

Class 1 History of working memory research

Cowan, N. (1988). Evolving conceptions of memory storage, selective attention, and their mutual constraints within the human information-processing system. *Psychological Bulletin*, 104(2), 163-191. doi:10.1037/0033-2909.104.2.163

Mewhort, D. J., Campbell, A. J., Marchetti, F. M., & Campbell, J. I. (1981). Identification, localization, and “iconic memory”: An evaluation of the bar-probe task. *Memory & Cognition*, 9(1), 50-67. doi:10.3758/bf03196951

Miller, G. A. (1956). *The magical number seven, plus or minus two: Some limits on our capacity for processing information*. Indiana: Bobbs-Merrill.

Sperling, G. (1960). *The information available in brief visual presentations*. Washington, D.C.: American Psychological Association. (pdf)

Baddeley, A. D., & Hitch, G. (1974). Working Memory. *Psychology of Learning and Motivation*, 47-89. doi:10.1016/s0079-7421(08)60452-1 (pdf)

Class 2 The Controversy Regarding Item Limits on Working Memory

Awh, E., Barton, B., & Vogel, E. K. (2007). Visual Working Memory Represents a Fixed Number of Items Regardless of Complexity. *Psychological Science*, 18(7), 622-628. doi:10.1111/j.1467-9280.2007.01949.x

Bays, P. M., & Husain, M. (2008). Dynamic Shifts of Limited Working Memory Resources in Human Vision. *Science*, 321(5890), 851-854. doi:10.1126/science.1158023

Brady, T. F., & Alvarez, G. A. (2015). No evidence for a fixed object limit in working memory: Spatial ensemble representations inflate estimates of working memory capacity for complex objects. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 41(3), 921-929. doi:10.1037/xlm0000075

Chen, Z., & Cowan, N. (2009). Core verbal working-memory capacity: The limit in words retained without covert articulation. *The Quarterly Journal of Experimental Psychology*, 62(7), 1420-1429. doi:10.1080/17470210802453977

Ma, W. J., Husain, M., & Bays, P. M. (2014). Changing concepts of working memory. *Nature Neuroscience Nat Neurosci*, 17(3), 347-356. doi:10.1038/nn.3655

Nosofsky, R. M., & Donkin, C. (2016). Qualitative Contrast Between Knowledge-Limited Mixed-State and Variable-Resources Models of Visual Change Detection. *Journal of Experimental Psychology: Learning, Memory, and Cognition*. doi:10.1037/xlm0000268

Wolfe, J. M. (2012). Saved by a Log: How Do Humans Perform Hybrid Visual and Memory Search? *Psychological Science*, 23(7), 698-703. doi:10.1177/0956797612443968

Zhang, W., & Luck, S. J. (n.d.). Discrete Fixed-Resolution Representations in Visual Working Memory. *PsycEXTRA Dataset*. doi:10.1037/e527342012-120

Zhang, G., & Simon, H. A. (1985). STM capacity for Chinese words and idioms: Chunking and acoustical loop hypotheses. *Memory & Cognition*, 13(3), 193-201. doi:10.3758/bf03197681

Zhang, W., & Luck, S. J. (2011). The Number and Quality of Representations in Working Memory. *Psychological Science*, 22(11), 1434-1441. doi:10.1177/0956797611417006

Class 3 The controversy Regarding Attention Limits and Interference Across Sets

Allen, R. J., Hitch, G. J., Mate, J., & Baddeley, A. D. (2012). Feature binding and attention in working memory: A resolution of previous contradictory findings. *The Quarterly Journal of Experimental Psychology*, 65(12), 2369-2383. doi:10.1080/17470218.2012.687384

Baddeley, A. (2000). The episodic buffer: A new component of working memory? *Trends in Cognitive Sciences*, 4(11), 417-423. doi:10.1016/s1364-6613(00)01538-2

Cocchini, G., Logie, R. H., Sala, S. D., Macpherson, S. E., & Baddeley, A. D. (2002). Concurrent performance of two memory tasks: Evidence for domain-specific working memory systems. *Memory & Cognition*, 30(7), 1086-1095. doi:10.3758/bf03194326

Cowan, N., Blume, C. L., & Saults, J. S. (2013). Attention to attributes and objects in working memory. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 39(3), 731-747. doi:10.1037/a0029687

Cowan, N., Saults, J. S., & Blume, C. L. (2014). Central and peripheral components of working memory storage. *Journal of Experimental Psychology: General*, 143(5), 1806-1836. doi:10.1037/a0036814

Fougnie, D., Zughni, S., Godwin, D., & Marois, R. (2015). Working memory storage is intrinsically domain specific. *Journal of Experimental Psychology: General*, 144(1), 30-47. doi:10.1037/a0038211

Morey, C. C., & Bieler, M. (n.d.). Visual Short-Term Memory Always Requires General Attention. *PsycEXTRA Dataset*. doi:10.1037/e502412013-516

