CG 2800, Fall, 2012
Language: History, Mystery, Mind, & Brain

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Section 1: History

A picaresque tour of some classic works in linguistics and the psychology of language. (4 weeks).

his·to·ry
Pronunciation: ˈhis-t(ə-)rē
Function: *noun*
Inflected Form(s): *plural* **-ries**
Etymology: Middle English *histoire, historie,* from Anglo-French *estoire, histoire,* from Latin *historia,* from Greek, inquiry, history, from *histōr, istōr* knowing, learned; akin to Greek *eidenai* to know
Date: 14th century
1 : tale, story
2 a : a chronological record of significant events (as affecting a nation or institution) often including an explanation of their causes **b :** a treatise presenting systematically related natural phenomena **c :** an account of a patient's medical background **d :** an established record <a prisoner with a *history* of violence>
3 : a branch of knowledge that records and explains past events <medieval *history*>
4 a : events that form the subject matter of a history **b :** events of the past **c :** one that is finished or done for <the winning streak was *history*> <you're *history*> **d :** previous treatment, handling, or experience (as of a metal)

Week of September 10 – Introduction

Saussure, F. de (1913) *Course in General Linguistics*. New York: Philosophical Library. (selections).

Week of September 17 – Conceptual Foundations of the Modern Study of Language

Sapir, E. (1925). Sound patterns in language. *Language*, 1, 37-51.

Trubetskoi, N. S. (1936). *Grundzüge der Phonologie* (*Principles of phonology*). Berkeley: University of California Press (selections).

Jakobson, R. (1941) *Kindersprache, Aphasie und allgemeine Lautgesetze* (*Child language, aphasia, and linguistic universals)* The Hague: Mouton (selections).

Greenberg, J. H. (1963). Some universals of grammar with particular reference to the order of meaningful elements. In J. H. Greenberg (Ed.) *Universals of language* (pp. 73-113). Cambridge, MA: MIT Press.

Week of September 24 – Language and Psychology

Miller, G. A. & Nicely, P. A. (1955). An analysis of perceptual confusions among some English consonants. *Journal of the Acoustical Society of America*, 27, 338-352.

Liberman, A. et al. (1957). The discrimination of speech sounds within and across phoneme boundaries. *Journal of Experimental Psychology*, 54, 358-368.

Pollack, I. & Pickett, J. M. (1964). Intelligibility of excerpts from fluent speech: auditory vs. structural context. *Journal of Verbal Learning and Verbal Behavior*, 3, 79-84.

Whorf, B. L. (1936). The punctual and segmentative aspects of verbs in Hopi. *Language*, 12, 127-131.

(Whorf, B. L. (1956). Language, mind, and reality. In J. B. Carroll (Ed.) *Language, thought, and reality: Selected writings of Benjamin Lee Whorf* (pp. 246-270). Cambridge, MA: MIT Press.)

Week of October 1 – The Cognitive Revolution

Lashley, K. S. (1951). The problem of serial order in behavior. In L. A. Jeffress (Ed). *Cerebral mechanisms in behavior: The Hixon Symposium*. (pp. 112-146). Oxford: Wiley.

Miller, G. A. (1956). The magical number seven, plus or minus two: Some limits on our capacity for processing information. *Psychological Review*, 63, 81-97.

Chomsky, A. N. (1959). A review of B. F. Skinner's Verbal Behavior. *Language*, 35, 26-58.

Section 2: Mystery

The sometimes inscrutable manners, modes, and methods of theoretical linguistics.
(3 weeks – generativity, rules, constraints)

mys·tery
Pronunciation: ˈmis-t(ə-)rē
Function: *noun*
Inflected Form(s): *plural* **-ter·ies**
Etymology: Middle English *mysterie*, from Latin *mysterium*, from Greek *mystērion*, from *mystēs* initiate
Date: 14th century
1 a : a religious truth that one can know only by revelation and cannot fully understand **b** (1) **:** any of the 15 events (as the Nativity, the Crucifixion, or the Assumption) serving as a subject for meditation during the saying of the rosary (2) *capitalized* **:** a Christian sacrament; *specifically* **:** Eucharist **c** (1) **:** a secret religious rite believed (as in Eleusinian and Mithraic cults) to impart enduring bliss to the initiate (2) **:** a cult devoted to such rites
2 a : something not understood or beyond understanding **:** enigma **b** *obsolete* **:** a private secret **c :** the secret or specialized practices or ritual peculiar to an occupation or a body of people <the *mysteries* of the tailor's craft> **d :** a piece of fiction dealing usually with the solution of a mysterious crime
3 : profound, inexplicable, or secretive quality or character <the *mystery* of her smile>

Week of October 8 – Introduction to Theoretical Linguistics

Chomsky, A. N. (1957) *Syntactic structures*. The Hague: Mouton.

