

24.900

Linguistics

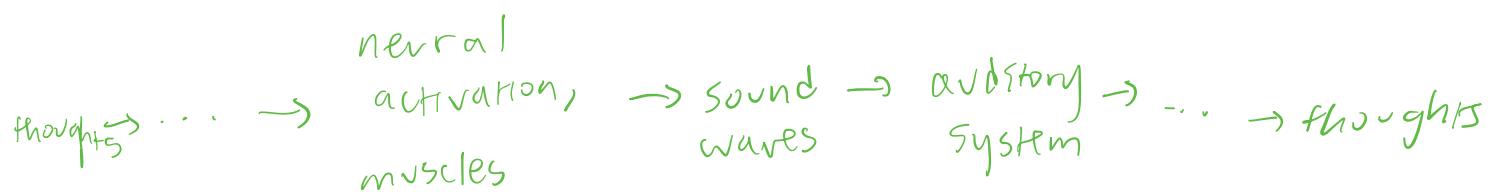
Fall 2023

LECTURE 1

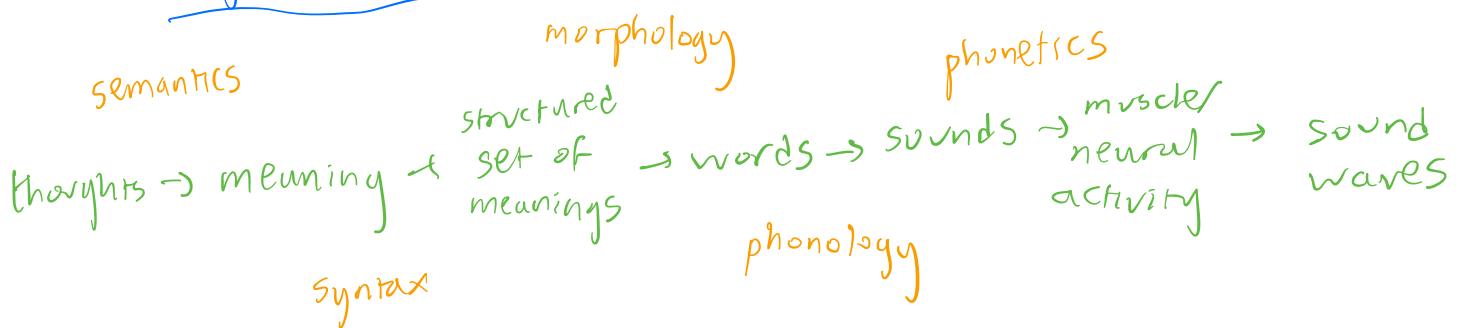
9/6/23 11 AM

- Ubbi Dubbi

Speech Chain



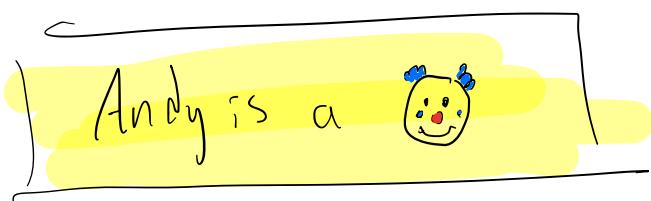
Linguistic Code



LECTURE 2

9/11/23

11 AM



LECTURE 3 9/13/23 11 AM

morpheme - minimal subpart of a word that expresses meaning - or information between parts

morphology = study of word structure

If a word can be broken into many parts, we say it is **morphologically complex**

e.g.) cats  $\Rightarrow$  cat + s

walked  $\Rightarrow$  walk + ed

WORD FORMATION is productive

- English has many ways to change one part of speech into another
- generative system's not just a list of words, but **internalized theory** about how existing words are created
- productivity: rules can be used to generate new words