Morey, C. C., & Cowan, N. (2004). When visual and verbal memories compete: Evidence of cross-domain limits in working memory. *Psychonomic Bulletin & Review*, 11(2), 296-301. doi:10.3758/bf03196573

Tulving, E., & Patkau, J. E. (1962). Concurrent effects of contextual constraint and word frequency on immediate recall and learning of verbal material. *Canadian Journal of Psychology/Revue Canadienne De Psychologie*, 16(2), 83-95. doi:10.1037/h0083231

Class 4 The Controversy Regarding Time Limits of Working Memory

Barrouillet, P., Bernardin, S., & Camos, V. (2004). Time Constraints and Resource Sharing in Adults' Working Memory Spans. *Journal of Experimental Psychology: General*, *133*(1), 83-100. doi:10.1037/0096-3445.133.1.83

Crowder, R. G. (1993). Short-term memory: Where do we stand? *Mem Cogn Memory & Cognition*, *21*(2), 142-145. doi:10.3758/bf03202725 (pdf)

Davelaar, E. J., Goshen-Gottstein, Y., Ashkenazi, A., Haarmann, H. J., & Usher, M. (2005). The Demise of Short-Term Memory Revisited: Empirical and Computational Investigations of Recency Effects. *Psychological Review*, *112*(1), 3-42. doi:10.1037/0033-295x.112.1.3

Keppel, G., & Underwood, B. J. (1962). Proactive inhibition in short-term retention of single items. *Journal of Verbal Learning and Verbal Behavior*, *1*(3), 153-161. doi:10.1016/s0022-5371(62)80023-1

Oberauer, K., & Lewandowsky, S. (2008). Forgetting in immediate serial recall: Decay, temporal distinctiveness, or interference? *Psychological Review*, *115*(3), 544-576. doi:10.1037/0033-295x.115.3.544

Peterson, L., & Peterson, M. J. (1959). Short-term retention of individual verbal items. *Journal of Experimental Psychology*, *58*(3), 193-198. doi:10.1037/h0049234

Ricker, T. J., Spiegel, L. R., & Cowan, N. (2014). Time-based loss in visual short-term memory is from trace decay, not temporal distinctiveness. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *40*(6), 1510-1523. doi:10.1037/xlm0000018

Waugh, N. C., & Norman, D. A. (1965). Primary memory. *Psychological Review*, *72*(2), 89-104. doi:10.1037/h0021797

Class 5 Practical Applications on Working Memory

Conway, A. R., Cowan, N., Bunting, M. F., Theriault, D. J., & Minkoff, S. R. (2002). A latent variable analysis of working memory capacity, short-term memory capacity, processing speed, and general fluid intelligence. *Intelligence*, *30*(2), 163-183. doi:10.1016/s0160-2896(01)00096-4

Cowan, N. (2013). Working Memory Underpins Cognitive Development, Learning, and Education. *Educational Psychology Review Educ Psychol Rev*, *26*(2), 197-223. doi:10.1007/s10648-013-9246-y

Cowan, N. (2016). Working Memory Maturation: Can We Get at the Essence of Cognitive Growth? *Perspectives on Psychological Science*, *11*(2), 239-264. doi:10.1177/1745691615621279

Engle, R. W., Tuholski, S. W., Laughlin, J. E., & Conway, A. R. (1999). Working memory, short-term memory, and general fluid intelligence: A latent-variable approach. *Journal of Experimental Psychology: General*, *128*(3), 309-331. doi:10.1037/0096-3445.128.3.309

Finley, J. R., Benjamin, A. S., & Mccarley, J. S. (2014). Metacognition of multitasking: How well do we predict the costs of divided attention? *Journal of Experimental Psychology: Applied*, *20*(2), 158-165. doi:10.1037/xap0000010

Gaillard, V., Barrouillet, P., Jarrold, C., & Camos, V. (2011). Developmental differences in working memory: Where do they come from? *Journal of Experimental Child Psychology*, *110*(3), 469-479. doi:10.1016/j.jecp.2011.05.004

Goldinger, S. D., Kleider, H. M., Azuma, T., & Beike, D. R. (2003). "Blaming The Victim" Under Memory Load. *Psychological Science*, *14*(1), 81-85. doi:10.1111/1467-9280.01423

Hulme, C., & Tordoff, V. (1989). Working memory development: The effects of speech rate, word length, and acoustic similarity on serial recall. *Journal of Experimental Child Psychology*, *47*(1), 72-87. doi:10.1016/0022-0965(89)90063-5

Kane, M. J., Hambrick, D. Z., Tuholski, S. W., Wilhelm, O., Payne, T. W., & Engle, R. W. (2004). The Generality of Working Memory Capacity: A Latent-Variable Approach to Verbal and Visuospatial Memory Span and Reasoning. *Journal of Experimental Psychology: General*, *133*(2), 189-217. doi:10.1037/0096-3445.133.2.189

