Syntax
Instructor's Handbook

Syntax

A Generative Introduction

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Introduction

Welcome

TO THE INSTRUCTOR

Thank you for adopting *Syntax* as the textbook for your class. I hope you and your students will find it useful.

The book is aimed at an introductory level of formal analysis. It is *not* an introduction to Minimalism, but presents a view that is Minimalist-informed. For example, I don't approach phrase structure from the perspective of Bare Phrase Structure or Antisymmetry. Instead, the student starts with old-style Phrase Structure Rules, then is lead through X-bar theory, finally in chapter 12, there is a very brief discussion of Merge. I didn't write the book in Minimalism mainly because I feel that MP, although a great theory, is a little too abstract at this time for beginning students.

The book is designed to take students through many of the fundamental concepts of syntax (constituency, phrase structure rules, X-bar theory syntax/lexicon interactions, binding, structural relations, various kinds of movement and conditions on movement). I certainly don't claim to have covered everything. For example, there is almost no discussion of VP ellipsis, and no mention at all of Dative Movement, Tough-movement or ACD. I chose topics that I think are accessible to the beginner and form a coherent whole. However, you may well want to supplement the text with readings on the topics I don't cover. You may also want to look carefully at the problem sets and gray textboxes for each chapter. If I wasn't able to include discussion of a topic then there is frequently a problem set that takes it up.

The textbook is designed to be used over a typical 14-week semester, although, I have found that sometimes I want to spend more time on some of the earlier chapters. For example, I often spend two and a half weeks on chapter 5. I, and my colleagues, have used this textbook successfully a number of times in our one-semester undergraduate *Introduction*

to Syntax class. This class (which normally has around 50 students in it) has a prerequisite of a formal introduction to linguistics, which focuses on the core areas of phonology, syntax, morphology, phonetics, and semantics. Some people may prefer to break this textbook into two semesters' worth of material, supplementing some areas I gloss over more quickly with additional reading. I have also given this textbook to first-year graduate students who came to our program with limited background in syntax. They have all found it a successful way to gear them up to the level of our core syntax classes. Other people have told me that they have used the book in introductory graduate classes, although this is not the primary audience for the book. I deliberately made the tone of the book "informal," which may be less appropriate to graduate students.

The textbook is designed to be used in the order of presentation, where each chapter builds on the next. I understand that you may, of course, want to do the chapters in a different order, or skip chapters entirely (e.g. some people may prefer to skip the discussion of phrase structure rules and go directly to X-bar theory). In this manual, I've mentioned all the major ideas covered in each chapter, so that if you skip a chapter or do them out of order you'll know what to cover extramurally.

The problem sets form an important part of the book. They often ask the student to challenge the presentation of the material in the textbook and think critically about the material. The problem sets come of a number of types. Some are simply technology practice to cement the knowledge they have learned (e.g., the tree drawing exercises), others ask the student to apply their new skills to foreign language problem sets, and still others ask the student to challenge the black and white presentation of the text.

Electronic copies of all the problem sets in Microsoft Word 98/2000 and PDF formats are available on the textbook homepage on Blackwell's website: `http://www.blackwellpublishers.co.uk/carnie` You may need a password to access them. Instructions on how to obtain one are found on the web page. You may also need to download fonts to use the Word98/2000 versions. You are welcome to download these problem sets and modify them for your own use. *However, please do not distribute problem sets without a citation to the book on every page, even if you significantly modify them.* I, and my contributing problem set authors, have spent a long time composing these problem sets, and would like credit for them. On that same website you can download the power point presentation slides I use in my own classes. You are welcome to use these if you like, again with credit.

On a related note: in order to retain the usefulness of the problem sets in this text book for use in classes by other instructors, and for your future classes, ***please do not distribute this instructor's handbook or these answer keys in any form (electronic, print, or otherwise) to your students. Please do not photocopy this handbook.*** If you need extra copies for teaching assistants, please contact Blackwell, and they will be happy to send you a desk copy. I thank you in advance for your assistance in this matter, it will ensure that future instructors will be able to use the problem sets in my textbook with confidence in the originality of their students' answers.

Unsurprisingly, this text is going to reflect my own biases. While I tried to follow the "canon" of thought on particular matters where possible, on occasion, I quite deliberately strayed from the generally accepted path. When I did this, I did it for one of two reasons: (1) Pedagogical reasons (2) I really don't believe the "standard view." An example of the former (pedagogical reasons), is the fact that until an exercise in chapter 8, I generate all auxiliary verbs under T (not as V). I felt it was just easier for the students to put them in the right place when you don't give them the option. An example of the latter (I don't believe the canon), is I don't distinguish adverbs from adjectives (calling them both A). This may well annoy you, the instructor, and for that I apologize in advance. I have thought very carefully about all the cases

where I diverge from common practice, and have decided on reflection to leave them all in. Perhaps these areas will stimulate discussion in your classes.

This instructor's manual is your personal guide to the major ideas, idiosyncrasies of presentation, and answer keys. Each chapter has a brief outline of the major topics covered in the corresponding textbook chapter, along with a discussion of anything unexpected or non-canonical. What follows are the definitions (also found in the textbook itself) used in the chapter, and answers to most problem sets.

Please feel free to send me – or, if you prefer to remain anonymous, Blackwell – any comments, corrections, or high praise you might have on the textbook. I'll be saving those comments for revisions in future editions.

Andrew Carnie
Tucson

chapter 1

Generative Grammar

1. TOPICS COVERED IN THIS CHAPTER

This chapter covers some of the basic philosophical issues of syntactic theory. Items marked with an asterisk (*) have a mention below in Idiosyncrasies in this Chapter section below.

a) Syntax as a science
b) Syntax as a part of cognitive science
c) I-Language (Language) vs. E-Language*
d) The scientific method*
   The distribution of person, number agreement in anaphors is used as an example.
e) Modeling syntactic hypotheses using rules
f) Prescriptive vs. Descriptive rules
g) Sources of data: Intuitions, corpora
h) Distinguishing learning from acquisition
i) Innateness and arguments for it
j) Parameters as an explanation for language variation
k) choosing among theories: Levels of adequacy (descriptive, observational and explanatory)

2. IF YOU SKIP THIS CHAPTER

Some instructors have expressed to me the desire to do this chapter last instead of first. This is a matter of personal taste. If you leave it until last, then you will want to review number and agreement and the notion of anaphor before you do chapter 4, and will probably want to discuss evaluation metrics (levels of adequacy) before you do chapters 12–14. Parameter setting

should be reviewed before chapter 5. The things that I would review in class before going on to chapter 2 include prescriptive vs. descriptive rules, and basic syntactic methodology and perhaps innateness.

3. IDIOSYNCRASIES IN THIS CHAPTER

1 My description of the scientific method will undoubtedly cause some people to raise their eyebrows. Of course scientific investigation does not necessarily begin with data. (In fact, some people claim that it never does). Often a hypothesis precedes any data gathering. However, from the perspective of the student, I think it is important to perceive the data as being the primary driving force behind linguistic science. So I made this simplification for pedagogic reasons.

2 I distinguish I-language from E-language, but use the terms ***Language*** (capital L) and ***language*** (lower case l). The definitions are not precisely identical to I-language and E-language. Language (upper case) is the capacity and ability to use a particular language (lower case).

PROBLEM SETS

1. INTUITIONS

a) Prescriptive (*who* instead of *whom*)
b) Prescriptive (*me* instead of *I*)
c) Descriptive, syntactic (*red* can't be a subject NP)
   (Some students say semantic for the same reason. I generally accept this answer too.)
d) Descriptive, syntactic (*that*-trace effect)
e) Prescriptive (*Hopefully* is supposed to mean "in a hopeful manner" not "I hope that…")
f) Prescriptive (split infinitive)
g) Descriptive, syntactic (wrong word order)
h) Descriptive, semantic (a sister must be a sibling)

2. INNATENESS

It is really hard to come up with a good answer to this question, which is the point of the question. It is hard to come up with an argument against innateness, which suggests the hypothesis is likely correct! The best common answer I've seen suggests performing an unethical experiment where one exposes a child to a language that violates UG.

3. PRESCRIPTIVE RULES

Common answers include: maintaining a standard across dialects for effective communication. Marking of social and educational status; so-called "clarity" in writing.

4. UNIVERSALS

Common answers include: shared world view and perception of the way the world works; a common ancestor language.

5. LEARNING VS. ACQUISITION

Typical answers:
Learned: Reading, writing, mathematics, modern dance, the rules of basketball, driving.
Acquired: walking, facial recognition, sexuality, taste in food.
Other answers are, of course, possible.

6. LEVELS OF ADEQUACY

a) descriptive
b) observational
c) explanatory

7. ANAPHORA

Part 1: The antecedent must precede the anaphor

Part 2: This is the trickiest question in the chapter. The antecedents here are quantifiers. *Everyone* allows any gender or number to appear on the anaphor. *Nobody*, although it is technically not plural (as shown by the verb agreement) requires a plural or masculine singular anaphor.

chapter 2

Fundamentals: Rules, Trees, and Parts of Speech

1. TOPICS COVERED IN THIS CHAPTER

This chapter focuses on the basic notions of constituency (and constituency tests) and phrase structure rules. There is also an extensive discussion of parts of speech and how they are determined (on the basis of distribution, rather than semantically). The rules are roughly aspect-style phrase structure rules.

2. IF YOU SKIP THIS CHAPTER

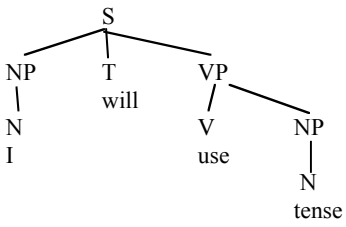
It is possible to skip directly to chapter 5 at this point and do X-bar theory. However, if you do this, you will need to discuss parts of speech, as well as the mechanics of how rules are written, and trees are generated by rules. Average students often comment to me that they are glad they did this chapter before doing X-bar, although they express frustration at having to learn two notations.

You should be warned that the trees in chapters 3 and 4 use the phrase structure rules in this chapter, not the X-bar ones. So if you skip this chapter, you'll need to explain that.

3. IDIOSYNCRASIES OF THIS CHAPTER

1 I don't distinguish adjectives from adverbs, abbreviating both as A. I've had a number of good in-class debates on this issue.

2 I don't use AUX, instead auxiliaries are generated in T. I use the categories S and S' (TP and CP are introduced in chapter 6).



3 Be careful to note the final form of rules, some rules are revised throughout the chapter. I also draw my student's attention to this fact.

4 I use + to indicate multiple possible occurrences of an item in a PSR instead of *, since many student confuse this * with the one meaning ungrammaticality. E.g.

NP → (D) (AP+) N (PP+)

means you can have (hypothetically) as many APs and NPs as you need.

5 I discuss the possibility that particles (blow *up*, etc.) are actually prepositions without an object.

6 Some people dislike my use of the term "modifies" in my golden rule for tree association, feel free to replace with "is closely semantically associated with."

