

## ***In Search of Lost Time: Memory in Legal Principle and Process***

*Legal Studies 190.8 – Spring 2023*

*Prof. Daniel A. Levy*

Human memory plays a key role in legal thought, institutions, and procedures. In a wide range of circumstances – evaluating the reliability of testimony, appreciating challenges to judges and jurors in learning and retaining information presented during a trial, assessing intent and culpability for plagiarism, or considering the admissibility of a plaintiff’s repressed memories – assumptions about the nature of memory play a vital role. This course will explore recent progress in the understanding of the nature and brain substrates of human memory. For each topic, the relevant basic cognitive psychology and neuroscience information will be introduced in non-specialist terms. We will then consider the implications of those insights for philosophical attitudes, legal processes, and societal institutions.

### *Learning objectives:*

- A. To become acquainted with the fundamental processes of human memory and their brain substrates, as relevant to real-life memory challenges.
- B. To be able to identify instances of social policy and legal process in which memory veracity is crucial, and to choose appropriate procedural approaches in such circumstances.
- C. To understand the memory bases of individual and collective psychological trauma, and to be aware of their implications for disability, tort circumstances, rehabilitation, and reconciliation.
- D. To appreciate the promises and perils of memory-related physiological detection of deception in principle and practice.

### *Course requirements:*

- Reading and advance commentary (for 10 of the 11 posted sessions; you may take one week off) - 20% of the course grade
- Active participation in discussions - 20% of the course grade
- In-class oral presentation of one of the course topics - 30% of the course grade
- Comprehensive written analysis or position paper on a relevant topic of individual choice. That paper may be on the same topic as the classroom presentation, or any other relevant topic, with instructor approval - 40% of total course grade.
- Assignment guides for all required submissions will be posted on the course website.

*Advance commentary:* In advance of class meetings, you are required to contribute to an on-line forum discussion of the assigned reading on the bCourse site. This will take the form of brief responses to specific cue questions and thought challenges that will be provided by the instructor. These commentaries are due each week in advance of the seminar meeting. You are expected to read through all of the contributions before each meeting. The assignment is designed to help you reflect on the assigned reading and kick-start our seminar conversation. (You are allowed one “absence” from the bCourse forum.)

*Class presentation:* Each participant will be in charge of presenting an enrichment topic listed in the syllabus below (following up on the theme of the previous week’s class). Presentations may be up to 30 minutes (it sounds like a long time, but it’s easier to give longer presentations than shorter ones...). The

instructor will be available (live or Zoom, by appointment) to advise and assist in the preparation of the presentation. You may suggest an alternative relevant topic to those listed in the syllabus, subject to instructor approval. After the presentation, the presenter will co-moderate the class discussion of the topic (with the assistance of the instructor).

### *Academic integrity*

Please review Berkeley's Academic Integrity Policy: <http://sa.berkeley.edu/conduct/integrity>. University rules require that you comply with this policy. If you have questions as to what it requires, please contact me.

### *Accommodation*

Students who require accommodation for a disability should refer to policies here: <https://dsp.berkeley.edu/students>. As the instructor, I must receive an official accommodation notice from DSP as soon as possible.

### **Course topics** (Note: read the articles in the order listed)

#### **23 January – Unit 1: Introduction**

The mechanisms of memory

Reading: Squire & Wixted, 2015; Schacter, 1999, 2022.

#### **30 January – Unit 2: Memory of repressed trauma and false memory creation I**

Infantile amnesia, the interpretation of dreams, and unconscious repression: The ghost of Freud in the courtroom

Reading: Kihlstrom, 2006; Bauer, 2004; Gammon, 2016.

#### **6 February – Unit 2: Memory of repressed trauma and false memory creation II**

*Student presentation – Eye Movement Desensitization and Reprocessing (EMDR)*

2.2 Repressed-recovered memories of sexual, physical, and emotional abuse

*Case study: Israel Supreme Court decision in “The Memory Wars”*

Reading: Howe et al., 2017, ch. 2; Otgaar et al., 2019.

2.3 Memory reconsolidation and the effects of misleading post-event information.

Reading: Braun et al., 2002.

#### **13 February – Unit 3: Reliability of eyewitness testimony I**

*Student presentation – Flashbulb memories*

3.1 Signal detection approach to suspect identification

Reading: Gronlund et al., 2014; Wells et al., 2020; Wixted & Wells, 2017.

3.2 Scripts and schema in the formation of biased memories

Reading: Ghosh & Gilboa, 2014; Holst & Pezdek, 1992; Mandler, 2014 (selections).

#### **27 February – Unit 3: Reliability of eyewitness testimony II**

*Student presentation – Juror memory biases and limitations*

3.3 Efficacy of memory reconstruction enhancement methods

Reading: Fisher et al., 2011.

3.4 Lifespan differences in memory reliability: recent and remote memories

Reading: Fitzgerald & Price, 2015.