Mckown, C., & Strambler, M. J. (2009). Developmental Antecedents and Social and Academic Consequences of Stereotype-Consciousness in Middle Childhood. *Child Development*, *80*(6), 1643-1659. doi:10.1111/j.1467-8624.2009.01359.x

Regner, I., Smeding, A., Gimmig, D., Thinus-Blanc, C., Monteil, J., & Huguet, P. (2010). Individual Differences in Working Memory Moderate Stereotype-Threat Effects. *Psychological Science*, *21*(11), 1646-1648. doi:10.1177/0956797610386619

Sanbonmatsu, D. M., Strayer, D. L., Medeiros-Ward, N., & Watson, J. M. (2013). Who Multi-Tasks and Why? Multi-Tasking Ability, Perceived Multi-Tasking Ability, Impulsivity, and Sensation Seeking. *PLoS ONE*, *8*(1). doi:10.1371/journal.pone.0054402

General readings:

Cowan, N. (2010). The Magical Mystery Four: How Is Working Memory Capacity Limited, and Why? *Current Directions in Psychological Science*, *19*(1), 51-57. doi:10.1177/0963721409359277

Cowan, N., Li, D., Moffitt, A., Becker, T. M., Martin, E. A., Saults, J. S., & Christ, S. E. (2011). A Neural Region of Abstract Working Memory. *Journal of Cognitive Neuroscience*, *23*(10), 2852-2863. doi:10.1162/jocn.2011.21625

- Kane, M. J., & Engle, R. W. (2002). The role of prefrontal cortex in working-memory capacity, executive attention, and general fluid intelligence: An individual-differences perspective. *Psychonomic Bulletin & Review*, 9(4), 637-671. doi:10.3758/bf03196323
- Kharitonova, M., Winter, W., & Sheridan, M. A. (2015). As Working Memory Grows: A Developmental Account of Neural Bases of Working Memory Capacity in 5- to 8-Year Old Children and Adults. *Journal of Cognitive Neuroscience*, 27(9), 1775-1788. doi:10.1162/jocn_a_00824
- Lewis-Peacock, J. A., Drysdale, A. T., Oberauer, K., & Postle, B. R. (2012). Neural Evidence for a Distinction between Short-term Memory and the Focus of Attention. *Journal of Cognitive Neuroscience*, 24(1), 61-79. doi:10.1162/jocn_a_00140
- Lisman, J., & Idiart, M. (1995). Storage of 7 +/- 2 short-term memories in oscillatory subcycles. *Science*, 267(5203), 1512-1515. doi:10.1126/science.7878473
- Lisman, J., & Jensen, O. (2013). The Theta-Gamma Neural Code. *Neuron*, 77(6), 1002-1016. doi:10.1016/j.neuron.2013.03.007
- Luck, S. J., & Vogel, E. K. (1997). *Nature*, 390(6657), 279-281. doi:10.1038/36846
- Majerus, S., Cowan, N., Péters, F., Calster, L. V., Phillips, C., & Schrouff, J. (2014). Cross-Modal Decoding of Neural Patterns Associated with Working Memory: Evidence for Attention-Based Accounts of Working Memory. *Cereb. Cortex Cerebral Cortex*, 26(1), 166-179. doi:10.1093/cercor/bhu189
- May, C. P., Hasher, L., & Foong, N. (2005). Implicit Memory, Age, and Time of Day. *Psychological Science*, 16(2), 96-100. doi:10.1111/j.0956-7976.2005.00788.x
- Palva, J. M., Monto, S., Kulashekhar, S., & Palva, S. (2010). Neuronal synchrony reveals working memory networks and predicts individual memory capacity. *Proceedings of the National Academy of Sciences*, 107(16), 7580-7585. doi:10.1073/pnas.0913113107
- Peterson, D. J., & Naveh-Benjamin, M. (2016). The Role of Aging in Intra-Item and Item-Context Binding Processes in Visual Working Memory. *Journal of Experimental Psychology: Learning, Memory, and Cognition*. doi:10.1037/xlm0000275
- Todd, J. J., & Marois, R. (2004). Capacity limit of visual short-term memory in human posterior parietal cortex. *Nature*, 428(6984), 751-754. doi:10.1038/nature02466
- Todd, J. J., Han, S. W., Harrison, S., & Marois, R. (2011). The neural correlates of visual working memory encoding: A time-resolved fMRI study. *Neuropsychologia*, 49(6), 1527-1536. doi:10.1016/j.neuropsychologia.2011.01.040
- Todd, J. J., & Marois, R. (2010). Posterior parietal cortex activity predicts individual differences in visual short-term memory capacity. *Journal of Vision*, 5(8), 608-608. doi:10.1167/5.8.608

Todd, J. J., Fournie, D., & Marois, R. (2005). Visual Short-Term Memory Load Suppresses Temporo-Parietal Junction Activity and Induces Inattentional Blindness. *Psychological Science*, *16*(12), 965-972. doi:10.1111/j.1467-9280.2005.01645.x