### morphological analysis

ex) undecomposability

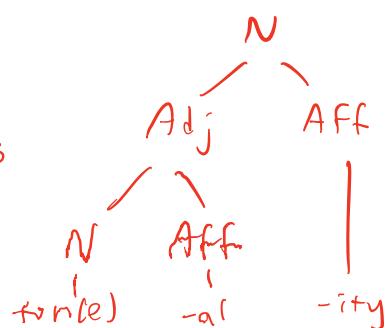
buckwards: decompose word into parts, find meaning in each

forwards: rules of combination



**Suffix** - morpheme that are pronounced after the thing it combines with (not necessarily at end)

e.g.) tonality  
two suffixes



two flavors of  $\text{vn}^-$

- **poietic**  $\text{vn}^-$  : adjective  $\rightarrow$  adjective , means "opposite of X"
- **reversative**  $\text{vn}^-$  : verb  $\rightarrow$  verb , means "undo the action X"

Lexicon - list of all morphemes in language

### Merging "Algorithm"

- (1) take affix from lexicon
- (2) **select** suitable base to operate on
- (3) **merge** : attach affix to the base.

**bound** vs **free** roots

free - can stand alone (herb, sane, scale, liquid)

bound - can't, must be affixed (flat, galvan, frug)

Assumption - learners can divide the words based on commonly recurring bits, even without solid evidence of a compositional meaning

### Taft and Forster (1975)

- participants took significantly longer to refer sound stems "tree" than pseudostems "sassin", "gnilate"

\* bound stems have right properties/categories to have  
the affix added, can be considered to be in lexicon

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infix - may occur inside morpheme they're attached to  
ex) ~ v b b; Dubbi

### Proto-Indo-European

- sometimes ~n- infix for present tense
- stand vs. stood
- tangible vs. tactile, convin<sup>cible</sup> vs. victor

### English (modern)

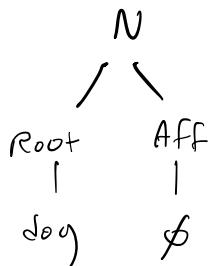
bear - bore

sing - sang - sung

**allomorphs** - different pronunciations depending on context

**reduplication** - e.g. "old old" or "dumb dumb"  
T  
AND Y

### Free Roots (again)



perhaps "free" roots are really just  
bound by a null affix?

## describing morphemes

- type (affix v. root)
  - pre,suffix
  - bound,free
- sound
  - ~ pronunciation, position
- affixes:
  - what kind of base does it attach to
  - inflectional vs. derivational

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## Evidence based argumentation

- problem, question
- hypothesis (proposed answer)
- prediction
- assessment

## two crucial elements

- your thesis
- specific reference to data
  - example sentences with interlinear glosses
  - discussion of prose: what do they show?

- when choosing an inflectional affix to merge,  
always select the most specific affix compatible  
with the desired meaning
- blocking: once you've chosen one affix for a given

meaning, don't choose any more affixes for that meaning

## English example

I sing	we sing
You sing	you(tall) sing
he/she sings	they sing

-S: 3<sup>rd</sup> singular (present)

-Ø: other (underspecification)

structure of words → structure of sentences

morphology

Syntax

A = unacceptability,

e.g. "Watch for that leopard out!"

Syntactic Acceptability - not a rule learned in class.

↳ descriptive, not prescriptive rules

↳ accepted by native speakers.

## LECTURE 7 9/27/23 11AM

- utterances are made up of units

- only certain types of units are eligible to be used  
as stand-alone utterances (sentences)

- syntactic operations like question formation target  
particular units

ex ) { The leopard will devour my snazzy orange socks.  
                    ↗  
                    switch for question

The leopard will devour my snazzy orange socks.  
 what will the leopard devour?

The leopard devoured my snazzy orange socks.

Did the leopard devour my snazzy orange socks?

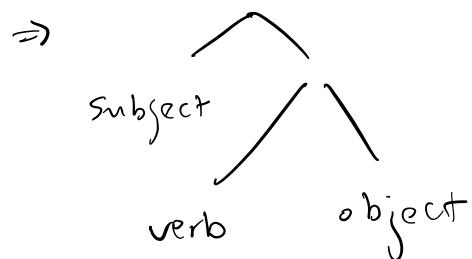
"What" questions can only replace this type of phrase

(def) adj\* noun  
 ↑  
 \* = as  
 many as  
 need

"What + do" questions replace verb (object)

### Restricting Merge

e.g.) verb to object is constituent but subject + verb is not



auxiliaries can combine with only "verb phrases" (i.e. has a verb)  
 VP

blocking - choose most specific suffix/morpheme,

and then pick no more

e.g. Sing vs. Sang  
↓  
not  
Sanged.