PROBLEM SETS

1. PART OF SPEECH 1

```
a)  The old rusty pot-belly stove has been replaced.
    D    A   A     N(or A)   N     T  T(orV) V

b)  The red-haired assistant put the vital documents
    D      A       N         V   D   A     N

    through the new efficient shredder.
       P    D   A       A       N

c)  The large evil leathery alligator complained to
    D   A       A       A       N        V        P

    his aging keeper about his extremely
    D    A     N       P     D    A

    unattractive description.
    A                  N
```

d) I've just eaten the last piece of chocolate cake.
N T A V D A N P A N

2. PART OF SPEECH 2

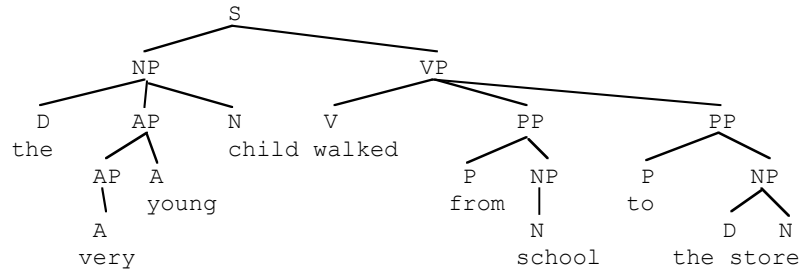
wabe N;	after *the*
were T;	closed class
outgrabe V;	after *did*, *out-* prefix
Jubjub A;	after *the*, before *bird*
frumious A;	after *the*, *-ious* ending
bandersnatch N;	after *frumious*
vorpal A;	after *his*, before *sword*, possibly *-al* ending
manxone A;	after *the*, before *foe*
tumtum A;	after *the*, before *tree*
And Conj;	closed class
in P;	closed class
thought N (!!!);	after *in*
uffish A;	after *in*, before *thought*, *-ish* ending
he	This is tricky, I accept D, Pronoun, or Noun
Jabberwock N;	after *the*, before PP
whiffling	could be either a V (gerund) (after *came*, precedes PP) or an adverb (after verb *came*)
the D;	closed class
tulgey A;	between *the* and *wood*, *-y* ending
burbled V;	*-ed* ending

3. NOOTKA

1) N
2) V
3) V
4) N
5) First position in sentence is a verb, verbs take *-ma* ending second position in a sentence is a noun, nouns take -ʕi suffix.
6) The same word appears in different parts of speech in the same language.

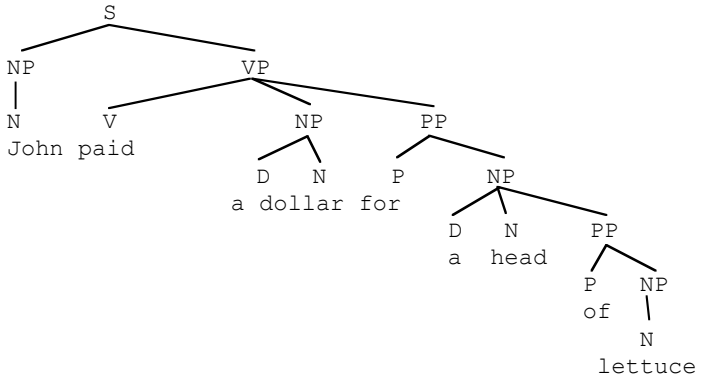
4. ENGLISH

a)



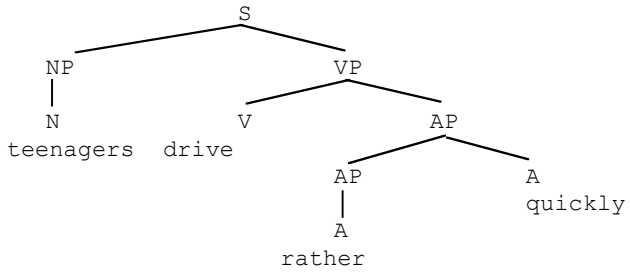
a) [$_S$[$_{NP}$[$_D$The][$_{AP}$[$_{AP}$[$_A$very]][$_A$young]][$_N$child]][$_{VP}$[$_V$walked]
[$_{PP}$[$_P$from][$_{NP}$[$_N$school]]][$_{PP}$[$_P$to][$_{NP}$[$_D$the][$_N$store]]]]].

b)



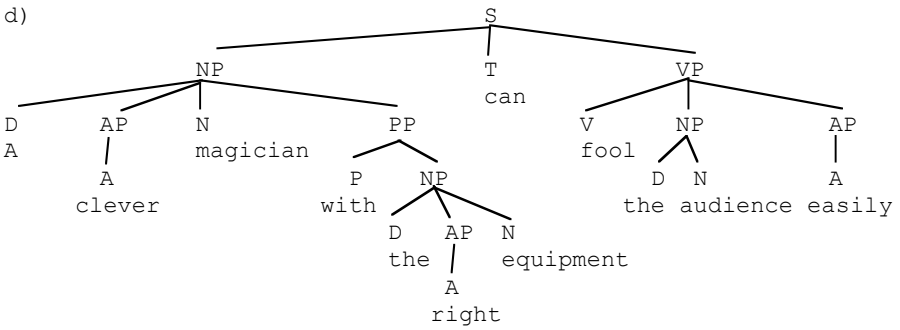
b) [$_S$[$_{NP}$[$_N$John]][$_{VP}$[$_V$paid][$_{NP}$[$_D$a][$_N$dollar]][$_{PP}$[$_P$for]
[$_{NP}$[$_D$a][$_N$head][$_{PP}$[$_P$of][$_{NP}$[$_N$lettuce]]]]]]].

c)



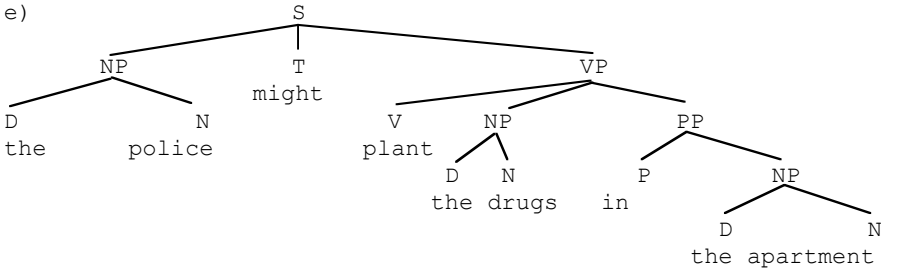
c) [$_S$[$_{NP}$[$_N$Teenagers]][$_{VP}$[$_V$drive][$_{AP}$[$_{AP}$[$_A$rather]][$_A$quickly]]].

d)



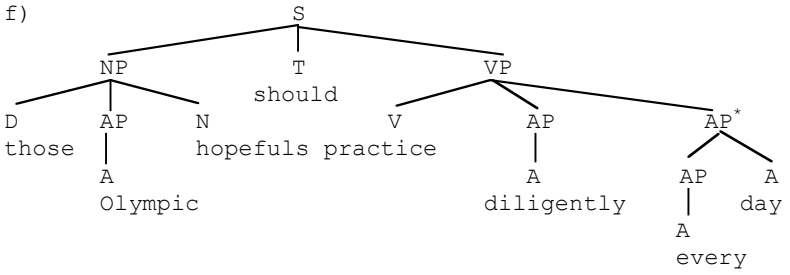
d) [$_{S}$[$_{NP}$[$_{D}$A][$_{AP}$[$_{A}$clever]][$_{N}$magician][$_{PP}$[$_{P}$with][$_{NP}$[$_{D}$the] [$_{AP}$[$_{A}$right]][$_{N}$equipment]]]][$_{T}$can][$_{VP}$[$_{V}$fool][$_{NP}$[$_{D}$the] [$_{N}$audience]][$_{AP}$[$_{A}$easily]]]].

e)



e) [$_{S}$[$_{NP}$[$_{D}$The][$_{N}$police]][$_{T}$might][$_{VP}$[$_{V}$plant][$_{NP}$[$_{D}$the][$_{N}$drugs]] [$_{PP}$[$_{P}$in][$_{NP}$[$_{D}$the][$_{N}$apartment]]]]].

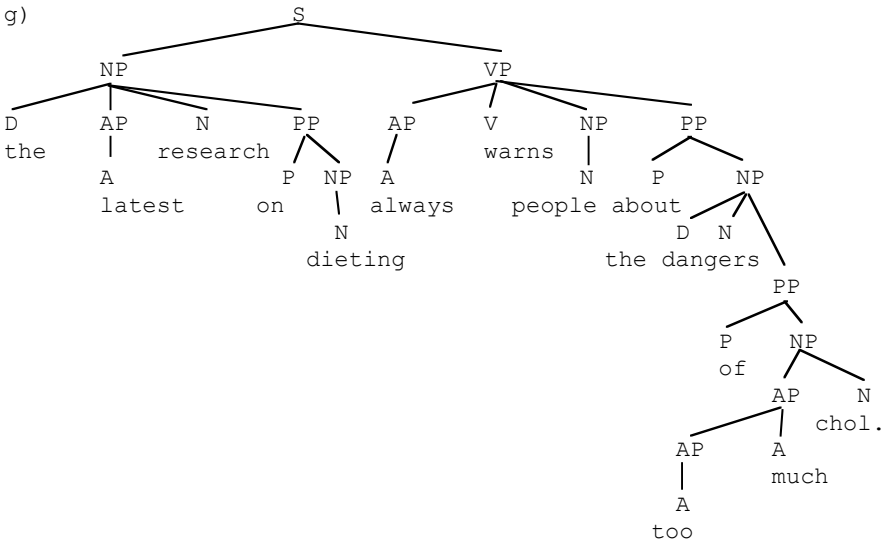
f)



*The AP characterization of *every day* is of course suspicious. But it is the only one that fits the rules I've given. I allow a certain amount of flexibility on this point.

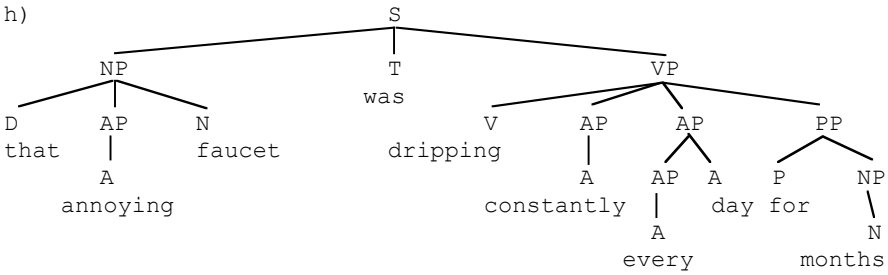
f) [$_{S}$[$_{NP}$[$_{D}$Those][$_{AP}$[$_{A}$Olympic]][$_{N}$hopefuls]][$_{T}$should] [$_{VP}$[$_{V}$practice][$_{AP}$[$_{A}$diligently][$_{N?P}$[$_{D}$every][$_{N}$day]]]].

g)



g) [$_S$[$_{NP}$[$_D$The][$_{AP}$[$_A$latest]][$_N$research][$_{PP}$[$_P$on][$_{NP}$[$_N$dieting]]]]
[$_{VP}$[$_{AP}$[$_A$always]][$_V$warns][$_{NP}$[$_N$people]][$_{PP}$[$_P$about][$_{NP}$[$_D$the]
[$_N$dangers][$_{PP}$[$_P$of][$_{NP}$[$_{AP}$[$_{AP}$[$_A$too]][$_A$much]][$_N$cholesterol]]]].

h)



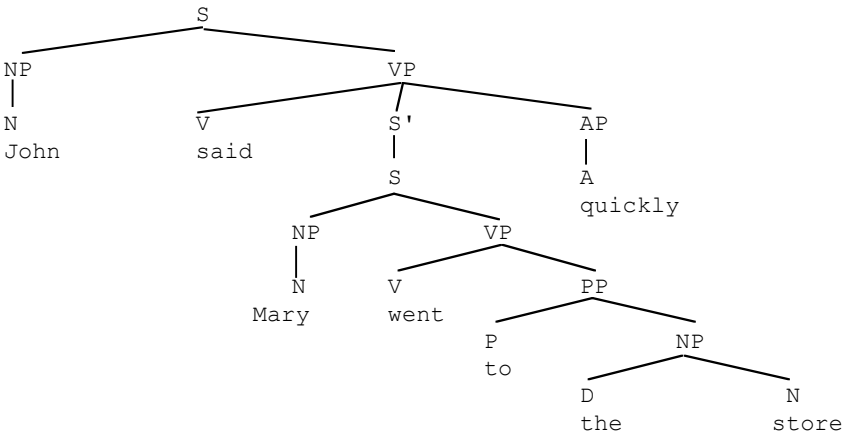
(Again *every day* is problematic.)

h) [$_S$[$_{NP}$[$_D$That][$_{AP}$[$_A$annoying]][$_N$faucet]][$_T$was][$_{VP}$[$_V$dripping]
[$_{AP}$[$_A$constantly]][$_{AP}$[$_{AP}$[$_A$every]][$_A$day]][$_{PP}$[$_P$for]
[$_{NP}$[$_N$months]]]].

