

TAS ARCHIVES**TAS Seminars 2002-03**

#1. The Nature and Use of Human Language

November 19, December 3, and December 17

Marguerite Browning

Department of Linguistics

Modern Linguistics seeks the answer to three questions: What is knowledge of language? How is this knowledge acquired? How is it put to use? In attempting to answer these questions, linguists study the properties of specific languages to discover the universal properties, which are the foundation of all human language. The first session will introduce the concepts and assumptions of this approach to human language. Central to this inquiry are the very peculiar properties of human language acquisition: in the absence of pathology, children become fluent native speakers of the language to which they are exposed in a surprisingly uniform degree, without explicit teaching, in a relatively short time. The second session will focus on some of the recent research devoted to understanding the way children acquire their native language(s) and how this process differs from second, or non-native, language acquisition. Finally, we explore some of the social aspects of language use and attitudes towards language, focusing on issues related to bilingual education, including the Oakland Ebonics resolution.

#2. The Process of Scientific Discovery

January 7

Russell Hulse

Plasma Physics Laboratory

How do scientific discoveries occur? Students are often taught in school that the "scientific method" is a strict procedure involving the pass/fail testing of rigidly defined hypotheses, but this dictum does not fully illuminate the rich variety of ways in which knowledge is really developed. Similarly, while the role of serendipity is anecdotally popular, the old maxim "chance favors a prepared mind" indicates that pure luck is seldom the whole story, either. I will begin the seminar with a personal narrative of the discovery of the first binary pulsar. We will use this as a springboard to a broad discussion of the various ways that scientific progress occurs. I am counting on strong contributions from the seminar participants to make this a lively and thoughtful discussion. Each participant will be expected to give a short presentation on the scientific context, motivation, and approach that led to some important scientific result. I will be available before the seminar to advise the participants as they select, research, and prepare their presentations. The seminar is limited to 12 participants.

#3. Shakespeare on Love

January 13, January 27, and February 10

Hank Dobin

Associate Dean of the College

All of us know the more popularly studied and frequently performed comedies and tragedies of Shakespeare that focus on the folly and the grief of love: plays like *Othello*, *Romeo and Juliet*, and *A Midsummer Night's Dream*. However, there are several less well known, and infrequently performed, plays that deal with love relationships between men and women that are much harder to categorize. This seminar will study three such plays - *Antony and Cleopatra*, *Troilus and Cressida*, and *Measure for Measure*. While each play has a very different (and difficult) take on the problem of love, these plays also stretch our notions of literary form and genre in fascinating ways.

Each week, we will do an intensive examination of one play including close reading of the text, research into Shakespeare's sources, and comparisons to other more familiar plays. Because Shakespeare's plays were not intended just for the page, we will consider the performance aspects of these plays - both viewing tapes of performances and doing our own scene-studies.

#4. Musicians: Teaching Through Music

February 4

David Missenio

Principal University Organist, Princeton University Chapel

Penna Rose

Director of Chapel Music, Princeton University Chapel

Can we actually teach our students to be good musicians while enjoying the experience? We think so! Here at the University Chapel, David Missenio and Penna Rose educate the Chapel Choir and University Handbell choir using various techniques they would love to share. The chapel also hosts an extensive concert series designed to educate the entire community. Come and share with these two unusual musicians in the inspiring gothic University Chapel!

#5. Chaucer's Canterbury Tales

January 23, February 6, and February 20

John V. Fleming

Department of English

The seminar will offer an introduction to the study and teaching of Chaucer's *Canterbury Tales*. I shall operate on the assumption that members of the seminar have no familiarity with earlier forms of the English language. Thus we shall call upon the support of a modern English version even as we approach the text in the original Middle English.

In addition to reading and discussing selected prologues and tales, we will focus on the historical background, Chaucer's literary education, the idea of pilgrimage, medieval literary

conventions and aesthetic assumptions. In our last session, we will look at the range of Chaucerian narrative and consider the problem of the poem's incompleteness.

#6. Classical Mythology: What It Is and Why It Still Matters

January 24, February 7, and February 21

Georgia Nugent

Department of Classics

Wherever we look, the characters and stories of Greek and Roman mythology still surround us--whether in popular films like Hercules, everyday terms like narcissist or odyssey, or even as the names of products like Ajax and Nike. This seminar will explore both the nature of classical mythology and why these stories from antiquity hold such enduring appeal.

Our first session will tackle the difficult problem of defining myth. We will consider together some of the many different definitions scholars have offered--and what their implications are. The second session will focus on the interpretation of myth, ranging from ancient allegorizing to the more modern theorizing of anthropologists (from Jane Harrison to Levy-Strauss), psychologists (such as Freud and Jung), and religious thinkers. Seminar members will be invited to experiment with developing interpretations utilizing these differing approaches. The final session will examine the ways in which mythological stories tend to cluster around our most significant life events, providing narratives that can help us to understand and negotiate some of the more difficult aspects of the human condition. In all three sessions, particular (brief) mythic narratives will be read and discussed.

