Linguistics 3302: Syntactic Analysis (Technology-enhanced)
Spring '16

Lecturer: Prof. Nicholas Sobin (njsobin@utep.edu)
Office & Hours: LART 113; 2-3:25 p.m. M&W, and by appointment
Required text: Sobin, *Syntactic Analysis: The Basics*

Syntax, the study of sentence structure, is one of the areas of research at the forefront of the Cognitive Sciences. A speaker of any human language has access to any of infinitely many sentences. This could only be possible if underlying each language is a computational system giving the speaker access to this infinite set of sentences. The underlying computational system comes 'on-line' very early (5-year-olds have an adult-compatible system), and it is completely subconscious. Learning a human language (really, acquiring the underlying computational system) is one of the greatest cognitive feats that any human being performs. Research in Syntax centers around discovering (i) the rules and elements which comprise human language computational systems, and (ii) how such systems are acquired by children at such an early age. This course introduces the basic analytic techniques and findings of research into human language syntactic systems.

Goals/learning outcomes: This course deals with topics and skills in syntactic analysis which are recognized as basic to becoming a professional in the field of linguistics, and syntax in particular, and which are essential to dealing with the research literature in syntax and areas of work related to it such as language acquisition. Students in this course should gain a basic understanding of concepts and analytic techniques in generative syntax. These include

(i) familiarity with core syntactic terms and concepts;

(ii) reading and operating formal analyses of sentence structure and with seeing what outcomes a given system predicts; and

(iii) being able to discuss/argue for the viability of a given analysis, or for the superiority of one analysis over another.

In everything that we deal with here, we want not only to offer analyses, but also to deal with the question of why one analysis is preferable to other conceivable analyses--this is what makes syntax (linguistics) a 'scientific' study.

Some core ideas:

•Speakers possess a subconscious grammar/computing system for human language.
•As a result of having such a grammar, speakers have untutored knowledge about language, sometimes contrary to the 'common wisdom' found in grammar books.
•The product Ss are infinite in number, and each has a hierarchic structure.

The goals of syntactic research:

There is a lot that we still don't know about human language grammars. On-going research in linguistics aims to discover (i) how human language grammars are constructed, and (ii) how children acquire languages (really, the underlying grammar).

Some surprising behavior of pronominal expressions:

Some data:

1 The girl saw her
2 The girl's mother saw her
3 The girl said that Jane saw her

Who can 'her' refer to in each of these sentences? (The answer isn't the same in each case.)

1'[$_S$ [The girl] saw her]

2' [$_S$ [The girl's mother] saw her]

3' [$_S$ [The girl] said that [$_S$ [Jane] saw her]]

First hypothesis:
A pronoun **object** can't refer to the **subject** when they are in the **same simple sentence**.

(**Principle B**: A pronominal cannot be 'bound' within a simple sentence.)

How did English speakers come to know this?

Does Principle B hold in Spanish?

a. María la vió a ella
b. María cree que [Juanita la vió a ella]

Does Principle B hold for German?

a. Maria hat sie gesehen
Maria has her seen
'*Maria saw her*'

b. Maria glaubt daß [Hedwig sie gesehen hat]
Maria thinks that Hedwig her seen has
'*Maria thinks that Hedwig saw her*'

Big Questions/things to investigate further:

•On what basis do speakers have untutored judgments about/knowledge of infinitely many sentences?
--the internal grammar/computing system for language

•What is the content of the computational system/grammar that leads speakers to such intuitions?
--rules for structuring words into Ss? Principles like B and C?

•How do children learn the internal grammar of their language?
--the Innateness Hypothesis

•How wide-spread are particular intuitions about the meaning and structure of sentences?
--specific to particular languages? universal?

The readings/lectures/discussions (usually one chapter per week):

Introduction: Introductory notes & references

Chapter 1: Doing science with language
This chapter introduces hypothesis formation and testing in the realm of human language and discusses the paradox of language acquisition. It offers a first sketch of the Principles & Parameters approach.

Chapter 2: The structure and classification of words
Words are analyzed into roots and affixes. A system of generative word formation is introduced involving morphemes and word formation rules. Also discussed are criteria for identifying the lexical class of roots, stems, and words.

Chapter 3: Determining the structure of sentences
Tests of phrasehood are introduced, indicating the presence of hierarchic structure within sentences. Also presented is some of the core terminology of syntactic relations among phrases.