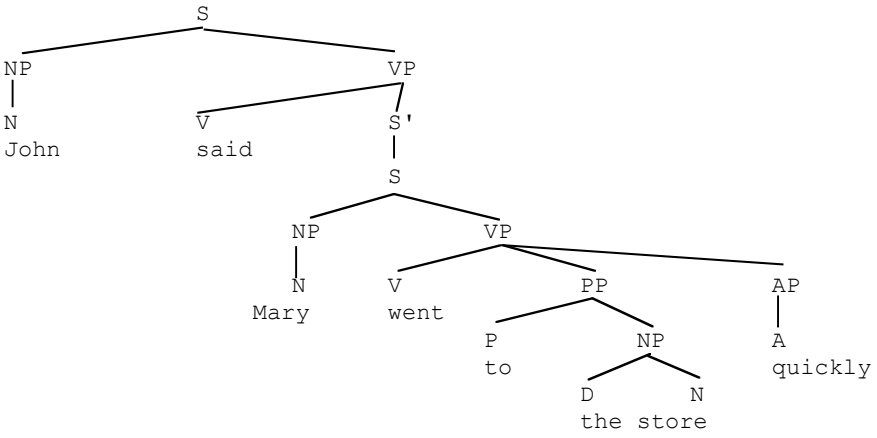
5. AMBIGUITY

(Students often give the trees for their paraphrases, not the original sentence, although the question is worded so they don't. You might draw their attention to this.)

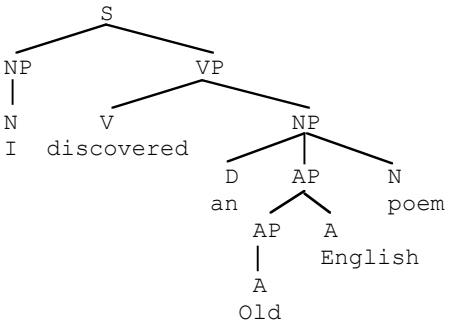
a) i) John said quickly that Mary went to the store.



ii) John said that Mary went quickly to the store.

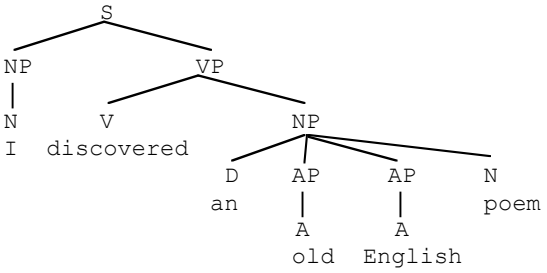


b) i) I discovered a poem written in Old English.



(Some students will also treat Old English as a compound and generate it under a single A node. This seems like a reasonable alternative to me.)

ii) I discovered an old poem written in Modern English(or written in England, or from England).



6. STRUCTURE

a) *It was a minivan to Petunia that Susan gave.
*Susan gave it. (where ellipsis hasn't occurred)

The following sentence will give bad results:
Susan gave the minivan to Petunia and the car to Phil.

b) The constituency here depends upon whether the letter is from Stacy, or whether Clyde merely got it from Stacy (but it was from Louise). So both answers are possible

7. CONSTITUENCY TESTS (ADVANCED)

This is a very difficult question. [Barbie and Ken kissing] is a small clause. Various tests will show this. But [Barbie and Ken] is displaced by movement.

8. ENGLISH PREPOSITIONS

*He blew out the candle and up the building

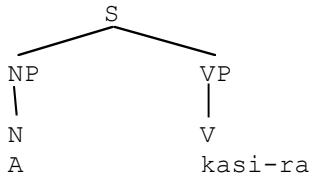
But

He turned off and blew up the lightbulb.

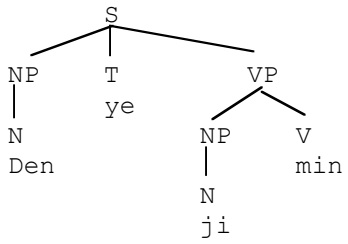
9. BAMBARA

1) No
2) Yes
3) No evidence

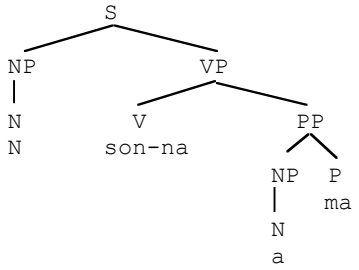
4) NP → N (or none)
5) PP → NP P
6) VP → (NP) V (PP)
7) S → NP (T) VP
8) a)



c)



d)

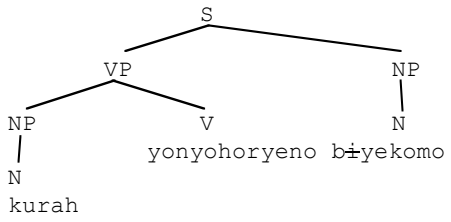


9) b) [$_S$[$_{NP}$[$_N$A][$_{VP}$[$_V$kaa-ra]]].
c) [$_S$[$_{NP}$[$_N$Den][$_T$ye][$_{VP}$[$_{NP}$[$_N$ji]][$_V$min]]].

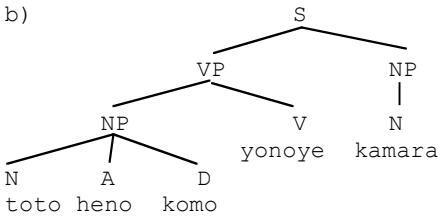
10. HIXKARYANA

1) Yes
2) No
3) NP → N (A) (D)
4) VP → (NP) V
5) S → VP NP
6) Verb, it precedes the subject NP

7) a)



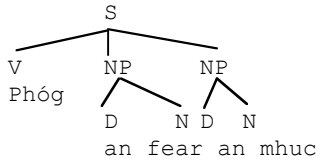
b)



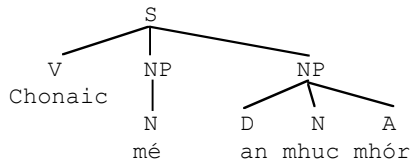
8) a) [$_S$[$_{VP}$[$_{NP}$[$_N$Kuraha]][$_V$yonyhoryeno]][$_{NP}$[$_N$bi~yekomo]]].
c) [$_S$[$_{VP}$[$_{NP}$[$_N$Toto][$_A$heno][$_D$komo]][$_V$yonoye]][$_{NP}$[$_N$kamara]]].

11. IRISH

1) No
2) NP → (D) N (A) *(must be consistent with the answer to (1)*
3) No
4) S → V NP (NP)
5) c)



d)



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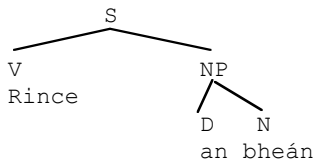


chapter 3

Structural Relations

0. INTRODUCTION

This chapter is pretty straightforward. However, I would like to draw a couple of things to your attention.

1) There is no discussion of government (except in passing).
2) The definition of "mother" is limited to immediate domination.
3) The discussion of "indirect object" is very sketchy. If you care about this you might want to expand on the issue.

PROBLEM SETS

1. STRUCTURAL RELATIONS[1]

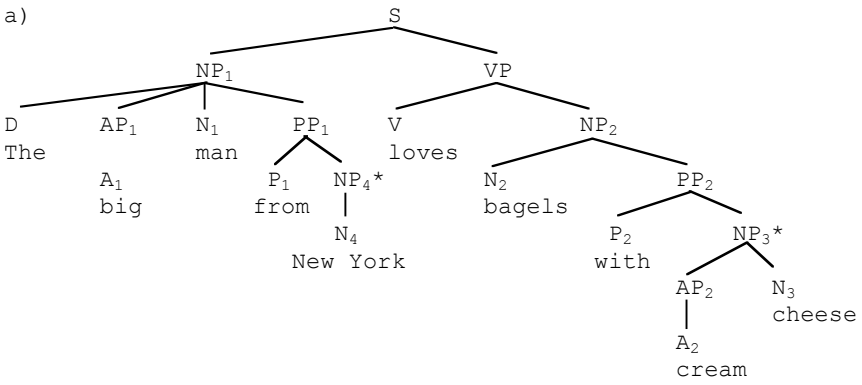
1) N_3, NP_3, PP, VP, S
2) NP_3
3) No
4) D_1 AP, A,

[1] The idea for this problem set is borrowed from Radford (1988).

5) T, VP, V, NP_2, N_2, PP, P, NP_3, D_3, N_3
6) VP
7) VP, V, NP_2, N_2, PP, P, NP_3, D_3, N_3
8) {NP_1,T,VP}, {D_1,AP,N_1}, {V,NP_2,PP}, {P,NP_3}, {D_3,N_3}
9) VP
10) Symmetrically c-command
11) NP_2, N_2, PP, P, NP_3, D_3, N_3
12) NP_1
13) NP_2
14) NP_3
15) Yes
16) PP
17) V, NP_2, N_2, PP, P, NP_3, D_3, N_3
18) S
19) D_1, A, N_1, T, V, N_2, P, D_3, N_3
20) D_3

2. TREES

a)



*Some students may treat New York as an N with an adjective modifier, and similarly some students may treat cream cheese as a compound.

I haven't done the trees for the following sentences. Sorry, you are on your own!

b) Susan rode a bright blue train from New York.
c) The plucky platypus kicked a can of soup from New York to Tucson.
d) John said Martha sang the aria with gusto.
e) Martha said John sang the aria from *La Bohème*.
f) The book of poems from the city of Angels with the bright red cover stinks.
g) Louis hinted Mary stole the purse deftly.

h) The extremely tired students hated syntactic trees with a passion.
9) Many soldiers have claimed bottled water quenches thirst best.
10) Networking helps you grow your business.

3. STRUCTURAL RELATIONS

1) VP, V, NP_2, N_2, PP_2, P_2, NP_3, AP_2, A_2, N_3
2) V, NP_2, N_2, PP_2, P_2, NP_3, AP_2, A_2, N_3
3) D, AP_1, N_1, PP_1, P_1, NP_4, N_4
4) D, AP_1, N_1, PP_1
5) VP, V, NP_2, N_2, PP_2, P_2, NP_3, AP_2, A_2, N_3
6) NP_1, D, AP_1, N_1, PP_1, P_1, NP_4, N_4
7) D, AP_1, N_1, PP_1, P_1, NP_4, N_4
8) V, NP_2, N_2, PP_2, P_2, NP_3, AP_2, A_2, N_3
9) V, NP_2
10) None
11) NP_1, D, AP_1, N_1, PP_1, P_1, NP_4, N_4

4. NEGATIVE POLARITY ITEMS

Both c-command and precedence are consistent with the data in this question.