Chomsky, A. N. (1965). *Aspects of the theory of syntax* (pp. 3-9; 18-27). Cambridge, MA: MIT Press.

Week of October 15
To Be Announced

Week of October 22
To Be Announced

Section 3: Mind

Research on some key topics in psycholinguistics.
(4 weeks)

mind
Pronunciation: ˈmīnd
Function: *noun*
Etymology: Middle English, from Old English *gemynd;* akin to Old High German *gimunt* memory, Latin *ment-, mens* mind, *monēre* to remind, warn, Greek *menos* spirit, *mnasthai, mimnēskesthai* to remember
Date: before 12th century
1 : recollection, memory <keep that in *mind*> <time out of *mind*>
2 a : the element or complex of elements in an individual that feels, perceives, thinks, wills, and especially reasons **b :** the conscious mental events and capabilities in an organism **c :** the organized conscious and unconscious adaptive mental activity of an organism
3 : intention, desire <I changed my *mind*>
4 : the normal or healthy condition of the mental faculties
5 : opinion, view
6 : disposition, mood
7 a : a person or group embodying mental qualities <the public *mind*> **b :** intellectual ability
8 *capitalized, Christian Science* **:** God 1b
9 : a conscious substratum or factor in the universe
10 : attention <pay him no *mind*>

Week of October 29 - Speech Perception
Eimas. P. D., Siqueland, E. R., Jusczyk, P. W., & Vigorito, J. (1971). Speech perception in infants. *Science* 171, 303-306.

Werker, J. F., & Tees, R. C. (1984). Cross-language speech perception: Evidence for perceptual reorganization during the first year of life. *Infant Behavior and Development,* 7, 49-63.

Kuhl, P. K., Williams, K. A., Lacerda, F., Stevens, K. N., & Lindblom, B. (1992). Linguistic experience alters phonetic perception in infants by 6 months of age. *Science*, 255, 606-608.

Feldman, N. H., Griffiths, T. L., and Morgan, J. L. (2009). The influence of categories on perception: Explaining the perceptual magnet effect as optimal statistical inference. *Psychological Review,* 116, 752-782.

(A shorter version: Feldman, N. H., & Griffiths, T. L. (2007). A rational account of the perceptual magnet effect. In D. S. McNamara & J. G. Trafton (Eds.), *Proceedings of the 29th Annual Conference of the Cognitive Science Society* (pp. 257-262). Austin, TX: Cognitive Science Society.)

McGurk, H., & MacDonald, J. (1976). Hearing lips and seeing voices. *Nature*, 264, 746-748.

Ganong, W. F. (1980). Phonetic categorization in auditory word perception. *Journal of Experimental Psychology: Human Perception and Performance*, 6, 110-125.

Elman, J. L., & McClelland, J. L. (1988) Cognitive penetration of the mechanisms of perception: Compensation for coarticulation of lexically restored phonemes. *Journal of Memory and Language*, 27, 143-165.

Week of November 5 – Spoken Word Recognition

McQueen, J. M. (2007). Eight questions about spoken-word recognition. In M. G. Gaskell (Ed.), *The Oxford handbook of psycholinguistics* (pp. 37-53). Oxford: Oxford University Press.

McClelland, J. L, and Elman, J. L (1986) The TRACE model of speech perception. *Cognitive Psychology*, 10: 1-86.

Cluff, M. S., and Luce, P. A. (1990) Similarity neighborhoods of spoken two-syllable words: Retroactive effects on multiple activation. *Journal of Experimental Psychology: Human Perception and Performance*, 16: 551-563.

Connine, C. M . , Blasko, D. G., and Titone, D. (1993) Do the beginnings of spoken words have a special status in auditory word recognition? *Journal of Memory and Language*, 32: 193-210.

