

ANTHROPOLOGY 375/575: ABRACADABRA: LANGUAGE AND MEMORY IN SCIENCE AND TECHNOLOGY

MWF 10-10:50  
Sewall Hall 303  
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**What exactly** do language and memory have to do with knowledge? Are they passive tools or essential components? Are all languages equal, or are there better and worse ways of saying something? What's the difference between natural language and mathematics? Between logic and language? Between memory and storage? Between information processing and thinking? Do words do things? Do algorithms have meaning? What's the relationship between technology and thinking, or between remembering and archiving? Between meaning and information? And what does Dracula have to do with all this?

This is lecture and discussion course that considers these issues. It is a combination of history, philosophy, and anthropology. It is eclectic in its scope, and it spans 2500 years of human history. The course is principally concerned with presenting a small cross section of the great diversity of ways that language, memory, information, science and religion intersect.

There are five sections:

An introduction where we will begin with some modern scientific problems of representation and writing: birdwatching and genetics.

A section on the print revolution and the rise of literacy between 900 AD and 1900 AD

A section on memory, in particular, the *Ars Memoria* of ancient and medieval scholars; includes modern memory in film and literature.

A section on *universal and perfect languages*, the logical calculus and the so-called scientific method.

Finally, a section on Dracula, which we will read as a document the role of literacy, writing, circulation, and information in the 19th-20th century.

**Requirements** are the following:

**Required reading** of c. 50-80 pages per week. **Assignments** happen approximately every two-three weeks, students will be responsible for assignments varying in length and complexity. Readings and Assignments constitute the bulk of your grade. Mandatory **participation and attendance** will make up the rest.

**Required Texts**, available at the bookstore:

Francis Yates, *The Art of Memory*, Chicago: University of Chicago Press, 1966.

Umberto Eco, *The Search for the Perfect Language*, Oxford: Blackwell Pubs. 1995.

Bram Stoker, *Dracula*, New York: W.W. Norton Publishers, 1997[1897].

Martin Davis, *Engines of Logic: Mathematicians and the Origin of the Computer*, New York: W.W. Norton Publishers, 2000.

**Optional:** Friedrich Kittler, *Grammophone, Film, Typewriter*, Palo Alto: Stanford University Press, 1999.

Also **required** are readings on electronic reserve. Instructions for Use will be presented in class.

## 1 Introduction

### Week 1

- Jan 13: Introduction
- Jan 15: **(1)**Michael **Lynch** and John **Law**, “Pictures, Texts, and Objects: The literary language game of bird-watching,”  
**(2)** Lily **Kay** “In the Beginning was the Word? The Genetic Code and the Book of Life” in *The Science Studies Reader*, ed. Mario Biagioli, New York: Routledge, 1999
- Jan 17: Discussion: Birds and Words in Science and History

### Week 2

- Jan 20: No Class (MLK Day)

## 2 Literacy, Numeracy, Print

- Jan 22: Elizabeth **Eisenstein**. *The Printing revolution in Early Modern Europe*, Cambridge University Press, 1983, pgs. 3-106.
- Jan 24: Eisenstein Cont'd, Discussion.

### Week 3:

- Jan 27: Paul **Saenger**, *The Space Between Words*, Chapters. 1,15.
- Jan 29: Patricia **Crain**, *The Story of A*, Chapter 1.
- Jan 31: Discussion. Literacy and printing presses, technological determinism vs. social change.

## 3 Ars Memoria: Techniques of Memory and Creativity

### Week 4

- Feb 3: Francis **Yates**, *The Art of Memory*, Chapter 1.
- Feb 5: **Yates**, Chapter 5. Chapter 4 Recommended
- Feb 7: Discussion – New and Old Media, New and Old Memory.

### Week 5

- Feb 10: **Yates**, Chapter 6.
- Feb 12: (1) Jorges Luis **Borges**, “Funes, his memory” and (2) “Library of Babel” in *Collected Fictions*, Viking Press, 1998.  
(3) Mary **Carruthers**, ‘*The Craft of Thought*, Cambridge University

Press, 1998, pgs. 1-24

- Feb 14: Discussion. Memory vs. Cognition.  
Film Screening: “Rashoman” dir. Akira Kurosawa 1950. Time TBA

### Week 6

- Feb 17: Mary **Carruthers**, “Craft of Thought” pgs. 25-60
- Feb 19: **Yates**, Ch, 17.  
**Optional Reading:** Decartes, *Discourse on The Method*, chapters 1-3.
- Feb 21: Discussion: Methods of Thought and Methods of science

### Week 7

Film screening: “Memento” dir. Christopher Nolan 2000. Time TBA

- Feb 24: A.R. **Luria**, *Mind of a Mnemonist*, pgs. 3-40.
- Feb 26: Vannevar **Bush**, “As We May Think,” from *The Atlantic Monthly*, July 1945, Volume 176, No. 1; pages 101-108.  
At <http://www.theatlantic.com/unbound/flashbks/computer/bushf.htm>
- Feb 28: Discussion

## 4 Perfect Languages: from tables to algorithms

### Week 8

- Mar 3: Umberto **Eco**, *The Search for the Perfect Language*, Introduction, Chapters. 1, 2, (5 optional).
- Mar 5: (1) **Eco**, Chapter 4  
(2) **Yates**, Chapter 8. Selections from Lull
- Mar 7: Discussion

## Week 9

Mar 10-14: midterm break

## Week 10

- Mar 17: (1) **Eco**, Chapter 14.  
(2) Martin **Davis**, *Engines of Logic*, Chapter 1.
- Mar 19: Mary M. **Slaughter**, *Universal Languages and Scientific Taxonomy in the Seventeenth Century*, Intro, Ch. 2.
- Mar 21: Discussion

## Week 11

- Mar 24: (1) **Slaughter**, Ch. 5  
(2) **Eco**, Ch. 10.
- Mar 26: (1) **Eco**, Ch. 12. (2) **Borges**, “The Analytical Language of John Wilkins”  
**Optional:** Michel **Foucault**, *The Order of Things*, Chapter 1, Las Meninas.
- Mar 28: No Class.

## Week 12

- Mar. 31: (1) **Eco** pgs. 302-336 (chapters 15-16).  
(2) Martin **Davis**, *The Universal Computer*, Ch. 7.
- Apr 2: Geoffrey **Nunberg**, “Farewell to the Information Age” in *The Future of the Book*, ed. Geoffrey Nunberg, University of California Press, 1996.
- Apr 4: Discussion/Lecture: Social Character of information. Supernatural technology. (Begin Reading Dracula)

### Week 13

## 5 Dracula

- Apr 7: Bram **Stoker**, *Dracula*, Chs 1-4.
- Apr 9: **Stoker**, Chs 5-9.
- Apr 11: Discussion

### Week 14

- Apr 14: **Stoker**, Chs. 10-14.
- Apr 16: **Stoker**, Chs. 15-17.
- Apr 18: Discussion.

### Week 15

- Apr 21: **Stoker**, Chs. 18-22.
- Apr 23: **Stoker**, Chs. 23-27.
- Apr 25: Conclusion, Reprise.

#### **Other Important Information:**

Incompletes are not given.

Honor Code issues: For the assignments, group investigation and research is encouraged, but each assignment handed in must be the student's own original work. In the case of group assignments, division of labor will be up to the students, and any necessary honor code guidelines will be provided.

Any student with a documented disability needing academic adjustments or accommodations is requested to speak with the instructor during the first two weeks of class. All discussions will remain confidential. Students with disabilities will need to also contact Disability Support Services in the Ley Student Center.