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Bro is back 

- different types of objects occur in different positions,  
are eligible for different operations

do (so) substitution - replaces a verb phrase

pronoun substitution -  $(\text{det})[\text{adj}]^* \text{ noun}$  again  
noun phrase!  
↓

verb phrase = verb selected an NP

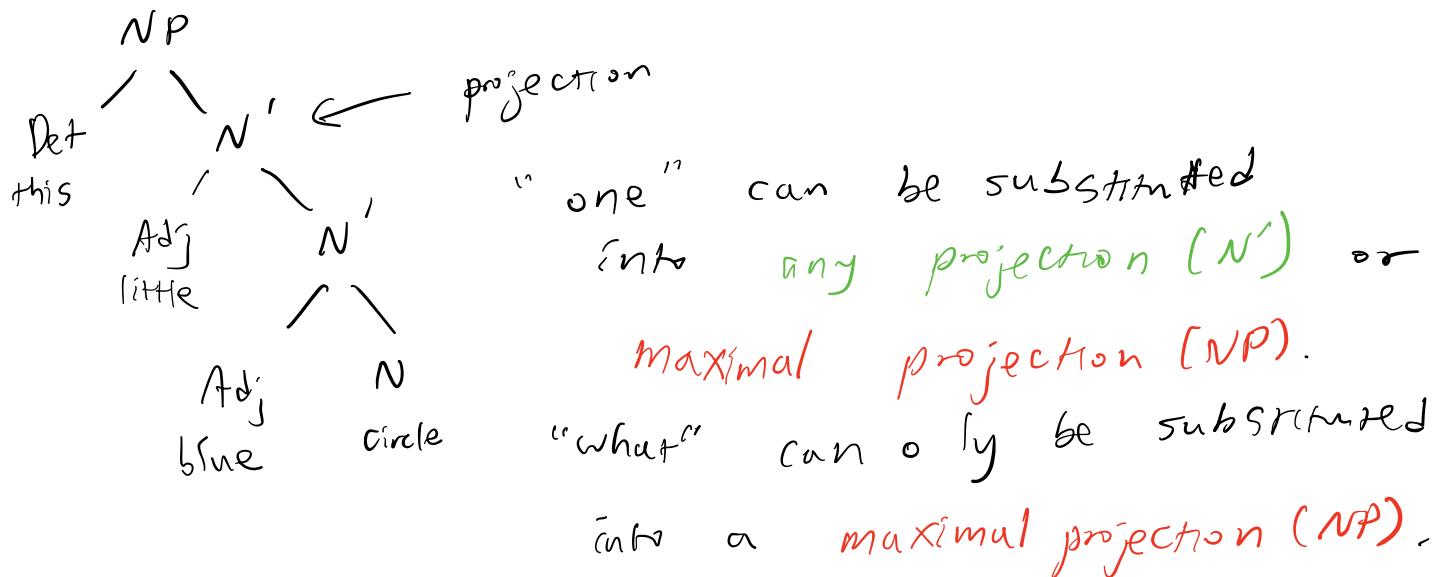
terminology

tree, nodes (leaves)

"mother"

"sister" "sister"

the head determines the  
label of the projections



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other operations:

topicification  
(Yoda)

Over that hill, I will walk.

clefting

It is Y that X Z.

### Toolbox

topicification, clefting		NP (maximal projection)
pronoun substitution	it	NP (maximal projection)
do (so) substitution	do so	VP (any projection)
what, what + do question (+ fragment answers)	what what + do	NP (maximal projection) VP (any projection)
'one' substitution		$N'/NP$ (any projection)

$V$  selects NP

- NP is the complement of  $V$

- the verb selects an NP

auxiliaries (e.g. will) combine with VP

transitive verbs combine with NP

nouns combine with PP (preposition phrases)

prepositions combine with NP

### Morpheme-specific selection

- different verbs may/may not select an NP/PP.

e.g. \*The badger snored a ruckus

The badger snored.

