Topics in Philosophy of Mind (Phil 555S):
The Philosophy and Science of Memory and Imagination
Time: Tuesday – 3:05 – 5:35 PM; Place: West Duke 204

Instructor:
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About the Course:
Memory plays a pivotal role in our mind. We can report our perceptions, for instance, in part because we can retrieve them from memory. We know which foods we like and which movie styles we dislike because we can remember. We know what the square root of 36 is because once we learned the answer we stored it in our memory. And we know which gate to go to at the airport, in part, because we can remember why we were there to begin with. Imagination also plays a critical role in our mental life. We decide what to get for lunch, for instance, because we imagine ourselves eating a certain dish in the next few minutes. We make career choices because we forecast a future self enjoying certain tasks or living a certain kind of life. We use imagination whenever we play, tell stories, or wonder what would have happened had we made a different choice in the past. But the relationship between memory and imagination is not totally clear. Some philosophers and scientists consider that memory and imagination are completely independent faculties. After all, memory is about the past—what happened—while imagination deals merely with possibilities—what could have or may happen. However, others think that memory and imagination share many of their operations, and even others have suggested that they are one and the same cognitive faculty. In this class we will discuss the relationship between memory and imagination, and we will read texts from philosophy, psychology and neuroscience.

Evaluation:
The day before each class, students will be required to post comments/questions about the readings for the next day. The objective of these comments/questions is, first, to make sure that the assigned texts are read and, second, to motivate discussion in class. Additionally, there will be two papers in this class. The first paper should be between 1,000 and 1,250 words long and the second (final) paper should be up to 3,500 words. In addition, there will be a take-home exam. Class participation—which presupposes, but isn't identical to, class attendance—will be evaluated as well. Here is the distribution of the grades' percentages:

Comments/questions: 20%
First paper: 15%
Take-home exam: 20%
Final paper: 25%
Class participation: 20%

All students are expected to follow the rules and regulations stipulated by the Duke Community Standard (http://studentaffairs.duke.edu/conduct/z-policies).

Texts:
There is no mandatory textbook for this class, but if you want a readable introductory text to give you some background in the science and philosophy of memory, I suggest the following:

Locke, D.C. (1971). *Memory.* London: Macmillan.

Warnock, M. *Memory*. London: Faber & Faber.

Schacter, D. (2001). *The Seven Sins of Memory*. NY: Houghton Mifflin.

Michaelian. K. (2016). *Mental Time Travel: Episodic Memory and Our Knowledge of the Personal Past*. MIT Press.

All the readings for this class will be available on the course website in Sakai. Also, this syllabus is accompanied by the following text, as background reading:

De Brigard, F. (2017). Memory and Imagination. In: Bernecker, S. & Michaelian, K. (Eds.) *Routledge Handbook of Philosophy of Memory*. Routledge Press. pp. 127-140

Schedule[1]

1. **August 26 – Introduction.**

2. **September 3 - Philosophy background (I)**

   Aristotle (~350 BD) *On Memory and Reminiscence*

   Augustine (397-400 AD) *Confessions* (Book X: 8-22)

   Descartes, R. (1626-1628/1684) *Rules for the Direction of the Mind* (X-XII)

   Descartes, R. (1630-1633/1662) *Treatise on Man* (AT XI,177-178)

   Spinoza, B. (1662) *Treatise on the Emendation of the Intellect* (81-84)

   Spinoza, B. (1677) *Ethics* (Pr. XIV-XVIII)

3. **September 10 – Philosophy background (II)**

   Hobbes, T. (1651) Leviathan. (Part 1, Ch. 2)

   Locke, J. (1690) *An Essay concerning Human Understanding* (Book II, Chapter X)

   Leibniz, G. (1714/1720) *Monadology* (26 – 29)

   Hume, D. (1738) *A Treatise of Human Nature* (Book I, Part I, 3; Part III, 5, 8-10)

   Hume, D. (1748) *An Enquiry concerning Human Understanding* (Section II, III)

   Reid, T. (1785) *Essay on the Intellectual Powers of Man*. (Essay III)

4. **September 17 – Philosophical background (III)**

   Mill, J. (1829/1869). *Analysis of the Phenomena of the Human Mind*. (Ch. VII and X).

   Russell, B. (1912). *The Problems of Philosophy* (Chapter V);

   Russell, B. (1921). *The Analysis of Mind* (Lecture IX)

   Ryle, G. (1949). *The Concept of Mind* (Chapter VIII, section 7).

   Wittgenstein, L. (1956). *Philosophical Investigations* (166, 261-265, 342-344, 602-607)

5. **September 24 – Science background (I): H.M. and the standard model of memory**

   Scoville, W.B. and Milner, B. (1957). Loss of recent memory after bilateral hippocampal lesions. *J. Neurol. Neurosurg. Psychiat*. 20: 11-21.

   Corkin, S. (1968). Acquisition of motor skill after bilateral medial temporal-lobe excision. *Neuropsychologia*, 6: 255-265.

   Milner, B. (1972). Disorders of learning and memory after temporal lobe lesions in man. *Clin. Neurosurg.* 19: 421-46.

[1] This schedule is an idealization. We may not get to all of it.

Cohen, N.J. and Squire, L.R. (1980). Preserved learning and retention of pattern-analyzing skill in amnesia: Dissociation of knowing how and knowing that. *Science,* 210(4466): 207-210.

Squire, L.R. (1992). Memory and the Hippocampus: A Synthesis From Findings With Rats, Monkeys, and Humans. *Psychological Review*. 99(2): 195-231.