Chapter 4: Rules of sentence structure--a first approximation
Phrase structure rules are introduced as a means of explaining the presence of hierarchic structure within sentences. Beyond basic phrasal structure, key concepts such as structural ambiguity and recursion are presented as further evidence of the efficacy of the phrase structure approach to the analysis of sentences. Recursion is noted as the key to explaining 'linguistic creativity'.

Chapter 5: Assigning meaning in sentences
Presented here is the system of determining grammatical function (subject, object, or adjunct) based on structural position. Building on this, theta roles and argument structure are

introduced, offering an explanation both of how arguments (subjects,objects, etc.) get their explicit meanings, and how verbs 'choose' the correct complementation pattern.

Chapter 6: Some category-neutral processes
Here, the notion of 'category-neutral' processes is first introduced, paving the way for the generally category-neutral system of X-bar syntax presented later. The processes discussed here are coordination and proform insertion.

Chapter 7: How structure affects pronoun reference
This chapter introduces c-command and some of the phenomena which c-command has been crucial to explaining, including the distribution of negative polarity items, and the distribution and semantics of anaphors and pronominals.

Chapter 8: Complex verb forms
The case is made here that auxiliary verbs each head a VP, so that sentences with multiple verbs involve a recursive VP architecture. Also, the first transformation, Affix Hopping, is introduced, opening the discussion of transformational grammar, and the levels deep structure and
surface structure.

Chapter 9: Real vs. apparent sentence structure
Tense affixes are argued here to originate in the same position as modal verbs do, leading to the claim that deep structure is 'abstract', that is, consistently different in its alignment of elements from that seen in surface forms. Also discussed is the position of negation, the head movement rule V-to-T, which raises an auxiliary verb to the position of tense. All of this expands the transformational view of syntax. Arguments are presented for the presence of a 'null' tense affix in sentences like 'They like beans,' making the system of affixation fully general.

Chapter 10: Generalizing syntactic rules
Arguments are advanced that phrases headed by the major lexical categories NP, VP, AjP, and PP share the same internal architecture, pointing toward the conclusion that the rules of the syntactic system are category-neutral rather than category-specific--instead of having separate rules for NP or VP, a single, general rule set explains the internal architecture of all major phrase types.

Chapter 11: Functional categories
The category-neutral analysis is extended here to functional categories such as T and C, leading to the conclusion that the system of syntax is completely category-neutral. The rules of syntax are few and simple. The specific details of derivations are largely driven by the features and argument structure of the words/morphemes employed in the derivation.

Chapter 12: Question formation
A number of apparent anomalies are raised in the detailed consideration of *WH* questions.

The transformation Move *WH* is argued to resolve these apparent anomalies in a way that is fully compatible with the theory of syntax developed to this point. Move *WH* exemplifies phrase movement to a non-argument position.

Chapter 13: Active and passive sentences
Arguments are advanced for the VP-internal-subject hypothesis, the idea that the subject of a sentence originates low, in SpecVP, rather than in its higher surface position, SpecTP. This indicates the existence of a rule, Move NP, which searches for an NP low in the structure to fill the SpecTP position. This leads easily into the analysis of passive sentences, where no subject appears in SpecVP (due to theta role suppression), so that Move NP must find another (non-subject)
argument to fill the SpecTP position.

Chapter 14: Things to come--various aspects of 'current theory'
Here, three further significant aspects of syntactic analysis are sketched out, anticipating a more detailed account in the student's future studies in syntax. These include the unaccusative hypothesis (the idea that the subject of certain apparently intransitive verbs actually starts as an object), the VP shell hypothesis (the idea that multiple complements are not 'flat' but involve asymmetrical c-command), and the DP hypothesis (the theory that 'traditional' NPs are in fact DPs, phrases headed by the functional category D.

Reference texts (optional support):

Carnie, Andrew (2007) Syntax, 2nd ed. Oxford: Blackwell.
Haegeman, Liliane (1992) Introduction to Government & Binding Theory. 2nd ed. Oxford: Blackwell.
Haegeman, Liliane (2006) Thinking Syntactically. Oxford: Blackwell.
Jackendoff, Ray (1993) Patterns in the Mind. New York: Harvester/Wheatsheaf.
Pinker, Steven (1994) The Language Instinct. London: Penguin.
Radford, Andrew (1988) Transformational Grammar. Cambridge: Cambridge University Press.
Radford, Andrew (1997) Syntax. Cambridge: Cambridge University Press.
Tallerman, Maggie (2005) Understanding Syntax. Oxford: Arnold.