\* The badger reached.

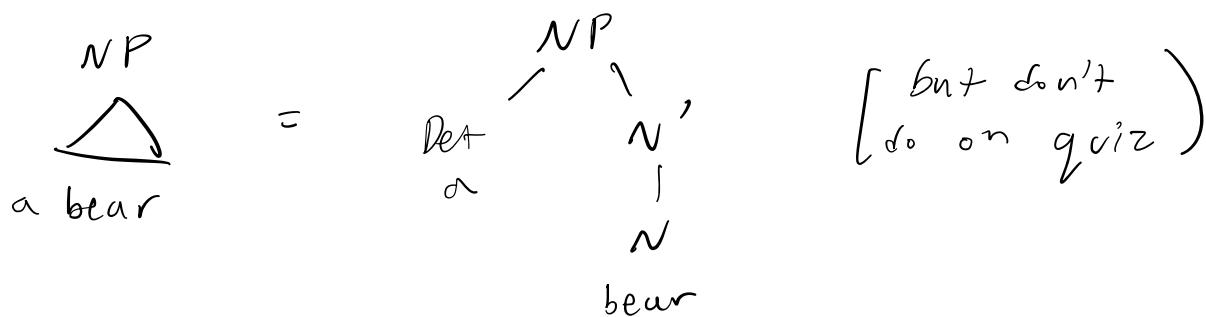
The badger reached its home.

tenses : head can select properties of complement  
head. (e.g. will like v.s. [past] liked)

X' schema ~ non-maximal projections

e.g. N', V'

triangles = shorthand for phrase w/ internal structure.