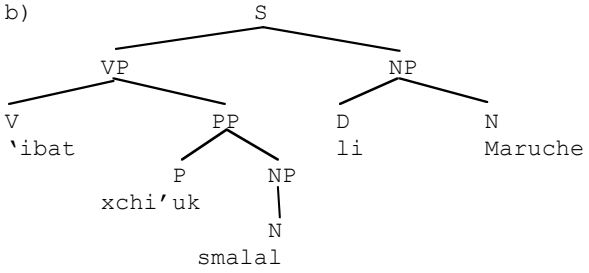
5. GRAMMATICAL RELATIONS

a) Subject: It; object of preposition: southern California
b) Subject: we ; indirect object: the family dog; object: another bath
c) Subject: The quiz show contestant; object: a wild guess about the answer; object of a preposition: the answer

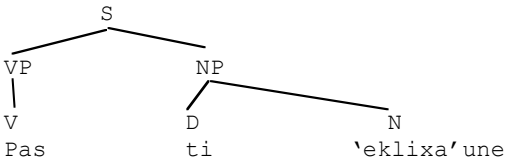
6. TZOTZIL

1) NP → (D) N
2) PP → P NP
3) VP → V (AP) (NP) (PP)
(There is not enough evidence to determine the order of NP and PP.)
4) S → VP NP
(Some students may treat the subject as optional if they note that the church in (c) is semantically an object.)
5) li Maruche
6) A trick question, could be either depending upon how you treat passives also depending upon their trees in (10) below.

7) Precede
8) Precede
9) Yes
10) b)

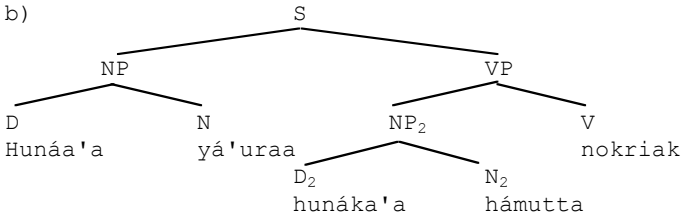


c)

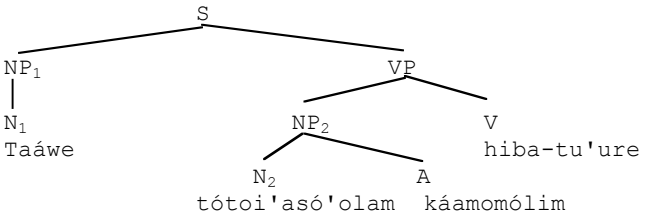


7. HIAKI

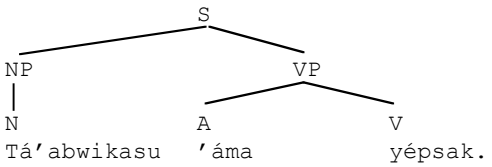
1) NP → (D) N (A)
2) No, prepositions are morphologically marked.
3) VP → {PP, A, NP} V
(Don't put any order on these complements because there isn't any evidence for the order in the data.)
4) S → NP VP
5) b)



c)



d)



6) [$_{NP}$Hunáa'a yá'uraa]
7) Technically no, since the students are told to assume *'áma* is an adverb and object is defined as an NP daughter of VP.
8) [$_{N}$ yá'uraa]
9) VP, NP_2, N_2, D_2, V
10) [$_{V}$ yépsak]
11) NP
12) NP_2, VP, S
13) N_2,
14) NP_1, N_1, N_2
15) No
16) Yes

chapter 4

Binding Theory

0. INTRODUCTION

This chapter presents a fairly straightforward presentation of binding theory. However, there is coverage of all three binding conditions. I oversimplify the description of what binding domain is. I stipulate that the binding domain is equivalent to the clause. So there is no discussion of accessible subject etc. Nor, since there is no government discussed in chapter 3, is there any discussion of "governing category." These topics might serve as topics for further discussion.

PROBLEM SETS

1. BINDING PRINCIPLES

a) Condition B
b) Condition C
c) Condition A
d) Condition B
e) Condition A
f) Condition B

2. JAPANESE

Question 1: It appears to be an anaphor in this data, it must be locally bound.

Question 2: It has the properties of both, since in (b) it can be bound by something outside the clause. (The solution, not asked for, is that *zibunzisin* must be bound by the first NP that precedes it.)

Question 3: Condition C (Mary bound by *zibunzisinga*).

3. WH-QUESTIONS

The anaphor in the *wh*-phrase isn't c-commanded by its antecedent in it's surface position. We return to this question in the chapter on *wh*-movement.

4. COUNTEREXAMPLES?

a) *Me* is c-commanded and coindexed with I, should be a principle B violation.
b) Should be a condition A violation, because *himself* is bound by an NP outside its binding domain (clause).
c) The obligatorily bound anaphor is bound by an NP two clauses up.
d) In (i) the pronoun *ye* can't be locally bound.
   In (ii) the pronoun *ye* can't be free.
   So in (i) it's behaving like a pronoun, and in (ii) like an anaphor.

5. PERSIAN

Xodesh can either be locally or longdistance bound.
Xod must be locally bound.

6. C-COMMAND OR PRECEDENCE?

If precedence defines binding, then these sentences would constitute condition C violations. However, the sentences are grammatical. By contrast, under c-command, the pronoun does not c-command the R-expression, so these do not constitute condition C violations (correctly).

chapter 5

X-bar Theory

0. INTRODUCTION

This chapter introduces the basic notions of X-bar theory as applied to NPs, APs, PPs, and VPs.[2] CP, TP (which I use instead of IP), and DP are saved until the next chapter. There is significant discussion on motivating more general principles instead of language specific phrase structure rules. I also discuss at length the distinction between complements and adjuncts, and the tests to distinguish them. The notion of phrase structure parameters is also introduced.

As in Radford (1988) and the original work in X-bar theory (but not consistent with common current practice), adjuncts in this chapter are *not* Chomsky-adjoined. Instead they are daughters of and sisters to the single bar level.

$$[_{XP} \text{ spec } [_{X'} \text{ adjunct } [_{X'} \text{ X complement}]]]$$

I'm using a version of X-bar theory where only the single bar level iterates, XP is what I use for X^{max} or X".

There is relatively little discussion of specifiers (I'm going to reserve specifiers for subjects in later chapters). I put determiners in the specifier of NP in this

[2] The particular presentation in this chapter of X-bar theory draws fairly heavily on Radford (1988) rather than on the original versions of X-bar theory found in Chomsky (1973) or Jackendoff (1977).

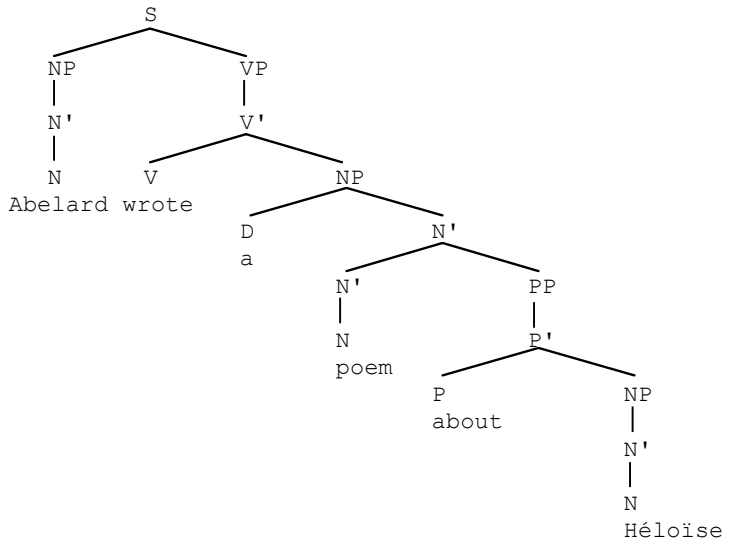
chapter but this is the *only* specifier they see. In chapter 6, I adopt a DP hypothesis getting rid of this exception. Unlike Jackendoff's original form, I don't put *very* in the spec of VP, because I find this confuses the students later when they do the VP-internal subject hypothesis. So students may need some additional discussion reassuring that specifiers are well motivated.

One area that may require further discussion is the treatment of pre-head complements (as in *the linguistics professor*). Some people prefer to treat these as N-N compounds rather than AP N complement head structures. I adopt the latter, without much discussion. There is no discussion in the text of why pre-head modifiers must not be phrasal. This will probably need some classroom work.

PROBLEM SETS

1. TREES

a)



You are on your own with the rest. Notice that "from Italy" in (d) is ambiguous and could either modify *volume* or *verse*, in either case as an adjunct.

b) Abelard wrote a poem with Héloïse in mind.
c) Abelard wrote a poem with Héloïse's pen.
d) The red volume of obscene verse from Italy shocked the puritan soul of the minister with the beard quite thoroughly yesterday.

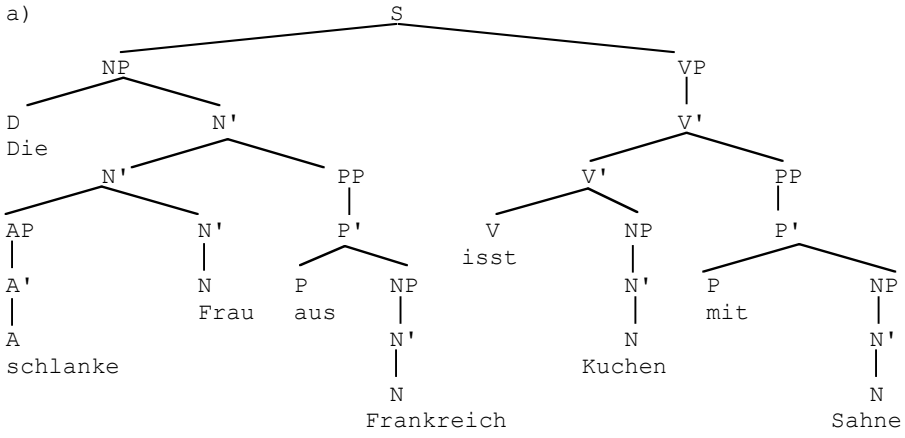
e) The biggest man in the room said that John danced an Irish jig from County Kerry to County Tipperary all night long.

2. GERMAN NOUN PHRASES

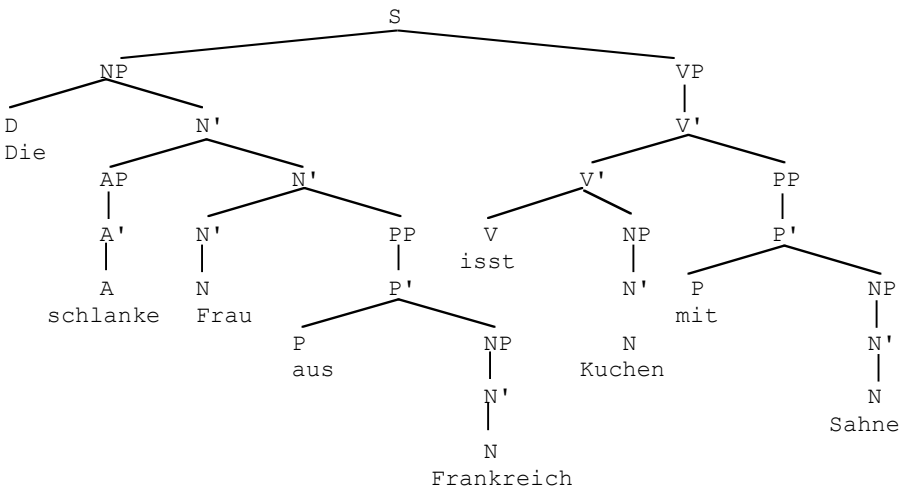
1) Elide or delete an N' node. This is like *one*-replacement in English.