These texts are useful reading for following key ideas in the course, but the course isn't about the texts. In fact, we may disagree with some of its assertions at various points. There will be significant handouts related to the topics that we deal with. These will be important to hold on to.

Course work/grade: Work for the course will include readings, lectures & discussion, problems in linguistic analysis, and 2 exams (dates to be announced). The course is technology enhanced. We will generally divide the course work into presentation/discussion of new material followed by discussion/presentation of problems in analysis and argumentation.

Your questions and discussion are essential. Your questions, observations, and ideas are very important to gaining a proper understanding of this material. At times, you may be asked to 'draw up' (present) and/or discuss analyses. Everyone is expected to contribute to this aspect of

the course.

The grade for the course will be determined as follows for students in regular attendance:

Assignments (approximately weekly) 10%
Exam 1 (Chs 1-7) 45%
Exam 2 (Chs 8-13) 45%

The **assignments** deal with topics core to the course and are aimed at helping to prepare you for the exams. They each involve using the analytical tools taught in the relevant chapter to analyze linguistic structure.

Exam 1 will take place around mid-term and will contain questions based on the first seven chapters, including knowledge of terms, the construction of valid tests of constituency, and the analysis of sentence structure and meaning as sketched in the descriptions of Chs 1-7 above. There will also be some emphasis on constructing arguments for the superiority of one hypothesis over another.

Exam 2 will likewise ask for knowledge of terms, the structural and semantic analysis of sentences as advanced in Chs 8-13, and the construction of arguments for the superiority of one hypothesis over another.

Other useful guidelines, ground rules and housekeeping hints:

Reading 'science' is not a casual affair. You have to read 'actively', not 'passively'. You should read the materials for the details of analyses and arguments discussed. Read with pencil in hand. Try to glean from the readings how the analyses/arguments work. If you don't follow something, try to isolate exactly the part that you don't get. That in itself may help resolve the difficulty. If the question remains, then ask about it in class or during office hours. Close reading of the materials is key to doing well.

Plagiarism will not be tolerated and will be reported immediately to the Dean of Students. Refer to the accompanying handout for definitions, etc.

Please do not bring **electronic communications devices (ECDs--cell phones, etc.)** to the class OR be sure that they are switched "off". Do not use ECDs during the class for talking, texting, or any other purpose. They are a huge distraction. ECDs are strictly forbidden in any exam situation.

Please **avoid "casual" absences**. Any absence will present difficulties since we necessarily cover a lot of material in a course of this nature. Absences equivalent to 3 class hours are allowed without penalty, excepting absences on dates on which an assignment is due or an exam is being given. Following university policy, at the professor's discretion, more than 3 class hours of absences may result in being dropped from the course with a 'W' before the drop date or with an 'F' after the drop date. For details, refer to the Undergraduate Catalog.

A student may also be dropped at the professor's discretion for various behaviors which in the professor's opinion may compromise the delivery or the intellectual integrity of the class (e.g. talking, phoning, or texting during class, looking in the direction of someone else's test paper, etc.). These problems are easy to avoid. Please do so.

Please get assignments turned in on time and be present for all examinations. It is your responsibility to do so. 'Late' submissions will be treated as follows. An assignment turned in after the due date but before the assignment is returned to the class is penalized 10%. Except by prior arrangement, no late assignment will be accepted after that assignment has been returned to the class. For good comprehension of the material, it is important to do the assigned work on time. By university policy, a missed exam results in a grade of 'F' for that exam, unless a prior arrangement has been made with the professor. Refer to the Undergraduate Catalog for details.

On the positive side, if you have questions, or even if you're just curious about something that may be related to what we're working on, please ask. I also learn things from your questions and observations. Feel free to come by during office hours. That's what they're for. Human language is a large and a fascinating topic. I hope that you enjoy our study of it, and that this study will heighten your interest in what has become one of the major frontiers in cognitive science -- linguistics.

If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at www.utep.edu/CASS.