*Case study: Holocaust survivors' eyewitness testimony in Israeli courts*

**6 March – Unit 4: Failures of memory**

*Student presentation – Children as witnesses*

4.1 Cryptomnesia: Honest lying

Reading: Gingerich & Sullivan, 2013; Spellman & Weaver, 2022.

*Case study: Jerusalem of Gold*

4.2 Prospective memory and negligence

Reading: Einstein & McDaniel, 2005.

**13 March – Unit 5: The echoes of trauma I**

*Student presentation – Hypnosis and memory*

5.1 The neurophysiology (extinction, reconsolidation interference) and ethics of traumatic memory erasure

*Case study: Snap judgments in an Israeli emergency rooms*

Reading: Haig, 2007; Kolber, 2011; Treanor et al., 2017.

**20 March – Unit 5: The echoes of trauma II**

*Student presentation – Eternal Sunshine of the Spotless Mind?*

5.2 Post-traumatic stress disorder (PTSD) and acquired phobias: Understanding the memory systems bases of the conditions, their treatment challenges, and their disability costs.

*Case study: Combat veterans' and terror victims' rehabilitation in Israel*

Readings: Ross et al., 2017; Yehuda et al., 2015.

**3 April – Unit 6: Memory and mind reading**

*Student presentation – Trauma tort law*

Memory-based physiological lie-detection methods

*Case study: Security service screening*

Readings: Farah et al., 2014; Mameli et al., 2017; Ofen et al., 2017.

**10 April – Unit 7: Responsibility**

*Student presentation – Admissibility of polygraph testimony*

Responsibility – age, intellectual capacity, mental illness, psychopathy

Readings: Cohen & Casey, 2014; Reardon, 2014; Fox et al., 2011.

**17 April – Unit 8: Collective memory I**

*Student presentation – Psychiatric responsibility and preventative detention*

Memory and restorative justice

*Case study: Dynamics of dialogue in Israeli-Palestinian reconciliation and peace-seeking*

Readings: Blustein, 2014 (selections); Bolitho, 2017.

**24 April – Unit 8: Collective memory II**

*Student presentation – Dissociative Identity Disorders*

Monumental deconstruction, collective memory, and social justice

Reading: To be chosen by the class.

**1 May – RRR week (no class; finish your papers...)**

## Bibliography

*Readings will be accessible on the bCourses site for the class, or through campus library access using the links provided below.*

- Bauer, P. (2004). Oh where, oh where have those early memories gone? A developmental perspective on childhood amnesia. *Psychological Science Agenda*, 18, 12.  
<https://www.apa.org/science/about/psa/2004/12/bauer>
- Bolitho, J. (2017). Inside the restorative justice black box: The role of memory reconsolidation in transforming the emotional impact of violent crime on victims. *International Review of Victimology*, 23(3), 233-255. <https://doi.org/10.1177%2F0269758017714549>
- Blustein, J. M. (2014). *Forgiveness and Remembrance: Remembering Wrongdoing in Personal and Public Life*. New York: Oxford Academic. <https://doi.org/10.1093/acprof:oso/9780199329397.001.0001>.
- Braun, K. A., Ellis, R., & Loftus, E. F. (2002). Make my memory: How advertising can change our memories of the past. *Psychology & Marketing*, 19(1), 1-23. <https://doi.org/10.1002/mar.1000>
- Einstein, G. O., & McDaniel, M. A. (2005). Prospective memory: Multiple retrieval processes. *Current Directions in Psychological Science*, 14(6), 286-290. <https://doi.org.libproxy.berkeley.edu/10.1111/j.0963-7214.2005.00382.x>
- Farah, M. J., Hutchinson, J. B., Phelps, E. A., & Wagner, A. D. (2014). Functional MRI-based lie detection: scientific and societal challenges. *Nature Reviews Neuroscience*, 15(2), 123-131.  
<https://doi.org/10.1038/nrn3665>
- Fisher, R. P., Milne, R., & Bull, R. (2011). Interviewing cooperative witnesses. *Current Directions in Psychological Science*, 20(1), 16-19. <https://doi.org/10.1177/0963721410396826>
- Fitzgerald, R. J., & Price, H. L. (2015). Eyewitness identification across the life span: A meta-analysis of age differences. *Psychological Bulletin*, 141, 1228 –1265. <http://dx.doi.org/10.1037/bul0000013>
- Gammon, K. (2016). Childhood amnesia: Understanding the symptoms and causes. *Newsweek*. (August 10). <https://www.newsweek.com/2016/08/19/path-understanding-childhood-amnesia-488886.html>
- Ghosh, V. E., & Gilboa, A. (2014). What is a memory schema? A historical perspective on current neuroscience literature. *Neuropsychologia*, 53, 104-114.  
<https://doi.org/10.1016/j.neuropsychologia.2013.11.010>
- Gingerich, A. C., & Sullivan, M. C. (2013). Claiming hidden memories as one's own: A review of inadvertent plagiarism. *Journal of Cognitive Psychology*, 25(8), 903-916.  
<https://doi.org/10.1080/20445911.2013.841674>
- Gronlund, S. D., Wixted, J. T., & Mickes, L. (2014). Evaluating eyewitness identification procedures using Receiver Operating Characteristic analysis. *Current Directions in Psychological Science*, 23(1), 3–10. <https://doi.org/10.1177/0963721413498891>
- Haig, S. (2007). The ethics of erasing a bad memory. *Time*. (October 15).  
<http://content.time.com/time/health/article/0,8599,1671492,00.html> .
- Holst, V. F., & Pezdek, K. (1992). Scripts for typical crimes and their effects on memory for eyewitness testimony. *Applied Cognitive Psychology*, 6(7), 573-587.  
<https://doi.org/10.1002/acp.2350060702>
- Howe, M. L., Knott, L. M., & Conway, M. A. (2017). *Memory and miscarriages of justice*. Psychology Press.