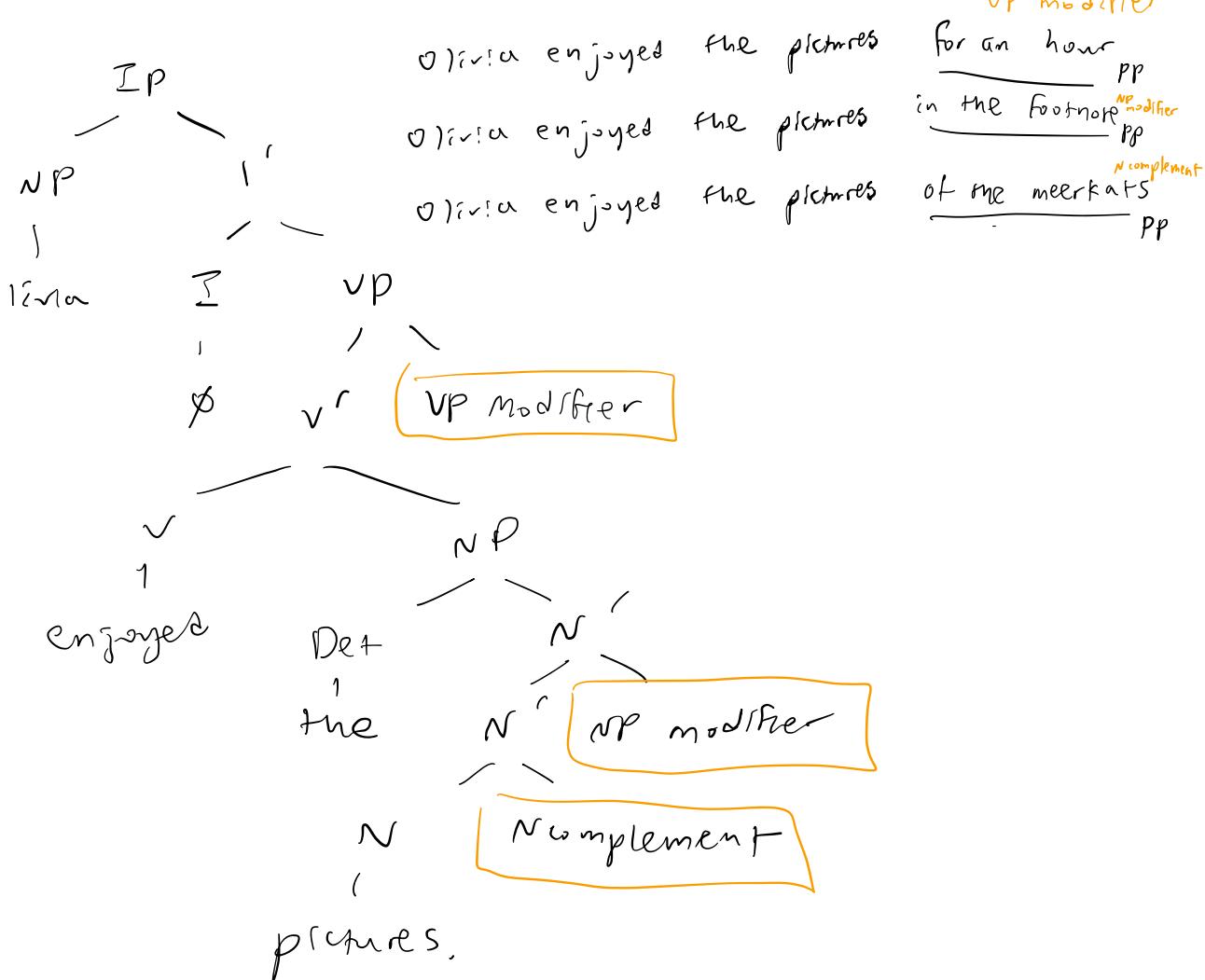


modifiers can be ambiguous.

Dylan eats cookies [on the floor].

Dylan eats [cookies on the floor].

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## complement

- V+NP, NP+PP, especially if it has "of": smoking of cigarettes, denial of guilt
- idiosyncratic selection: VT PP - feast on, think about  
NP+PP - ode to, ballad of

## modifiers

- preposition indicates locations/instruments/manner
- interchangeable: same PP can be used broadly w/ most verbs

## NP complements vs. modifiers

⇒ usually modifiers are swappable  
 but complements must be closer to head than modifiers

## complementizers

Some verbs take entire sentences as their complements

"that the..."

"for the..."

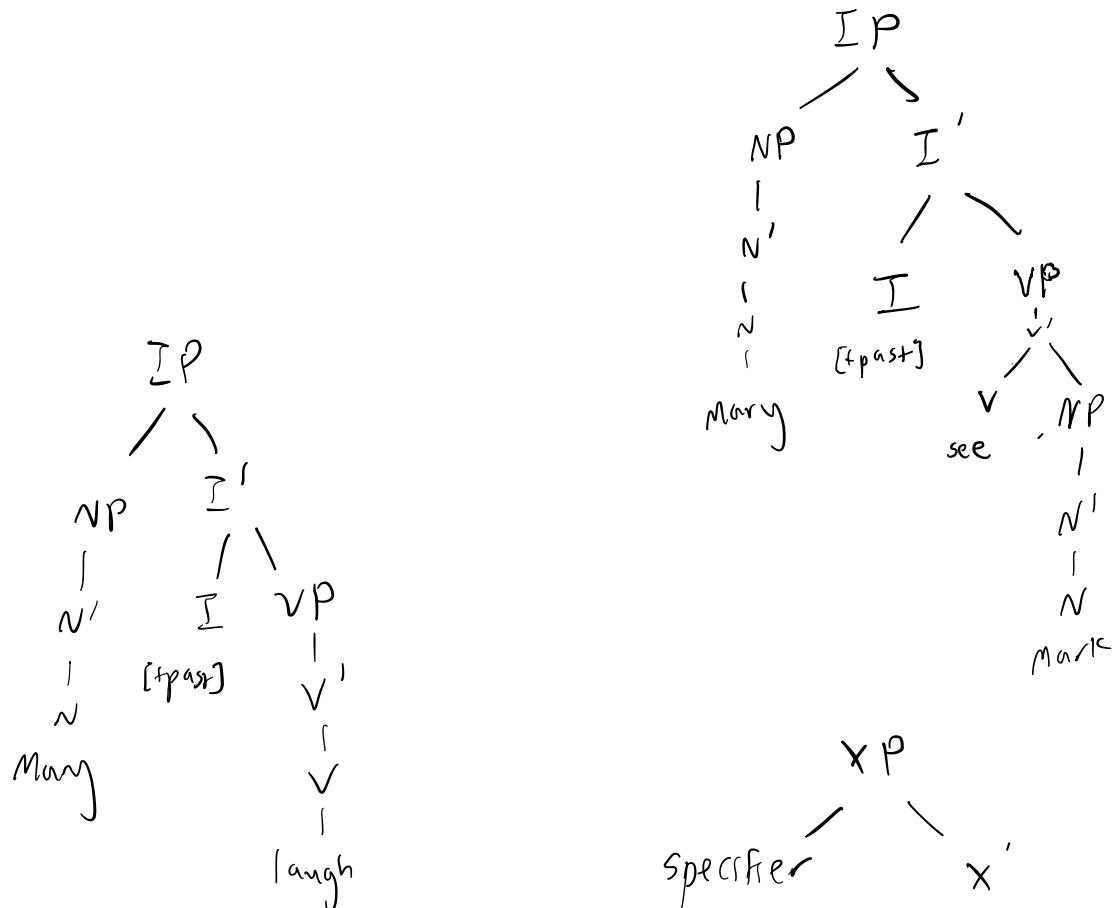
The ref believed that the players should stop the game.

