

Who You Are is What You Know

**Psychology 471M
Emory University
Fall Semester, 1997
Lawrence W. Barsalou**

**Wednesdays, 9:00 - 11:40 AM
Psychology Building, Room 219**

In this undergraduate seminar, we will explore how knowledge defines who we are. Knowledge enters into every facet of human existence and activity, from how we perceive the physical environment, to how we construe social events, to how we execute expert skills, to how we conceive of ourselves. To a substantial extent, individuals differ because of what they know.

The seminar will begin by surveying the myriad ways in which knowledge enters into experience and action. Once we establish these phenomena, we will explore the psychological mechanisms that underlie them. In particular, we will focus on the cognitive mechanisms that acquire, represent, and process knowledge, including implicit memory, categorical representation, dynamic retrieval, perceptual simulation, and top-down inference. We will also touch on other types of mechanisms, including neural, social, and cultural systems. A central theme will be that the brain is constantly trying to retrieve the specific knowledge that best simulates current perceptual experience, so as to provide optimal expectations about what is likely to occur, and about how best to act. Once we establish the mechanisms that underlie knowledge, we will bring them back to bear on the critical phenomena, exploring a few in depth. Possibilities include how knowledge underlies self concepts, social perception, emotion, environmentalism, politics, education, consumer behavior, artistic interpretation, and religion. The particular phenomena selected will reflect the interests of students.

Students will play an active role in defining and running the seminar. Besides helping to select the focal topics, students will be responsible for finding and presenting material in the seminar meetings. In the first few meetings, students will be asked to describe how knowledge enters into various aspects of their personal experience, for example, into perception, memory, and social interaction. In later sessions, students will be asked to search for research in the library that illustrates various roles of knowledge, for example, in self concepts, consumer behavior, and environmentalism. For each meeting, relevant readings will be assigned as background material. Short written summaries associated with the various presentations will be required occasionally. Students will also write a paper that explores a role of knowledge that is of particular interest to them. There will be no tests. The course can be taken for a grade, or pass-fail.

Course Schedule

Meeting	Date	Topic / Readings
1	9/3	Introduction and Logistics
2	9/10	Knowledge Effects: Movement and Perception Ramachandran, V.S. (1992). Filling in gaps in perception: Part 1. <i>Current Directions in Psychological Science</i> , 1, 199-205. Ramachandran, V.S. (1993). Filling in gaps in perception: Part II: Scotomas and phantom limbs. <i>Current Directions in Psychological Science</i> , 2, 56-65. Massaro, D.W., & Cohen, M.M. (1995). Perceiving talking faces. <i>Current Directions in Psychological Science</i> , 4, 104-109. Shiffrar, M. (1994). When what meets where. <i>Current Directions in Psychological Science</i> , 3, 96-100. Peterson, M.A. (1994). Object recognition processes can and do operate before figure-ground organization. <i>Current Directions in Psychological Science</i> , 3, 105-111. Shepard, R.N. (1990). <i>Mind sights</i> (158-214, plus drawings A2, D3, D4, D9, G7, H3). New York: W.H. Freeman and Co.
3	9/17	Knowledge Effects: Memory Brewer, W.F., & Treyens, J.C. (1981). Role of schemata in memory for places. <i>Cognitive Psychology</i> , 13, 207-230. Ross, M. (1989). Relation of implicit theories to the construction of personal histories. <i>Psychological Review</i> , 96, 341-357. Fallshore, M., & Schooler, J.W. (1995). Verbal vulnerability of perceptual expertise. <i>Journal of Experimental Psychology: Learning, Memory, and Cognition</i> , 21, 1608-1623.
4	9/24	Knowledge Effects: Language Bransford, J.D., & Johnson, M.K. (1973). Considerations of some problems of comprehension. In W.G. Chase (Ed.), <i>Visual information processing</i> (). New York: Academic Press. Graesser, A.C., Singer, M., & Trabasso, T. (1994). Constructing inferences during narrative text comprehension. <i>Psychological Review</i> , 101, 371-395. Long, D.L., Oppy, B.J., & Seely, M.R. (1997). Individual differences in readers' sentence- and text-level representations. <i>Journal of Memory and Language</i> , 36, 129-145.