Allopenna, P. D., Magnuson, J. S., and Tanenhaus, M. K. (1998) Tracking the time course of spoken word recognition using eye movements: evidence for continuous mapping models. *Journal of Memory and Language*, 38: 419-439.

Week of November 12 – Words and Rules

Berko, J. (1958). The child's learning of English morphology. *Word*, 14, 150-177.

Rumelhart, D. E., & McClelland, J. L. On learning the past tenses of English verbs. In McClelland, J. L., Rumelhart, D. E., and the PDP research group, *Parallel distributed processing: Explorations in the microstructure of cognition. Volume II* (pp. 216-271). Cambridge, MA: MIT Press.

Pinker, S., & Ullman, M. T. (2002). The past and future of past tense. *Trends in Cognitive Science*, 6, 456-463.

Week of November 19 – Comprehension and Discourse

Tanenhaus, M. K., Spivey-Knowlton, M. J., Eberhard, K. M., & Sedivy, J. C. (1995). Integration of visual and linguistic information in spoken language comprehension. *Science,* 268, 1632-1634.

Sedivy, J. C., Tananhaus, M. K., Chambers, C. G., & Carlson, G. N. (1999). Achieving incremental semantic interpretation through contextual representation. *Cognition*. 71, 109-147.

Spivey, M. J., Tanenhaus, M. K., Eberhard, K. M., & Sedivy, J. C. (2002). Eye movements and spoken language comprehension: Effects of visual context on syntactic ambiguity resolution. *Cognitive Psychology*, 45, 447-481.

Additional readings TBA

Section 4: Brain

The workings of the hardware in which language is implemented.
(2 weeks)

brain
Pronunciation: ˈbrān
Function: *noun*
Etymology: Middle English, from Old English *brægen;* akin to Middle Low German *bregen* brain, and perhaps to Greek *brechmos* front part of the head
Date: before 12th century
1 a : the portion of the vertebrate central nervous system enclosed in the skull and continuous with the spinal cord through the foramen magnum that is composed of neurons and supporting and nutritive structures (as glia) and that integrates sensory information from inside and outside the body in controlling autonomic function (as heartbeat and respiration), in coordinating and directing correlated motor responses, and in the process of learning -- compare forebrain, hindbrain, midbrain **b :** a nervous center in invertebrates comparable in position and function to the vertebrate brain
2 a (1) **:** intellect**,** mind <has a clever *brain*> (2) **:** intellectual endowment **:** intelligence -- often used in plural <plenty of *brains* in that family> **b** (1) **:** a very intelligent or intellectual person (2) **:** the chief planner of an organization or enterprise -- usually used in plural <she's the *brains* behind their success>
3 : something that performs the functions of a brain; *especially* **:** an automatic device (as a computer) for control or computation

Week of November 26 – Language Organization of the Brain

Ojemann, G. A. (1991). Cortical organization of language. *The Journal of Neuroscience*, 11, 2281-2287.

Thompson-Schill, S. L., D'Esposito, M., Aguirre, G. K., & Farah, M. J. (1997). Role of left inferior prefrontal cortex in retrieval of semantic knowledge: A reevaluation. *Proc. Natl. Acad. Sci.,* 94, 14792–14797.

Ullman, M. T. The biocognition of the mental lexicon. In M. G. Gaskell (Ed.), *The Oxford handbook of psycholinguistics* (pp. 267-286). Oxford: Oxford University Press.

Utman, J. A., Blumstein, S. B., & Sullivan, K. (2001). Mapping from sound to meaning: Reduced lexical activation in Broca's aphasics. *Brain and Language*, 79, 444–472.

Week of December 3 – Imaging Studies of Language Processing

Bates, E. et al. (2003). Voxel-based lesion–symptom mapping. *Nature Neuroscience*, 6, 448-450.

Prabhakaran, R., Blumstein, S. B., Myers, E. B., & Hutchison, E. (2004). An event-related fMRI investigation of phonological–lexical competition. *Brain and Language*, 91-193-194.

Wilson, S. M., Saygin, A. P., Sereno, M. I., & Iacoboni, M. (2004). Listening to speech activates motor areas involved in speech production. *Nature Neuroscience*, 7, 701-702.

Additional readings TBA