that, for = complementizers

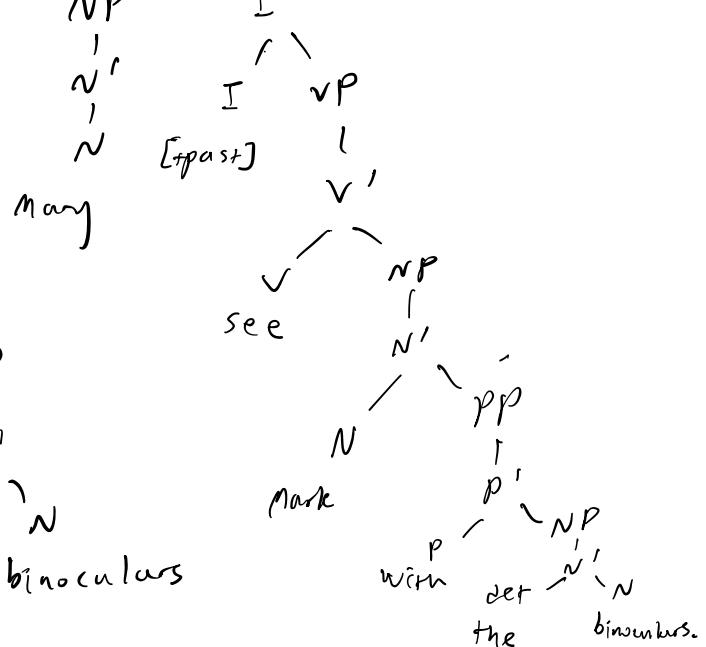
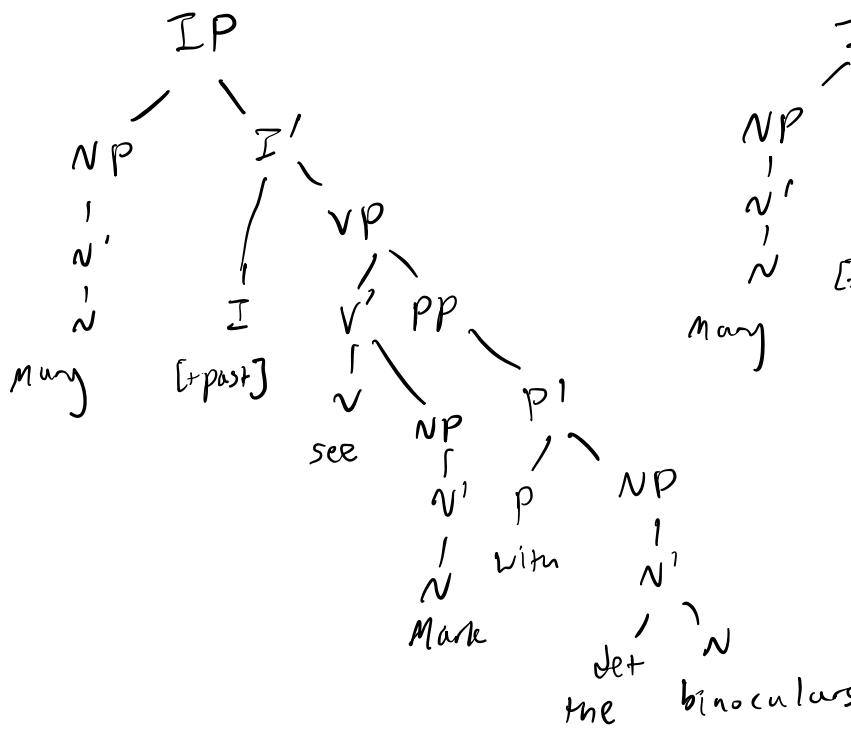
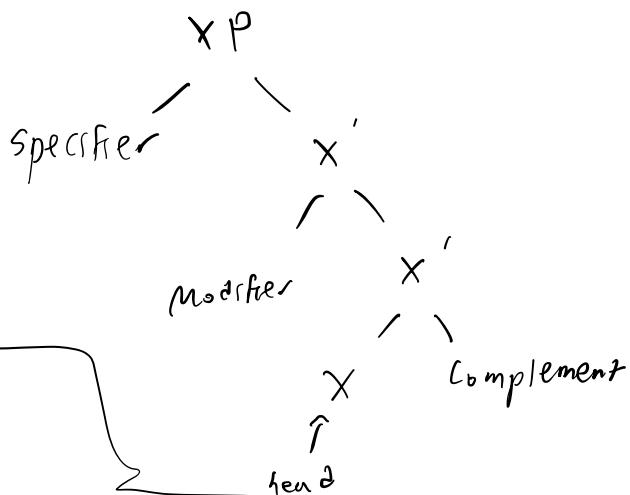
believe/indicate select that

