in human functional brain imaging. (n.d.).  
<https://wellcome.ac.uk/sites/default/files/wtvm052606.pdf>

Lee, V. K., & Harris, L. T. (2013). How social cognition can inform social decision making. *Frontiers in Neuroscience*, 7. <https://doi.org/10.3389/fnins.2013.00259>

Levy, I., Lazzaro, S. C., Rutledge, R. B., & Glimcher, P. W. (2011). Choice from Non-Choice: Predicting Consumer Preferences from Blood Oxygenation Level-Dependent Signals Obtained during Passive Viewing. *Journal of Neuroscience*, 31(1), 118–125.  
<https://doi.org/10.1523/JNEUROSCI.3214-10.2011>

Logothetis, N. K. (2008). What we can do and what we cannot do with fMRI. *Nature*, 453 (7197), 869–878. <https://doi.org/10.1038/nature06976>

Mauk, M. D., & Buonomano, D. V. (2004). THE NEURAL BASIS OF TEMPORAL PROCESSING. *Annual Review of Neuroscience*, 27(1), 307–340.  
<https://doi.org/10.1146/annurev.neuro.27.070203.144247>

Michael S. Gazzaniga, et al. (n.d.). *Methods of Cognitive Neuroscience*. Chapter 3 of textbook. In *Methods of cognitive neuroscience. The Biology of the Mind* (pp. 72–123). W. W. Norton & Company; 4th International student edition edition (5 Nov 2013).

Michael S. Gazzaniga, et al. (2014). Structure and function of the nervous system. In *Cognitive neuroscience: the biology of the mind* (4th ed., International student ed, pp. 22–79). W.W. Norton.

Miller, E. K., & Cohen, J. D. (2001). An Integrative Theory of Prefrontal Cortex Function. *Annual Review of Neuroscience*, 24(1), 167–202.  
<https://doi.org/10.1146/annurev.neuro.24.1.167>

Moran, J. M., & Zaki, J. (2013). Functional Neuroimaging and Psychology: What Have You Done for Me Lately? *Journal of Cognitive Neuroscience*, 25(6), 834–842.  
[https://doi.org/10.1162/jocn\\_a\\_00380](https://doi.org/10.1162/jocn_a_00380)

Neuroimaging: Separating the Promise from the Pipe Dreams - Dana Foundation. (n.d.).  
<https://www.dana.org/article/neuroimaging-separating-the-promise-from-the-pipe-dreams/>

Paller, K. A., & Wagner, A. D. (2002). Observing the transformation of experience into memory. *Trends in Cognitive Sciences*, 6(2), 93–102.  
[https://doi.org/10.1016/S1364-6613\(00\)01845-3](https://doi.org/10.1016/S1364-6613(00)01845-3)

Park, H., & Rugg, M. D. (2009). Prestimulus hippocampal activity predicts later recollection. *Hippocampus*, NA-NA. <https://doi.org/10.1002/hipo.20663>

POLDRACK, R. (2006). Can cognitive processes be inferred from neuroimaging data? *Trends in Cognitive Sciences*, 10(2), 59–63. <https://doi.org/10.1016/j.tics.2005.12.004>

