

STUDYING LINGUISTICS AT PRINCETON: A COGNITIVE SCIENCE PERSPECTIVE

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0. Introduction

I studied foundations in theoretical linguistics at Princeton University for the academic year 1990 to 1991. My status there was the guest of Professor Edwin Williams, i.e., an auditor. I attended the courses which the Program in Linguistics offers mainly to undergraduate students. In this report, I outline those linguistics courses, the special lectures, and conferences in linguistics. At Princeton linguistics is studied within a cognitive science framework. Thus, I found my study of linguistics there very exciting because of the multidisciplinary nature of cognitive studies.

1. Courses

I attended the following courses:

(1) Courses in the fall term:

- a. Linguistics as Cognitive Science
- b. Introduction to the Theory of Syntax

(2) Courses in the spring term:

- a. Advanced syntax
- b. Linguistic semantics

2. Linguistics as cognitive science

(3) a. Professors: R.Freidin, G.Harman, E.Williams

- b. Texts: i) D.Osherson and H.Lasnik(eds.), Language: an invitation to cognitive science, MIT Press, 1990.

ii) Course Anthology⁽¹⁾

The first parts of the class dealt with the major areas in theoretical linguistics, such as syntax, semantics, phonology, and language acquisition.

Topics like such as artificial intelligence, cognitive processing(speech perception, parsing, and visual perception), neuro-linguistics (concentrating on aphasia), and the relationship between grammar, psychology, and computation (especially the connectionist model and we discussed prototype approach in the second part of the course).

3. Introduction to the theory of syntax

(4)a. Professor: E.Williams

b. Texts: R.Freidin, Foundations of Generative Syntax, draft, to appear.

The main topics talked about in this course are given below:

(5)a. The structure of the English NP: case filter, m-commanding, government, etc.

b. WH-movement: the SPEC of CP as a landing site of WH-movement, cycle, and subjacency.

c. The auxiliary system: SAI, AUX raising, affix hopping, etc.

d. Binding theory: anaphors, cross linguistic parameters in BT, and interaction of BT and movement(crossover, etc.).

4. Advanced syntax

(6)a. Professor: M.A.Browning

b. Texts: i) R.Freidin(to appear), see (4b) above.

ii) Course reader⁽²⁾

The following topics were talked about in the course:

(7)a. Phrase structure: subcategorization, null complement anaphora, concealed question, LF, word order and parameters (theta-/case-/headedness-parameter), canonical structural realization, etc.

b. WH-movement: trace and subjacency as filters, the WH-parameter, LF-movement, absorption, etc.

c. ECP: typology of empty categories, functional vs. free determination of EC, lexical-and antecedent-government, condition on extraction domain, etc.

d. Passive: theta-role absorption vs.transferring, case absorption vs.category neutralization, syntactic vs.lexical passive, etc.

e. Binding theory

5. Linguistic semantics

(8)a. Professor: R.Freidin

- b. Texts: i) E.Bach, Informal Lecture on Formal Semantics: State University of New York Press, New York, 1989.
ii) Course reader⁽³⁾

The topics argued in the course are:

- (9)a. Structural vs.lexical ambiguity, implication, entailment, presupposition, etc.
b. Predicate calculus, possible worlds, scope interaction, lambda operator, etc.
c. NP, generalized quantifiers, quantifier raising, etc.
d. Formal theories of truth vs.translation theory.
e. Levels of representation which are the input for semantic interpretation.
f. Context, argument structure, theta-role and its discharge, etc.
g. Interpretation of the pronoun: crossover, WH-movement at LF in Chinese, non-coreference rule, Evans' classification of pronoun, the relation between sentence grammar and discourse grammar, BT, etc.
h. Projection problem: presupposition, etc.

6. Outside lectures and conferences

In addition to the courses above, I attended two special lecture series: the weekly noon lectures on cognitive science held by the Committee for Cognitive Studies and the Program in Linguistics colloquium series. The linguistics lectures were:

(10)a. September,27,1990.

Paul Gorrell, Informational Encapsulation in Sentence Processing: Experimental Results for the Modularity of Mind.

b. November,8,1990.

Edward Stabler, Deducing Sentence Structure.

c. November,29,1990.

Thomas Roeper, Asking Questions the Mind Can't ask.

d. March,14,1991.

Mark Baker, Mohawk and the Universality of Grammar.

e. March, 28, 1991.

Jill Carrier, The Proper Representation of Argument Structure.

f. April, 11, 1991.

William Labov, The Cognitive Consequences of Linguistic Diversity.

g. April, 25, 1991.

Amy Weinberg, Domain Restrictions and Natural Language Parsing.

On October, 20 and 21, 1990, a colloquium entitled Linguistic and Philosophical Approaches to the study of Anaphora was held at Princeton University. The content of the meeting is as follows:

(11) I. Howard Lasnik, Pronouns and Non-coreference

II. Gennaro Chierchia, Anaphora, E-type Pronouns and Dynamic Semantics.

III. Tanya Reinhart, Anaphoric Territories.

IV. James Higginbotham, Anaphoric Intentions.

V. George Wilson, Reference and Pronominal Descriptions.

VI. Saul Kripke, Presupposition and Anaphora: remarks on the formulation of the projection problem.

Each paper was followed by a commentary and a discussion.

Finally, on April, 19, 1991, I attended a New Jersey regional linguistics meeting in syntax, where the following papers were read:

(12)a. Edwin Williams, V-to-I.

b. Juan Uriagereka, A F(urther) Position.

7. Summary

By viewing linguistics as an part of cognitive science, and understanding the interactions between linguistics and formal semantics and logic my studies at Prnceton strong affected my research interests towards a GB based aproach to language research.

Finally, I would like to thank the professors both here and at Princeton who enabled me to attend Pronceton for a year.

NOTES

(1) It contains many articles, some of which are cited from other volumes of the same series as (3bi). Also included was Chomsky's Sophia University lecture.

(2) Because of spsce restrictions I will not list all the readings. The authors

of the materials are following: Grimshaw, Travis, Browning, Huang, Lasnik and Saito, Lasnik and Uriagereka, Jaeggli, and Sobin.

(3) Here are a list of the authors: Chierchia and McConnell-Ginet, Evans, Harman, Higginbotham, Hornstein, Karttunen, Lasnik, May, Soames, Williams.