#7. Fast Talking Dames

February 3 and February 19

Maria DiBattista

Department of English

"Fast Talking Dames" aims to introduce or reacquaint its participants with the witty women of thirties and forties film comedy. Coming of age during the depression, the fast talking dame called things as she saw them. She offered movie audiences, then and now, a modern model of American womanhood – articulate, self-confident, and in control of her destiny. The screen characters of Katherine Hepburn, Rosalind Russell and Barbara Stanwyck out-talked their men, out-smarted their rivals, and spoke as no one had before. The American language seemed to be reinventing itself with every word they spoke and, in many ways, it was.

This seminar will explore the social and cultural revolution envisioned by these fast-talking, resolute women. We will examine in some detail the language they spoke and the manners, both public and private, they created. The first seminar, which will focus on *Bringing up Baby* and *His Girl Friday*, will suggest the broad reach of the fast-talking dame as a social and culture presence. The second will explore her darker personality, which surfaces in the latter half of *The Lady Eve* and then mutates into the femme fatale of *Double Indemnity* (both starring Barbara Stanwyck).

#8. The Big Bang and the Expanding Universe

February 7 and February 21

Michael Strauss

Department of Astrophysical Sciences

One of the most exciting scientific breakthroughs of the 20th century was the discovery that the universe is expanding. This discovery led to our understanding of the size and age of the universe, and directly leads to the Big Bang model for the origin of the universe.

In this seminar we will discuss the observational evidence for these amazing conclusions, and critically examine the reasons that astronomers are confident that the Big Bang model is correct. Along the way, we will discuss the nature of galaxies and how their distance is measured, as well as learn about quasars, among the most energetic and distant known objects of the universe. We will also address the age-old question of the future fate of the universe: will it expand forever, or eventually recollapse? We will put emphasis on a quantitative understanding of these questions, using mathematics no more difficult than high-school algebra.

#9. Cain and Abel

February 12, February 24, and March 12

Thomas Briedenthal

Dean of Religious Life and Chapel

Attempting to think through a notion of selfhood responsive to the Holocaust and the past century generally, the French philosopher Emmanuel Levinas suggested that we only begin to grasp our selfhood when we see how we have won our own place in the sun at the expense of others. (Americans of European descent may readily apply this insight to their own status vis-à-vis Native Americans and African-Americans). Is it possible to move forward in the face of such a realization?

The story of Cain and Abel (Genesis 4) provides Levinas with his archetype: we are all Cain, working out the implications of our murder of Abel. In this seminar we will immerse ourselves in the story of Cain and Abel, and in the questions embedded in it. In the first session, we will strive to become experts on the text. We will scrutinize each word of the Genesis account, studying different English translations, digging into the Hebrew text, and examining what some ancient Greek and Latin translations have to offer. We will also examine traditions of interpretations of this story in rabbinical Judaism, early Christianity, and Islam. In the second session, we will explore how the theme of fratricide is sounded and played out in *King Lear*, *Dr. Jekyll and Mr. Hyde*, and Elie Wiesel's post-Holocaust novella, *Dawn*. In the final session, we will turn once again to Emmanuel Levinas, and one or two recent philosophers and theologians influenced by him.

#10. The Arab-Israeli Conflict

February 28 and March 14

Michael Doran

Department of Near Eastern Studies

For more than a century, Arabs and Jews have been struggling for control of Palestine. What have been the primary causes of the conflict? How have they changed over time? Why has a permanent settlement proved illusive? This two-day seminar will survey the history of the conflict, acquainting participants with the major developments in it, and with the main lines of the academic debate about it. Diplomacy and international relations will receive primary emphasis, but the social, cultural, and religious roots of the conflict will also capture our attention.

The first day will cover the historical background from the late nineteenth century to 1973. The second day will focus on the vicissitudes of the Peace Process, which has produced two peace agreements (with Egypt in 1979 and with Jordan in 1994) but which has yet to solve the conflict. We will pay particularly close attention to the Oslo agreements, the apparent demise of which we are witnessing today.