- 5 10/1 **Knowledge Effects: Social Cognition**
Beike, D.R., & Sherman, S.J. (1994). Social inference: Inductions, deductions, and analogies. In R.S. Wyer, Jr. & Srull, T.K. (Eds.), *Handbook of social cognition: Vol. 1. Basic processes* (2nd ed., 209-285). Mahwah, NJ: Lawrence Erlbaum Associates.
Greenwald, A.G. & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, 102, 4-27.
Andersen, S.M., & Glassman, N.S. (1996). Responding to significant others when they are not there: Effects on interpersonal inference, motivation, and affect. In E.T. Higgins & R.M. Sorrentino (Eds.), *Handbook of motivation and cognition: Foundations of social behavior* (Vol. 3, 262-321). New York: Guilford Press.
- 6 10/8 **Mechanisms: Implicit Memory**
Jacoby, L.L., Allan, L.G., Collins, J.C., Larwill, L.K. (1988). Memory influences subjective experience: Noise judgments. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 14, 240-247.
Jacoby, L.L., Kelley, C.M., Brown, J., & Jasechko, J. (1989). Becoming famous overnight: Limits on the ability to avoid unconscious influences of the past. *Journal of Personality and Social Psychology*, 56, 326-338.
Kelley, C.M., & Jacoby, L.L. (1996). Adult egocentrism: Subjective experience versus analytic bases for judgment. *Journal of Memory and Language*, 35, 157-175.
Roediger, H. L. III & McDermott, K. B. (1993). Implicit memory in normal human subjects. In F. Boller & J. Grafman (Eds.), *Handbook of Neuropsychology* (Vol. 8, 63-131). Elsevier Science Publishers B.V.
- 7 10/15 **Mechanisms: Perceptual Simulation**
Finke, R.A. (1989). *Principles of mental imagery* (29-60). Cambridge, MA: MIT Press.
Farah, M. (1995). The neural bases of mental imagery. In M.S. Gazzaniga (Ed), *The cognitive neurosciences* (963-975). Cambridge, MA: MIT Press.
Barsalou, L.W., Solomon, K.O., & Wu, L.L. (1997). Perceptual simulation in conceptual tasks. In M.K. Hiraga, C. Sinha, & S. Wilcox (Eds.), *Cultural, typological, and psychological perspectives in cognitive linguistics: The proceedings of the 4th conference of the International Cognitive Linguistics Association, Vol. 3*. Amsterdam: John Benjamins.

- 8 10/22 **Mechanisms: Categories and Concepts**
 Medin, D.L., & Ross, B.H. (1989). The specific character of abstract thought: Categorization, problem solving, and induction. In R. J. Sternberg (Ed.), *Advances in the psychology of human intelligence* (Vol. 5, 189-223). Mahwah, NJ: Lawrence Erlbaum Associates.
 Thorndyke, P.W., & Hayes-Roth, B. (1979). The use of schemata in the acquisition and transfer of knowledge. *Cognitive Psychology*, *11*, 82-106.
 Barsalou, L.W., Yeh, W., Luka, B.J., Olseth, K.L., Mix, K.S., & Wu, L. (1993). Concepts and meaning. In K. Beals, G. Cooke, D. Kathman, K.E. McCullough, S. Kita, & D. Testen (Eds.), *Chicago Linguistics Society 29: Papers from the parasession on conceptual representations* (pp. 23-61). University of Chicago: Chicago Linguistics Society.
- 9 10/29 **Mechanisms: Top-Down Processing**
- review knowledge effects across the first eight sessions
 - classify knowledge effects according to origins, mechanisms, effects, etc.
 - scientific exercise: students construct review lists and classification schemes
 - no new readings
- 10 11/5 **Special Topic: To be determined by student interest**
- 11 11/12 **Special Topic: To be determined by student interest**
- 12 11/19 **Special Topic: To be determined by student interest**
- 13 11/26 **Special Topic: To be determined by student interest**
- 14 12/3 **Special Topic: To be determined by student interest**

Possible Special Topics

social perception
stereotypes
self concepts
emotion
cognitive therapy
false memory phenomena
environmentalism
politics
education
consumer behavior
artistic interpretation
religion
meditation, zen

- special topics not limited to those above