- Kihlstrom, J. F. (2006). Trauma and memory revisited. In: Uttl, B., Ohta, N., & Siegenthaler, A. L. (Eds.) (2006). *Memory and emotions: Interdisciplinary perspectives* (pp. 259-291). New York: Blackwell.
- Mameli, F., Scarpazza, C., Tomasini, E., Ferrucci, R., Ruggiero, F., Sartori, G., & Priori, A. (2017). The guilty brain: The utility of neuroimaging and neurostimulation studies in forensic field. *Reviews in the Neurosciences*, 28(2), 161–172. <https://doi.org/10.1515/revneuro-2016-0048>
- Mandler, J. M. (2014). *Stories, scripts, and scenes: Aspects of schema theory*. Psychology Press.
- Ofen, N., Whitfield-Gabrieli, S., Chai, X. J., Schwarzlose, R. F., & Gabrieli, J. D. (2017). Neural correlates of deception: Lying about past events and personal beliefs. *Social Cognitive and Affective Neuroscience*, 12(1), 116–127. <https://doi.org/10.1093/scan/nsw151>
- Otgaar, H., Howe, M. L., Patihis, L., Merckelbach, H., Lynn, S. J., Lilienfeld, S. O., & Loftus, E. F. (2019). The return of the repressed: The persistent and problematic claims of long-forgotten trauma. *Perspectives on Psychological Science*, 14(6), 1072–1095. <https://doi.org/10.1177/1745691619862306> (See also: <https://pubmed.ncbi.nlm.nih.gov/33709851/> )
- Ross, D. A., Arbuckle, M. R., Travis, M. J., Dwyer, J. B., van Schalkwyk, G. I., & Ressler, K. J. (2017). An integrated neuroscience perspective on formulation and treatment planning for posttraumatic stress disorder: an educational review. *JAMA Psychiatry*, 74(4), 407–415. <https://doi.org/10.1001/jamapsychiatry.2016.3325>
- Schacter, D. L. (1999). The seven sins of memory: insights from psychology and cognitive neuroscience. *American Psychologist*, 54(3), 182-203. <https://psycnet.apa.org/doi/10.1037/0003-066X.54.3.182>
- Schacter, D. L. (2022). The seven sins of memory: an update. *Memory*, 30(1), 37-42. <https://doi.org/10.1080/09658211.2021.1873391>
- Squire, L. R., & Wixted, J. T. (2015). Remembering. *Daedalus*, 144(1), 53-66. [https://doi.org/10.1162/DAED\\_a\\_00317](https://doi.org/10.1162/DAED_a_00317)
- Treanor, M., Brown, L. A., Rissman, J., & Craske, M. G. (2017). Can memories of traumatic experiences or addiction be erased or modified? A critical review of research on the disruption of memory reconsolidation and its applications. *Perspectives on Psychological Science*, 12(2), 290-305. <https://doi.org/10.1177/1745691616664725>
- Wells, G. L., Kovera, M. B., Douglass, A. B., Brewer, N., Meissner, C. A., & Wixted, J. T. (2020). Policy and procedure recommendations for the collection and preservation of eyewitness identification evidence. *Law and Human Behavior*, 44(1), 3–36. <https://doi.org/10.1037/lhb0000359>
- Wixted, J. T., & Wells, G. L. (2017). The relationship between eyewitness confidence and identification accuracy: A new synthesis. *Psychological Science in the Public Interest*, 18(1), 10–65. <https://doi.org/10.1177/1529100616686966>
- Yehuda, R., Hoge, C. W., McFarlane, A. C., Vermetten, E., Lanius, R. A., Nievergelt, C. M., ... & Hyman, S. E. (2015). Post-traumatic stress disorder. *Nature Reviews Disease Primers*, 1(1), 1-22. <https://doi.org/10.1038/nrdp.2015.57>