2) I believe *mit Sahne* modifies the verb, not the NP *cake*, but this is up for debate. Simin Karimi tells me that on the basis of certain pronominalization facts, she thinks the PP modifies *Kuchen*. The exact analysis of the *mit Sahne* PP is irrelevant to the content of the question. Which is actually about the Subject NP.

a)



OR



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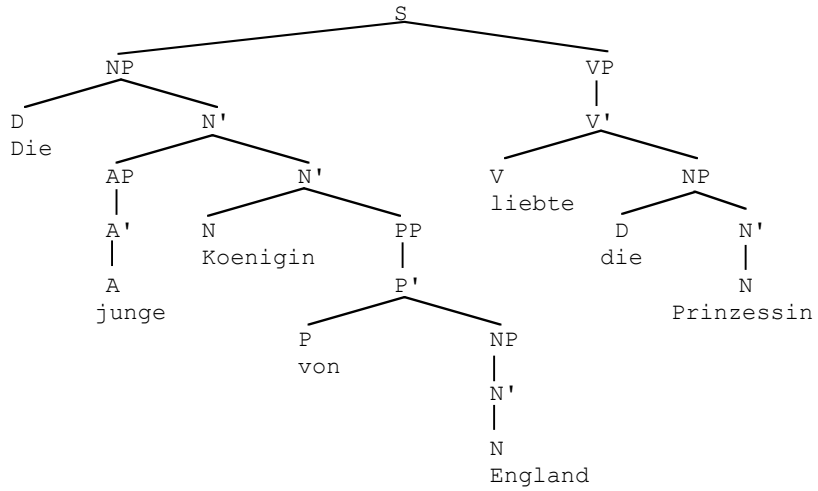
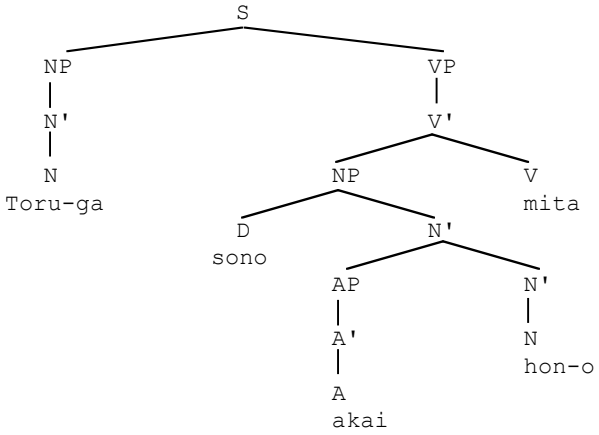


g) *von England* is a complement, so is a sister to N, not N', so deletion of the bare noun is impossible. By contrast *aus Frankreich* is an adjunct, sister to N', so there is an N' alone above the noun head can occur.

3. JAPANESE

1) *-o* marks objects and *-ga* marks subjects
2) SOV
3) Precede
4) Precede
5) Precede
6)



4. PARAMETERS

I leave these for you to do.

chapter 6

Extending X-bar Theory: CP, TP, and DP

0. INTRODUCTION

This chapter presents a short survey of clause types (main, embedded, complement, adjunct, specifier, tensed, untensed). There is no discussion of small clauses, I find students have too much difficulty with the concept to identify them at this stage in their intellectual development. I identify a clause as a subject and predicate phrase (I use the term *predicate phrase* here, instead of predicate due to the fact in the next chapter we use predicate to refer only to the head of the predicate phrase).

DPs, TPs (note not IP!) and CPs are all introduced. I make the claim that all clauses have a CP even if there is no overt C (and similarly with TP and T). There is a brief introduction to subject/aux inversion, which we return to in more detail in chapter 8.

PROBLEM SETS

1. ENGLISH *THAT*

a) Complementizer
b) Determiner, as shown by number agreement

2. SUBJECTS AND PREDICATE PHRASES

a) *Subject*: The peanut butter
   T: has
   Predicate Phrase: got moldy
b) *Subject*: The duffer's swing
   Predicate Phrase: blasted the golf ball across the green
c) *Main Clause Subject*: That Harry loves dancing
   Main Predicate Phrase: is evidenced by his shiny tap shoes
   Embedded clause subject: Harry
   Embedded clause predicate phrase: loves dancing
d) *Subject*: The Brazilians
   Predicate Phrase: pumped the oil across the river

3. CLAUSE TYPES

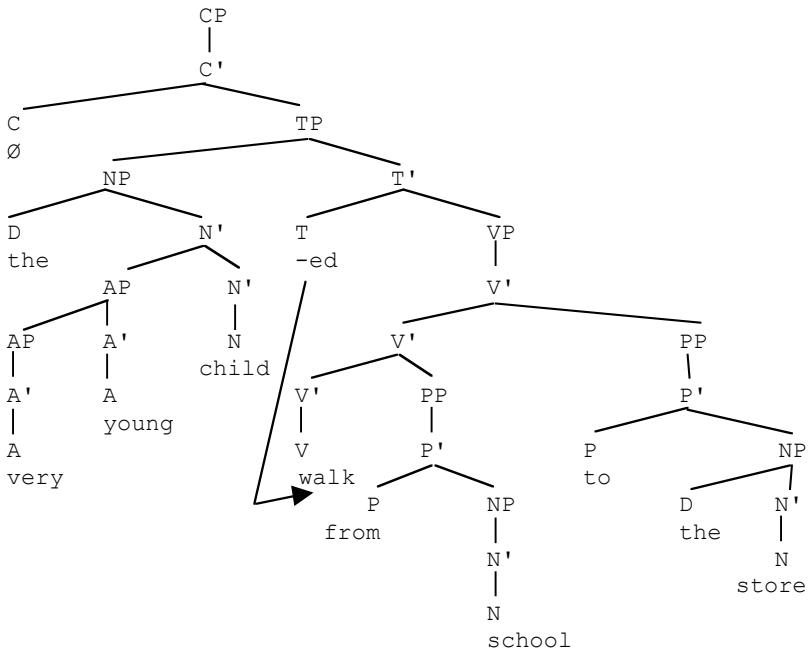
a) *Main clause*: Stalin may think that Roosevelt is a fool.
      complementizer: Ø
      T: may
      subject: Stalin
      finite
   Embedded clause: that Roosevelt is a fool
      complementizer: that
      T: is
      subject: Stalin
      finite

b) *Main clause*: Lenin believes the Tsar to be a power-hungry dictator.
      complementizer: Ø
      T: -s
      subject: Lenin
      finite
   Embedded clause: the Tsar to be a power-hungry dictator
      complementizer: Ø
      T: to (to be?)
      subject: the Tsar
      non-finite

c) *Main clause*: Brezhnev had said for Andropov to leave.
      complementizer: Ø
      T: had
      subject: Brezhnev
      finite
   Embedded clause: for Andropov to leave
      complementizer: for
      T: to
      subject: Andropov
      non-finite

d) *Main clause*: Yeltsin saw Chernyenko holding the bag.
   complementizer: Ø
   T: -ed?? or [past]
   subject: Yeltsin
   finite
   Embedded clause – this is tricky, since they have to identify the clause headed by *hold* as a clause. Chernyenko holding the bag
   complementizer: Ø
   T: -ing? (this requires some discussion)
   subject: Chernyenko
   non-finite

4. TREES



You are on your own for the rest:

b) Linguistics students like phonetics tutorials.
c) John paid a dollar for a head of lettuce.
d) Teenagers drive rather quickly.
e) Martha said that Bill loved his Cheerios in the morning.
f) Eloise wants you to study a new language. [assume *to* = T]
g) For Maurice to quarrel with Joel frightened Maggie.
h) John's drum will always bother me.

5. TREES II

Again you are on your own.

6. HUNGARIAN

No, the possessor has to appear in spec, NP. In the second construction it appears in spec, DP.

7. ENGLISH MODALS AND AUXILIARIES

You are only allowed one modal (=T), but multiple Auxs (=V) (e.g., I should have had been being kissed when Margo walked into the room and interrupted the frivolity).

chapter 7

Constraining X-bar Theory: Theta Roles and The Lexicon

0. INTRODUCTION

The system of X-bar theory developed in the previous chapter seriously overgenerates. This chapter introduces theta roles and thematic relations as a way to constrain this.

Two important points of note: (1) *I distinguish thematic relations from theta roles*. Thematic relations are the semantic notions. Theta roles are the syntactic slots associated with a group of theta roles. The theta criterion holds of theta roles, not thematic relations. (2) I use Haegeman's box notation for theta grids.

The EPP and expletives are also introduced in this chapters.

PROBLEM SETS

1. SINHALA

1) See below
2) See below
3) Experiencer
4) maṭə is used with experiencers
5) A attaches to Agents, B attaches to experiencers

a) Mamə$_i$ kawi$_j$ kiənəwa.

agent	theme
i	j

b) Maʧə$_i$ kawi$_j$ kiəwenəwa.

experiencer	theme
i	j

c) Lamea$_i$ kataawə$_j$ ahanəwa.

agent	theme
i	j

d) Lameaʧə$_i$ kataawə$_j$ æhenəwa.

experiencer	theme
i	j

e) Mamə$_i$ naʧənəwa.

agent
i

f) Maʧə$_j$ næʧəenəwa.

experiencer
i

g) Hæmə irida mə mamə$_i$ koləmbə$_j$ yanəwa.

agent	goal
i	j

h) Hæmə irida mə maʧə$_i$ koləmbə$_j$ yæwenəwa.

experiencer	goal
i	j

i) Malli$_i$ nitərəmə aňʤənəwa.

agent
i

j) Malliʧə$_i$ nitərəmə æňʤənəwạ.

experiencer
i

k) Mamə$_i$ untə$_j$ baninəwa.

agent	theme
i	j

l) Maʧə$_i$ untə$_j$ bænenəwa.

experiencer	theme
i	j

m) Apiɻə$_i$ pansələ$_j$ peenəwa.

experiencer	theme
i	j

2. IRISH AND THE THETA CRITERION

1) The theme role seems to be applied twice, once to *An fear*, the other time to *é* (a resumptive pronoun).
2) The subject role is in the subject agreement (pro-drop).
3) The object appears twice, once in the object, the second time in the possessive clitic (clitic doubling).

3. WARLPIRI

ngka: location
kurra: goal
ngirli: source
ngku: agent
wana: location/path

4. OBJECT EXPLETIVES

Maybe. It is the double of the relative clause that modifies it. Otherwise this sentence would be an example of a counterexample to the theta criterion.

5. PASSIVES

Part 1:

a) John$_i$ bit the apple$_j$.

agent	theme
i	j

b) Susan$_i$ forgave Louis$_j$.

agent experiencer	theme
i	j

c) The jockey$_i$ rides the horse$_j$.

agent	theme
i	j

d) Phillip$_i$ gave the medal$_j$ to the soldier$_k$.

agent	recipient	theme
i	j	k

e) Phillip$_i$ gave the soldier$_j$ the medal$_k$.

agent	theme	recipient
i	j	k

Part 2: Delete external argument (delete agent might also be consistent). Some students (usually the bright ones) will also say that the second theta role becomes the external argument. While technically this is not correct, they can't know this until they do chapter 9. Other students claim that the theme becomes an experiencer, I'm less thrilled with this answer, especially in light of how one can experience giving. But since the definition of experiencer is so wishy-washy, it is hard to argue against.

6. HIAKI *-WA*

Part 1: Deletes agents, similar to English –en.
Part 2: Only agents are effected by –wa. Also note that intransitives can be affected by the suffix.