6. October 1 – Science background (II) – Early psychology/neuroscience of LTM

Tulving, E. (1972). Episodic and semantic memory. *Organization of Memory.*

Tulving, E. (1985). Memory and consciousness. *Canadian Psychology/Psychologie canadienne, 26*(1), 1-12.

Schacter, D.L., Chiu, C.Y.P., Ochsner, K.N. (1993). Implicit Memory: A Selective Review. *Annu. Rev. Neurosci.* 16: 159-182.

Wheeler, M.A., Stuss, D.T., Tulving, E. (1997). Toward a Theory of Episodic Memory: The Frontal Lobes and Autonoetic Consciousness. *Psychological Bulletin.* 121(3): 331-354.

Gabrieli, J.D.E. (1998). Cognitive neuroscience of human memory. *Annual Review of Psychology*. 49:87-115.

7. October 8 – No class (Fall Break)

8. October 15 – More recent philosophical views on memory and imagination

Holland, R.F. (1954). The Empiricist Theory of Memory. *Mind*. 63: 646-486.

Furlong, E.J. (1956). Comment on Holland's "The empiricist theory of memory". *Mind*. 65: 542-547.

Urmson, J.O. (1967). Memory and Imagination. *Mind*, 76(301): 83-91.

Furlong, E.J. (1970). Mr. Urmson on Memory and Imagination. *Mind*, 79(313): 137-138.

9. October 22 – Early empirical work on false memories

Loftus, E.F., Miller, D.G., & Burns, H.J., (1978). Semantic Integration of Verbal Information into Visual Memory. *Journal of Experimental Psychology: Human Learning and Memory.* 4(1): 19-31.

Jacoby, L.L., Woloshyn, V., & Kelley, C. (1989). Becoming famous without being recognized: Unconscious influences of memory produced by dividing attention. *J Exp. Psych.: General,* 118(2): 115-125.

Roediger, H.L., & McDermott, K.B., (1995). Creating false memories: Remembering words not presented in lists. *Journal of Experimental Psychology: Learning, Memory and Cognition.* 21(4): 803-814.

Garry, M., Manning, C.G., Loftus, E.F., & Sherman, S.J. (1996). Imagination Inflation: Imagining a childhood event inflates confidence that it occurred. *Psychonomic Bulletin and Review.* 3(2): 208-214**.**

10. October 29 – Empirical approaches to false memories and imagination

Johnson, M., Hashtroudi, S., & Lindsay, D.S. (1993). Source Monitoring. *Psychological Bulletin.* 114(1): 3-28.

Reyna, V.F. & Brainerd, C.J. (1995). Fuzzy-trace theory: An interim synthesis. *Learning and individual differences.* 7(1): 1-75.

Schacter, D.L., Norman, K.A., & Koutstaal, W. (1998). The cognitive neuroscience of constructive memory. Annual Review of Psychology, 49, 289-318.

11. November 5 – Causal theory and memory traces

Martin, C.B., & Deustcher, M. (1966). Remembering. *Philosophical Review.* 75: 161-196.

Malcolm, N. (1977) – *Memory and Mind.* Cornell University Press. Ch. 6 – 7.

Zemach, E.M. (1983). Memory: What it is, and what it cannot possibly be. *Philosophy and Phenomenological Research.* 44(1): 31-44.

De Brigard, F. (2014). The nature of memory traces. *Philosophy Compass.* 9(6): 402-414.

12. November 12 – Reconstructive memory and mental simulation

Hassabis, D., Kumaran, D., Vann, S.D., & Maguire, E.A. (2007). Patients with hippocampal amnesia cannot imagine new experiences. *PNAS*, 104(5): 1726-1731.

Schacter, D.L., Addis, D., & Buckner, R.L. (2007). Remembering the past to imagine the future: The prospective brain. *Nat. Rev. Neurosci.* 8(9): 657-661

De Brigard, F. (2014). Is memory for remembering? Recollection as a form episodic hypothetical thinking. *Synthese*. 191(2): 155-185.

D. Perrin and K. Michaelian. 2017. Memory as mental time travel. *The Routledge Handbook of Philosophy of Memory*. Eds. S. Bernecker and K. Michaelian. Routledge. Pp. 228-239.

13. November 19 – Issues with constructivism

Robins, S. K. (2016). Misremembering. *Philosophical Psychology,* 29 (3), 432-447.

Robins, S.K. (2017). Confabulation and Constructive Memory. *Synthese.*

14. November 26 – Issues with constructivism 2

Michaelian. K. (2016). Confabulating, misremembering, relearning: The simulation theory of memory and unsuccessful remembering. *Frontiers in Psychology 7*: 1857

Bernecker, S. (2017). A Causal Theory of Mnemonic Confabulation. *Frontiers in Psychology*.

15. Dec 3 – Alternatives to the traditional model of LTM?

Reder, L.M., Park, H., & Kieffaber, P.D. (2009). Memory systems do not divide on consciousness: Reinterpreting memory in terms of activation and binding. *Psychol. Bull.* 135(1): 23-49

Henke, K. (2010). A model for memory systems based on processing modes rather than consciousness. *Nature Reviews: Neuroscience.* 11: 523-532.
Nadel, L., Hardt, O. (2011). Update on Memory Systems and Processes. *Neuropsychopharmacology*. 36: 251-273.

Dew, ITZ., & Cabeza, R. (2011). The porous boundaries between explicit and implicit memory: behavioral and neural evidence. *Ann. N.Y. Acad. Sci.* 1224: 174-190.