- Priori, A. (2003). Brain polarization in humans: a reappraisal of an old tool for prolonged non-invasive modulation of brain excitability. *Clinical Neurophysiology*, 114(4), 589–595. [https://doi.org/10.1016/S1388-2457\(02\)00437-6](https://doi.org/10.1016/S1388-2457(02)00437-6)
- Raichle, M. E. (2009). A brief history of human brain mapping. *Trends in Neurosciences*, 32(2), 118–126. <https://doi.org/10.1016/j.tins.2008.11.001>
- Ramnani, N., & Owen, A. M. (2004). Anterior prefrontal cortex: insights into function from anatomy and neuroimaging. *Nature Reviews Neuroscience*, 5(3), 184–194. <https://doi.org/10.1038/nrn1343>
- Rangel, A., Camerer, C., & Montague, P. R. (2008). A framework for studying the neurobiology of value-based decision making. *Nature Reviews Neuroscience*, 9(7), 545–556. <https://doi.org/10.1038/nrn2357>
- Reite, M., Teale, P., & Rojas, D. C. (1999). Magnetoencephalography: applications in psychiatry. *Biological Psychiatry*, 45(12), 1553–1563. [https://doi.org/10.1016/S0006-3223\(99\)00062-1](https://doi.org/10.1016/S0006-3223(99)00062-1)
- Rippon, G. (n.d.). Electroencephalography. Chapter 10 in *Methods in Mind (Cognitive Neuroscience)* [Paperback]. MIT Press (18 Sep 2009). <http://www.amazon.co.uk/Methods-Mind-Cognitive-Neuroscience-Senior/dp/0262513439>
- Rösler, F., & Ranganath, C. (2009). On how to reconcile mind and brain. In *Neuroimaging of Human Memory Linking cognitive processes to neural systems* (pp. 15–24). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199217298.003.0002>
- Rugg, M. D., & Thompson-Schill, S. L. (2013). Moving Forward With fMRI Data. *Perspectives on Psychological Science*, 8(1), 84–87. <https://doi.org/10.1177/1745691612469030>
- Rugg, M. D., & Vilberg, K. L. (2013). Brain networks underlying episodic memory retrieval. *Current Opinion in Neurobiology*, 23(2), 255–260. <https://doi.org/10.1016/j.conb.2012.11.005>
- Rugg, M. D., & Wilding, E. L. (2000). Retrieval processing and episodic memory. *Trends in Cognitive Sciences*, 4, 108–115.
- Sack, A. T. (2006). Transcranial magnetic stimulation, causal structure–function mapping and networks of functional relevance. *Current Opinion in Neurobiology*, 16(5), 593–599. <https://doi.org/10.1016/j.conb.2006.06.016>
- Seyal, M., Mull, B., Bhullar, N., Ahmad, T., & Gage, B. (1999). Anticipation and execution of a simple reading task enhance corticospinal excitability. *Clinical Neurophysiology*, 110(3), 424–429. [https://doi.org/10.1016/S1388-2457\(98\)00019-4](https://doi.org/10.1016/S1388-2457(98)00019-4)
- Squire, L. R., Stark, C. E. L., & Clark, R. E. (2004). The Medial Temporal Lobe. *Annual Review of Neuroscience*, 27(1), 279–306. <https://doi.org/10.1146/annurev.neuro.27.070203.144130>
- Structure and function of the nervous system. Chapter 2 of *Cognitive Neuroscience: The Biology of the Mind* [Paperback]. (n.d.). W. W. Norton & Company; 4th International student edition edition (5 Nov 2013).

[http://www.amazon.co.uk/Cognitive-Neuroscience-The-Biology-Mind/dp/0393922286/ref=sr\\_1\\_1?ie=UTF8&qid=1390474967&sr=8-1&keywords=gazzaniga+cognitive+neuroscience](http://www.amazon.co.uk/Cognitive-Neuroscience-The-Biology-Mind/dp/0393922286/ref=sr_1_1?ie=UTF8&qid=1390474967&sr=8-1&keywords=gazzaniga+cognitive+neuroscience)

Thut, G., & Miniussi, C. (2009). New insights into rhythmic brain activity from TMS-EEG studies. *Trends in Cognitive Sciences*, 13(4), 182–189.  
<https://doi.org/10.1016/j.tics.2009.01.004>

Uncapher, M. R., & Wagner, A. D. (2009). Posterior parietal cortex and episodic encoding: Insights from fMRI subsequent memory effects and dual-attention theory. *Neurobiology of Learning and Memory*, 91(2), 139–154. <https://doi.org/10.1016/j.nlm.2008.10.011>

Verhoeven, J. S., Cock, P., Lagae, L., & Sunaert, S. (2010). Neuroimaging of autism. *Neuroradiology*, 52(1), 3–14. <https://doi.org/10.1007/s00234-009-0583-y>

Walsh, V. (2003). A theory of magnitude: common cortical metrics of time, space and quantity. *Trends in Cognitive Sciences*, 7(11), 483–488.  
<https://doi.org/10.1016/j.tics.2003.09.002>

Walsh, V., & Cowey, A. (1998). Magnetic stimulation studies of visual cognition. *Trends in Cognitive Sciences*, 2(3), 103–110. [https://doi.org/10.1016/S1364-6613\(98\)01134-6](https://doi.org/10.1016/S1364-6613(98)01134-6)

Weber, M. J., & Thompson-Schill, S. L. (2010). Functional Neuroimaging Can Support Causal Claims about Brain Function. *Journal of Cognitive Neuroscience*, 22(11), 2415–2416.  
<https://doi.org/10.1162/jocn.2010.21461>

White, S. J. (2013). The Triple I Hypothesis: Taking Another('s) Perspective on Executive Dysfunction in Autism. *Journal of Autism and Developmental Disorders*, 43(1), 114–121.  
<https://doi.org/10.1007/s10803-012-1550-8>

White, S. J., Frith, U., Rellecke, J., Al-Noor, Z., & Gilbert, S. J. (2014). Autistic adolescents show atypical activation of the brain's mentalizing system even without a prior history of mentalizing problems. *Neuropsychologia*, 56, 17–25.  
<https://doi.org/10.1016/j.neuropsychologia.2013.12.013>