7. ANTIPASSIVES IN ENGLISH AND INUPIAQ

Note the question is only about theta grids, but of course there are also case changes going on here too (the element normally marked with absolutive is deleted, and the element that otherwise is marked with ergative becomes absolutive).

Part 1: Delete the theme.
Part 2: Similar to antipassive, but doesn't allow a *by*-phrase expression of the theme. Also seems to be limited to certain verbs (not required by question).

chapter 8

Head-to-Head Movement

0. INTRODUCTION

This is the first chapter on transformations. It presents a relatively straightforward view of head-to-head movement, starting by contrasting French and English adverbial and negative placement, moving on to VSO order in Irish (the VP-internal subject hypothesis is also introduced here). Then we move on to T → C movement and the interaction of V → T and T → C.

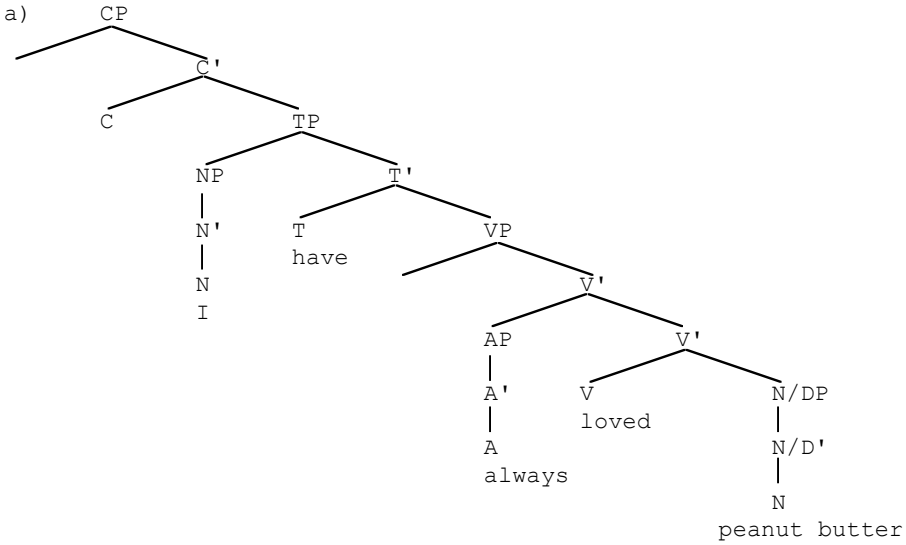
One thing that is unusual about this chapter, and that you should be aware of, is that I continue to treat all auxiliaries as generated under T, and not raised from V → T. I did this for a number of reasons, the primary of which is that I wanted to avoid having to talk about multiple VP shells. However, there is an exercise in this chapter (building on a previous exercise in chapter 6) that asks the students to develop a V raising analysis of auxiliaries.

I cast transformations in the D-structure → Transformations → S-structure model, leaving aside questions of the Minimalist model until chapter 12.

PROBLEM SETS

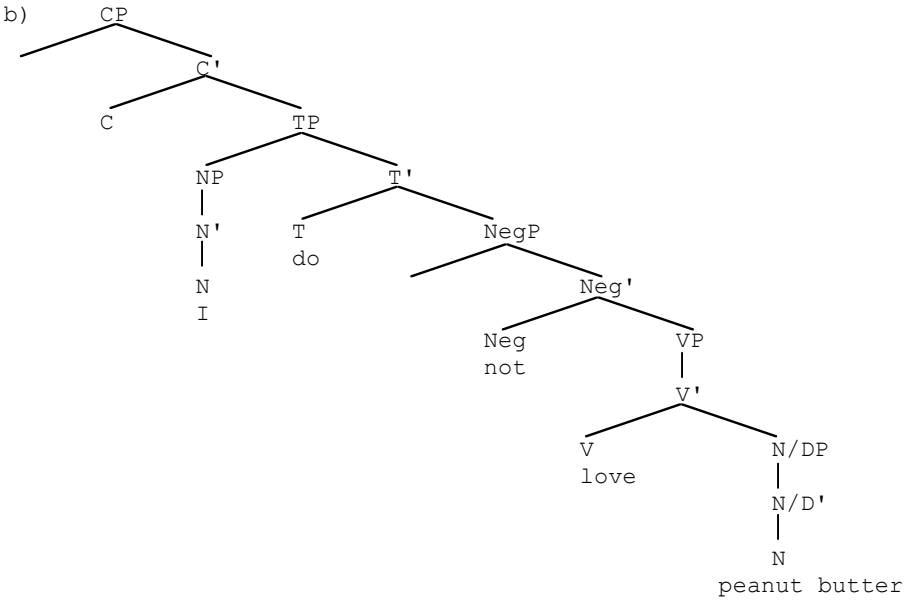
1. ENGLISH

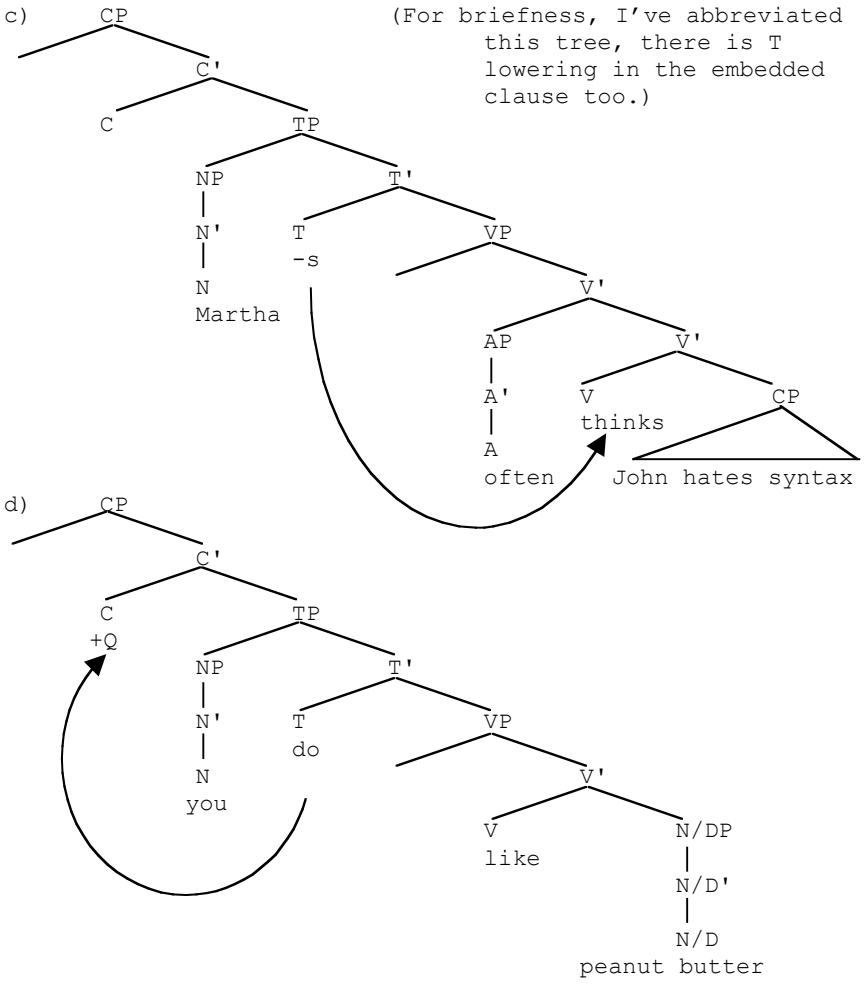
a)



(some students may treat *peanut butter* as a phrase)

b)





I leave the rest to you.
e) Have you always hated peanut butter?
f) Are you always so obtuse?

2. AMERICAN VS. BRITISH ENGLISH VERB *HAVE*

Part 1: Auxiliary *have* undergoes T → C but possessive *have* does not.
Part 2: Yes, (suggesting that it has undergone V → T).

3. VERB RAISING

German: Yes, main verbs appear higher than negation and undergo T → C.

Persian: Yes the main verb undergoes T → C. The data in (c) and (d) is trickier, but there it appears as if negation attaches to T, and in (c) it is attached to the V, suggesting the verb has raised to T. The word order is surprising, however.

4. ITALIAN

V raising

5. GERMANIC VERB SECOND

Part 1: You don't get V2 when there is an overt complementizer. The phenomenon is in complementary distribution with overt complementizers, suggesting that complementizers are involved.

Part 2: V raising.

6. HEBREW CONSTRUCT STATE (N → D)

Part 1: Overt complementizers are in complementary distribution with construct states.

Part 2: The agreement phenomena show that the construct state N, agrees with the final adjective. If we take seriously the idea that modifiers are always sisters (or more accurately are attached to a projection of the element they modify), then at some point the construct N had to be low and near the adjective.

7. ENGLISH

Adjectives normally precede nouns in English, the adjectives here follow. Suggesting that at least part of the noun has moved around them. This is supported by the alternation between *some spicy thing* and *something spicy*. (However, of course, contrast *a spicy something*!)

8. ENGLISH PROPER NAMES AND PRONOUNS

Part 1: Proper names are (usually) in complementary distribution with determiners. The fact that you can have The Smiths, suggests that under certain circumstances the N remains downstairs. The alternation (Smith vs. The Smiths) suggests that movement is involved.

Part 2: D, they are in complementary distribution with determiners (it is an open question as to whether they undergo N → D movement).

9. ITALIAN N → D

When there is no determiner, the adjective follows the noun, when there is, it precedes the noun. Assuming that adjectives are fixed in position, the alternation suggests that the N has raised around the AP. The answer to this is very similar to the answer to question 7.

10. ENGLISH MODALS (REPRISE)

Both modals and tensed auxiliaries can undergo subject/aux inversion, precede negation and adverbs, whereas untensed auxiliaries don't. This suggests untensed auxiliaries mark the base position for auxiliaries (but not modals) and they move when they are tensed.

chapter 9

NP/DP Movement

0. INTRODUCTION

This chapter presents a fairly standard view of NP movement. I call it NP/DP movement, so that we can retain the traditional NP movement name (which students will find in the literature), but maintain the use of the DP hypothesis.

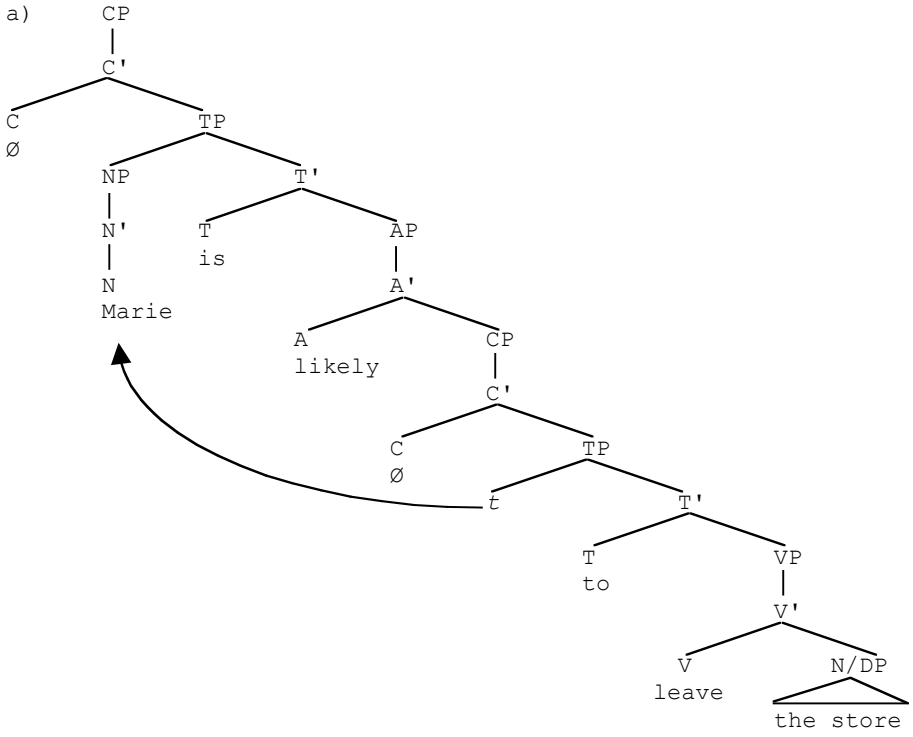
I treat both passives and subject-to-subject raising in this chapter. subject to object raising (see also exercise 6 of this chapter) and control constructions are left to the next chapter. I start out with an EPP-based explanation but develop it into Case theory.