#11. Technology in American Life

March 6, March 18, and April 1

Michael Mahoney

Department of History and Program in History of Science

From the early years of the republic, Americans have looked to technology to secure the material foundations of their experiment in democratic government, according special honor and encouragement to inventors and entrepreneurs. At the same time, Americans have kept a wary eye on the "machine in the garden", lest the imperatives of industrial technology undermine the values of personal autonomy and mutual responsibility on which our political system rests. The seminar will examine a series of historical episodes that illustrate this uneasy relation between technology and democracy. Topics will include the experiment in republican technology at Lowell in the early 19th century, the coming of mass production and the consumer society in the late 19th and early 20th centuries, and the advent of the Computer Age in our own time. In addition to readings from primary and secondary sources, we will look directly at artifacts and systems as the tangible expressions of their inventors' thinking about their society and of their aspirations for it. An example of this approach may be found on the instructor's web page (<http://www.princeton.edu/~mike/>) through the link to "Reading a Machine" (<http://www.princeton.edu/~hos/h398/readmach/modeltfr.html>).

Professor Mahoney has also create a Web page

(<http://www.princeton.edu/~hos/tas/tas2000.htm>) that provides a more detailed description of the seminar and a schedule of readings.

#12. Digging for Moy, Sand, and Gravel

March 3

Paul Muldoon

Howard G.B. Clark '21 Professor in the Humanities

An opportunity to discuss the making of Paul Muldoon's recently-published ninth collection of poems, his first since *Hay* (1998), which finds him working a rich vein that extends from the rivery, apple-heavy County Armagh of the 1950s, in which he was brought up, to suburban New Jersey, on the banks of a canal dug by Irish navies, where he now lives. At the heart of the book is an elegy for a miscarried child, and that elegiac tone predominates, particularly in the elegant remaking of Yeats's "A Prayer for My Daughter" with which the book concludes, where a welter of traffic-signs and slogans, along with the spirits of admen, hardware storekeepers, flim-flammers, fixers, and other forebears, are borne along by a hurricane-swollen canal, and private grief concides with some of the gravest matter of our age.

#13. Human Experimentation

March 27 and April 10

Andrew Post-Zwicker

Princeton Plasma Physics Library

The development of any new medical treatment must, eventually, include testing on human subjects. The benefits of finding a new treatment are obvious but the ethical implications are profound. Consent of the participant is one of the necessary ethical issues though many examples exist where this was ignored. On rare occasion, consent is given yet something goes terribly wrong. (In 1999, an 18-year-old student was killed while undergoing an experimental gene therapy.)

In this seminar, we will explore the science and ethics of human experimentation. We begin by examining the basis of our personal belief system and comparing it to international conventions adopted after World War II. Next, we will examine one of the most famous examples of ethical abuse, the Tuskegee syphilis experiments. During the second day, we will look at the issue of informed consent in regards to clinical trials of pediatric chemotherapy. Finally, we look to the future and study the benefits and ethical issues of using human stem cells to potentially cure a variety of diseases.

No prior knowledge of science content is assumed, or expected.

#14. Chekhov, Stanislavski, and the Birth of Modern Theater

April 8, April 29, May 4 (matinee), and May 6 (afternoon only)

Michael Cadden

Director of the Program in Theater and Dance

This seminar will use Emily Mann's production of Chekhov's *Uncle Vanya* at the McCarter Theater as an opportunity to remind ourselves that most of what is considered important in the

fields of theater, film, and television has its roots in turn-of-the-twentieth-century collaboration between two Russian artists--the playwright Anton Chekhov and the director Konstantin Stanislavski. For his part, Chekhov created a style of the real in dramatic writing that deeply challenged his audience's sense of the theatrical; Stanislavski, faced with the challenge of working with actors to interpret Chekhov's work, realized he would have to reinvent acting from the ground up. Stanislavski's "System" evolved into American "Method Acting," and formed the basis for most of the great acting performances of the twentieth century. Our seminar will attempt to come to terms with the achievements of Chekhov and Stanislavski, as well as the challenges facing twenty-first century directors and actors looking to reimagine their work for new audiences.

#15. Beautifying Your Mind: An Introduction to Game Theory

April 28

Avinash Dixit

Department of Economics

You have seen the movie "A Beautiful Mind"; you may have read the book, too. So you know that John Nash got a Nobel prize for his pathbreaking work in something called "game theory." But what is game theory? Come and find out.

Game theory studies situations of interactive decision-making. When you are playing a strategic game and deciding your choice of action, you must think about what others are planning to do, recognizing that they are thinking about what you are thinking, Nash Equilibrium is about squaring such circles of thinking about thinking. In this seminar, we will explain and illustrate this concept. Our examples will range from soccer and the CBS show "Survivor," to evolutionary biology and the nuclear arms race during the cold war. The seminar participants will also play some games during the day to gain more direct familiarity with the concepts. (And they will learn why Russell Crowe's explanation of Nash equilibrium in the bar scene in the movie is totally wrong.)

No prior knowledge of economics or game theory is assumed, but you must have some minimal level of comfort with graphs and numbers. High school math is ample background.