Movement is explained in terms of feature checking for the first time.

PROBLEM SETS

1. ENGLISH

a)



I leave the rest for you to do, however, I've listed the transformations that apply in each:

b) The money was hidden in the drawer.
   passive
c) Donny is likely to have been kissed by the puppy.
   passive in the lower clause, raising
   Note: you may want to discuss how to deal with the multiple auxiliaries before assigning this question.
d) It seems that Sonny loves Cher.
   T-lowering (in both clauses), expletive insertion
e) Has the rice been eaten?
   T → C movement, passive
   again discussion of the multiple auxs will probably be in order

2. ENGLISH UNGRAMMATICAL SENTENCES

a) Sonny can't get case in the embedded subject position, because of non-finite T.

b) Well this is a theta criterion violation, but in terms of case, at least one NP doesn't get case, since only the nom NP gets case.

c) Donny already has case in the embedded clause.

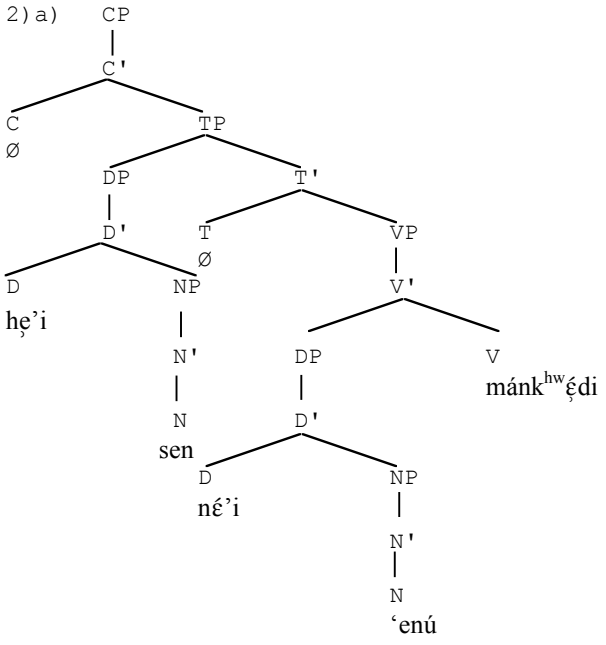
3. PERSIAN ACCUSATIVE CASE

Features don't have to be overtly morphologically expressed. We can have abstract case features. This parallels the discussion of English nouns in the body of the text.

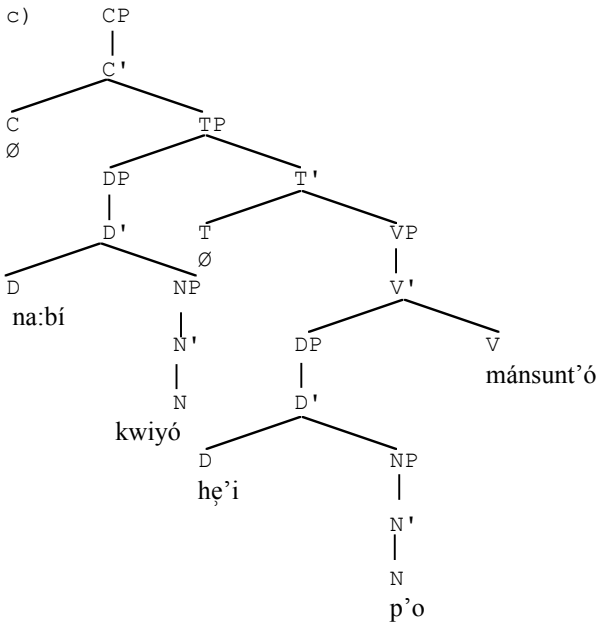
4. ARIZONA TEWA

1) Spec: XP → (YP) X'
Adjunct: X' → (ZP) X'
Complement: X' → (WP) X

2)a)

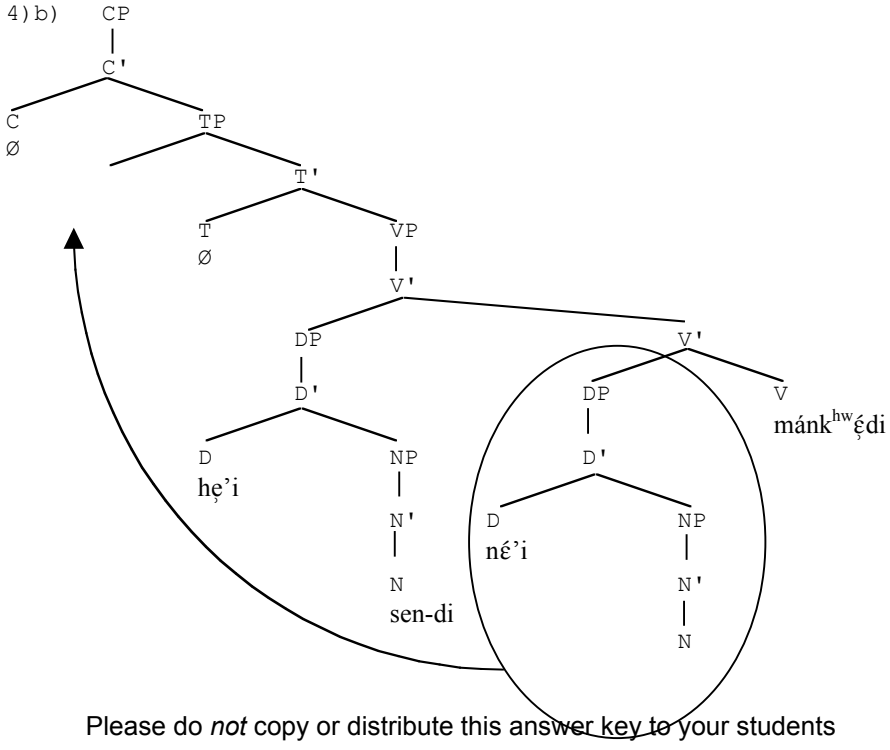


c)



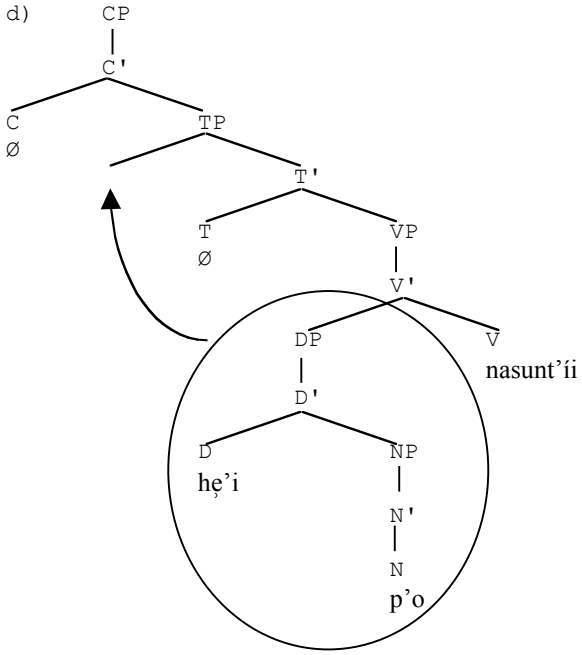
3) same as the English passive

4)b)



‘enú

d)



5. MIDDLES, ACTIVES, CAUSATIVES, AND PASSIVES

Part 1: Middle: theme
Active: instrument theme
Causative: agent theme (instrument)

Part 2: This is essentially the Relational Grammar Law 1AEX. Middles are already passive like, so they don't allow further passivization.

6. TWO KINDS OF RAISING

This question leads us into chapter 10. It should be done before chapter 10.

a and b) These two pieces of data show accusative case marking on the embedded subject, since acc case is assigned to a sister of V, then this is the correct surface position of the NP.

c,d,e) These three pieces of data show that the subject of the embedded clause is behaving like it is part of the higher clause with respect to binding theory, it allows disjoint reference in (c). For many people it may be bound by the subject

when it is an anaphor in (d), and in (e) it cannot be coreferent with the main clause subject.

f) It can get raised to subject position of the main clause in a passive, just like a regular object.

7. HAITIAN CREOLE

NP movement in Haitian Creole leaves a resumptive pronoun. This pronoun is an "overt trace," creating an NP–Pronoun chain (thus not violating the theta criterion).

9. TURKISH

The NP already has case in the embedded clause, therefore there is no motivation for raising.

10. IMPERSONALS IN UKRAINIAN, KANNADA, AND IRISH

In English intransitives aren't allowed to undergo passive; in these languages they are. [±intransitive passive]

11. UNACCUSATIVES AND PASSIVES

You can only delete the external argument once, and only suppress the ACC case feature once. (Again the 1AEX of relational grammar.)

12. ICELANDIC QUIRKY CASE

These NPs already have case. There is no motivation for the movement. The solution may lie in distinguishing abstract case from overt morphological case. The quirky case marked NPs in Iceland take both a quirky case (dative) and an abstract case (either accusative or nominative).

13. PASSIVES AND DOUBLE OBJECT CONSTRUCTIONS

Only the NP adjacent to the verb may passivize, suggesting that this is the element that gets accusative case.

chapter 10

Raising, Control and Empty Categories

0. INTRODUCTION

This chapter introduces the distinctions between raising and control constructions, between subject to subject raising and subject to object raising, between obligatory and optional control, and between subject control and object control. There is also a short discussion of little *pro* and the null subject parameter

Control theory is notoriously problematic. Here I give a less than satisfying answer, but that I think reflects the less that satisfying status of control theory at this time. I discuss the various syntactic, thematic/semantic, and pragmatic accounts that have been suggest for controlling PRO. I do not consider movement analyses of PRO.

PROBLEM SETS

1. ENGLISH PREDICATES

Warning: this is a very long (and tedious) problem set to do!

is eager	Subject control
is believed	SSR
seems	SSR
is ready	SC
persuaded	OC
urged	OC
requested	SC (and maybe Object control)
hoped	SC
expect	SOR
force	OC
tell	OC
advise	OC
ask	OC, SC
assure	This is a really weird verb. It doesn't allow any of them. *but* it does allow a *wh*-trace in the subject position of the embedded clause. *Is assured* is a SSR raising verb.
imagine	SOR
promise	SC
want	SC or SOR
is likely	SSR
consent	SC
imagine	SOR
encouraged	OC
intended	SOR, SC

2. TREES AND DERIVATIONS

I haven't bothered to do the trees here. I've just indicated traces and PROs. You'll also note I'm ignoring the existence of the VP-internal subject hypothesis.

a) Jean wants $Bill_i$ [$_{CP}$ t_i to do the Macarena].
b) $Robert_i$ is eager PRO_i to do his homework.
c) $Jean_i$ seems [$_{CP}$ t_i to be in a good mood].
d) $Rosemary_i$ tried PRO_i to get a new car.
e) Susan begged $Bill_i$ PRO_i to let her sing in the concert.
Students may require some discussion of the "let her sing in the concert" part of this sentence.

f) Susan$_i$ begged PRO$_i$ to be allowed t_i to sing in the concert.
   There should be some discussion of whether PRO moves from the specifier of *to sing*, to the specifier of *to be allowed*, given that neither of them are case positions. (Economy conditions – discussed in the chapter 12 – force such an analysis, but you may want to draw the problem to the student's attention.)
g) Christina$_i$ is ready PRO$_i$ to leave.
h) Fred was believed t_i to have wanted PRO$_i$ to try PRO$_i$ to dance.
   I leave it for discussion as to whether there is a trace only in the specifier of the first embedded TP, or whether there is also one in the main clause object position.
i) Susan consented PRO$_i$ to try PRO$_i$ to seem t_i to have been kissed t_i.
   Again the existence of the chain of the two traces and the lower PRO needs to be discussed, since none of these are case positions.

3. *IS EASY*

Both, there is an arbitrary PRO as the subject of the embedded clause, the object of the embedded clause raises to main clause subject position.

4. THE EXISTENCE OF PRO

a) There needs to be a binder for the anaphor - thus PRO.
b) *Himself* is too far away from *Robert* to meet condition A, so PRO must serve as the antecedent.

5. ICELANDIC PRO AND QUIRKY CASE

The quantifier here agrees in case with the quirky case marking that PRO would get (note, not the case on the main clause subject that controls PRO). So this means that PRO must be getting case. This problem is related to the one in the previous chapter, where passive occurred even though the NP got quirky case. A similar solution applies: we distinguish morphological from abstract case.

6. CONTROLLERS

a) To improve myself is a goal for next year.
PRO = me obligatorily (as shown by the anaphor bound by PRO) but there is no *me* to control it.
b) To improve yourself would be a good idea.
same answer as (a)
c) To improve himself, Bruce should consider therapy.
PRO = Bruce obligatorily, but Bruce does not c-command it.
d) To improve herself, Jane went to a health spa.
same answer as (c)

7. IRISH *pro*

Irish doesn't allow you to have both agreement and the pronoun.

chapter 11

Wh-movement

Basic *wh*-movement is addressed in this chapter, as well as some of the easier constraints. *Wh*-movement is cast as movement for feature checking reasons.

The main focus of the chapter is on locality conditions, in particular bounding theory. The version of bounding theory I use here involves the subjacency condition, and counting bounding nodes (TP and NP). There is no discussion of barriers or the ECP (because I haven't used government). In the next chapter we revise subjacency into the more general minimal link condition (MLC), but that is left aside in this chapter. I also discuss, briefly and stipulatively, *that*-trace and double-filled CP filters. There is no discussion of the specified subject condition or argument/adjunct asymmetries in extraction. There is also no discussion of relative clause or other operator constructions. The reason for all these omissions is brevity – I assume these topics can all be covered in more advanced classes.

PROBLEM SETS

1. ENGLISH TRANSFORMATIONS

Again I haven't bothered with the trees here, I just give the relevant traces and PROs. Students are asked to provide the trees.

a) How$_i$ was$_T$ [$_{TP}$ the plot$_j$ t_T discovered t_j by the authorities t_i?]
b) [Which animals]$_i$ [$_{TP}$ t_i appear [$_{TP}$ t_i to have lost their collars?]]
   (I'm assuming that there is *wh*-movement of subjects here)
c) Alan told me who wanted to seem to be invincible.

2. BOUNDING THEORY

Students are supposed to draw the tree. I've just circled the bounding nodes here:

*Who$_j$ did ([$_{TP}$) George try to find out [$_{CP}$ what$_i$ ([$_{TP}$)t_j wanted t_i]?

The *wh*-phrase has to cross both these, creating a subjacency violation. It can't stop off in the spec of CP because of the *what*.

3. PICTURE NPS

Should be a violation of the subjacency condition. *Who* crosses the NP node [a picture of] and the TP node of the sentence. There is no intermediate CP to stop off in.

4. IRISH

You get the a^N–resumptive strategy obligatorily when you have an island (= subjacency violation). A note on the data: this is a simplification of the facts. You can actually get the a^N-resumptive strategy in any position, except for the highest subject position, but it is only obligatory in an island. See McCloskey (1991) for more details.

5. BINDING THEORY

Binding conditions hold at D-structure, before the transformations have move the *wh*-phrase.

6. ENGLISH

Students are expected to do trees, I'll just list the transformations:

a) Car sales have surprised the stockbrokers.
   No transformations (unless you assume VP-internal subjects, or VP shells in which case there is one instance each of head movement and NP movement.)
b) Have you seen my model airplane collection?
   T → C
c) Can you find the lightbulb store?
   T → C
d) John was bitten by an advertising executive.
   NP movement (passive)
e) It is likely that Tami will leave New York.
   Expletive insertion
f) Tami is likely to leave New York.
   NP movement (raising)
g) It seems that Susy was mugged.
   Expletive insertion, T-lowering (main clause)
h) Susy seems to have been mugged.
   NP movement (raising), T-lowering, NP movement (passive) (sub. clause)
i) What did you buy at the supermarket?
   Wh-movement, T → C
j) I asked what Beth bought at the supermarket.
   Main clause: T-lowering
   Embedded clause: T-lowering, wh-movement
k) What is likely for Beth to have bought at the supermarket?
   Wh-movement, NP movement (raising)
   (some people may find this sentence ungrammatical)
l) What is likely to have been bought at the supermarket?
   Wh-movement, NP movement (raising), NP movement (passive)

7. SERBO-CROATIAN

All the *wh*-words seem to move. Various alternatives can be proposed, some more likely than others: Multiple CPs, (or other multiple functional categories high in the tree). Other students have suggested that the *wh*-words all combine into one *wh*-phrase. This latter answer is obviously less satisfying.

8. BINDING AND SCRAMBLING

Wh-movement, because the anaphor can still be bound even though it has moved.

9. IRISH

Complementizer agreement shows that the *wh*-word stops off in the intermediate specifier. There would be no a^{L} comp in the embedded CP if the *wh*-word didn't stop there.

chapter 12

Towards Minimalism

0. INTRODUCTION

This chapter is called "towards Minimalism" for a reason, it is *not* an introduction to minimalism. Instead it is designed to take the student in the direction of Minimalist ideas using the more standard P&P tools they've been taught in the first 11 chapters. There are plenty of parts of Minimalism that are not covered here. The basic philosophical and conceptual issues are almost entirely ignored. There is no discussion of Bare Phrase Structure, Merge, multiple functional categories, to name a few issues.

What is covered (*note that I am not claiming that these are by any measure defining properties of minimalism, these are simply the transitional issues I address*):

a) uniting head movement, NP movement, and *wh*-movement into Move
b) motivating all movement via feature checking and Full Interpretation
c) reducing conditions on movement to the Minimal Link Condition (MLC) (=shortest move)
d) distinguishing LF from PF movement
e) accounting for language-specific variation in terms of timing between overt and covert movement
f) a brief discussion of LF operations (like QR).

PROBLEM SETS

1. ENGLISH

The MLC holds that movement is to the closest potential landing site. With *wh*-islands there is an intermediate, but filled spec, CP that serves to block further movement. With NP islands, however, there is no such "closer potential landing site" to block extraction.

2. PF MOVEMENT

I was looking for sentences that might be synonymous or nearly synonymous, for example, particle movement. Of course there are always those that will claim that that all movement types have some effect on meaning (broadly interpreted to include so called "pragmatic" issues like topic and focus). The answers you'll get on this question will depend upon the semantic sophistication of your students.

3. SERBO-CROATIAN VS. ENGLISH *WH*-QUESTIONS

English only allows one overt *wh*-movement. Serbo-Croatian requires that all movement be overt

chapter 13

Alternative Approaches: Lexical-Functional Grammar

0. ALTERNATIVE THEORIES

While I myself am a Minimalist, I think it is important for my students to be able to read papers and work written in other theoretical frameworks.

This chapter and the next take a fairly big turn from the rest of the book. These are quite dense and quite technical surveys of the machinery involved in LFG and HPSG. People who have read the manuscript of this book tell me that these are the hardest chapters in the book and I agree. These are not designed to be user-friendly or in-depth introductions to these frameworks. If you really want to teach your students to do LFG or HPSG properly (as opposed to giving them a familiarity with the mechanics and ideas underlying the theories) then these chapters are *not* for you. Instead, I'd recommend that you use one of the textbooks written by practitioners of these approaches (such as Bresnan 2001 and Sag and Wasow 1999). This chapter and the next one are designed to be quick and dirty introductions to the technical apparatus of these approaches.

I've written these chapters with an eye towards a smart syntax student who has understood the basics of P&P/Minimalism, but would like to understand the mathematical tools of these other approaches. In doing this, I haven't always been faithful to the ideological or philosophical underpinnings of the approaches. For example, I occasionally say things like "this is the equivalent of head movement" when what I really mean is "this does roughly the work that head movement does in P&P,

even though it has different assumptions and motivations." This is likely to annoy those people who actually work in these frameworks, as it gives a certain P&P feel to them. Again this is for pedagogical reasons. I reiterate, if you want proper introductions to the influential ideas of LFG or HPSG, you'd be better off going to the source material. But if you want a brief explanation of what a metavariable or a SYNSEM structure is, then these chapters will do the trick.

One other caveat has to do with my discussion of evaluating competing theories. A number of people have given me quite a bit of flack about the "all theories are roughly equal" or "aesthetics play a big role" language I use in these chapters. Let me state for the record, that of course I believe it is possible to evaluate theoretical approaches on empirical grounds. However, I do want to point out that doing so is extremely difficult. Some theoretical machinery is better suited to certain empirical tasks, but other machinery might be better at different tasks. This makes empirical comparison, while not impossible, certainly more difficult than many scholars would have us believe. This practical consideration has the effect that for the most part people work in the theoretical framework that appeals to them on aesthetic grounds or works best in their own particular sub-area of interest. This isn't an ideal situation, but I think it is wrong to try to conceal this fact from students.

This chapter, on LFG, introduces – but does not discuss in depth – some of the original motivations for abandoning transformations. It introduces the basic notions of c-structure, f-structure, a-structure, variables, metavariables, grammatical functions, AVMs, functional equations, f-descriptions, unification, lexical rules, and functional control. It treats none of these topics in depth.

PROBLEM SETS

1. ENGLISH

I leave these for you to do.

2. ICELANDIC (AGAIN)

No.

3. TRANSFORMATIONS OR NOT?

The answer to this question involves creativity on the part of the student.

4. *WANNA*-CONTRACTION

The answer to this question involves creativity on the part of the student.

chapter 14

Alternative Approaches: Head-Driven Phrase Structure Grammar

Please read the caveat about the alternatives chapters at the beginning of chapter 13 of this instructor's handbook.

This chapter covers all the basics of HPSG: Features, SYN-SEM structures, tags, realization principles, gap (slash) features, lexical rules, compositionality, unification, phrase structure rules, and binding theory. It does not get into some of the more difficult issues, such as inheritance hierarchies. As in the last chapter, the metaphors used are sometimes those of P&P not HPSG, for pedagogic reasons, and I make no claims that this chapter represents HPSG as it's practitioners would present it.

PROBLEM SETS

1. ENGLISH

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I leave these for you to do.
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2. SUBJECT/AUX INVERSION

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The answer to this question involves creativity on the part of
the student.
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3. ISLAND CONSTRAINTS

The answer to this question involves creativity on the part of the student.