wish/want select for

signal selects either one



Many saw Mark with the binoculars.  
 (ambiguity)

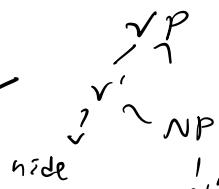


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head-directionality:

head first

English



head last

Korean, Japanese

VP

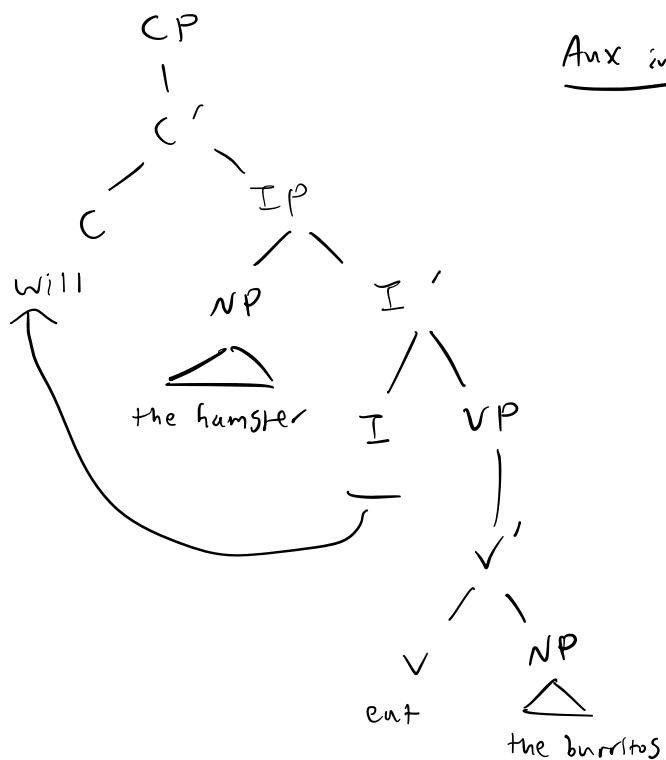
Det the N books

NP V

subjects are not accounted for by head directionality

### Yes/No Questions

Will the hamster eat the tiny burritos?



Aux inversion; element in I moves

(np) to empty host C

proof: inversion is blocked when complementizer exists

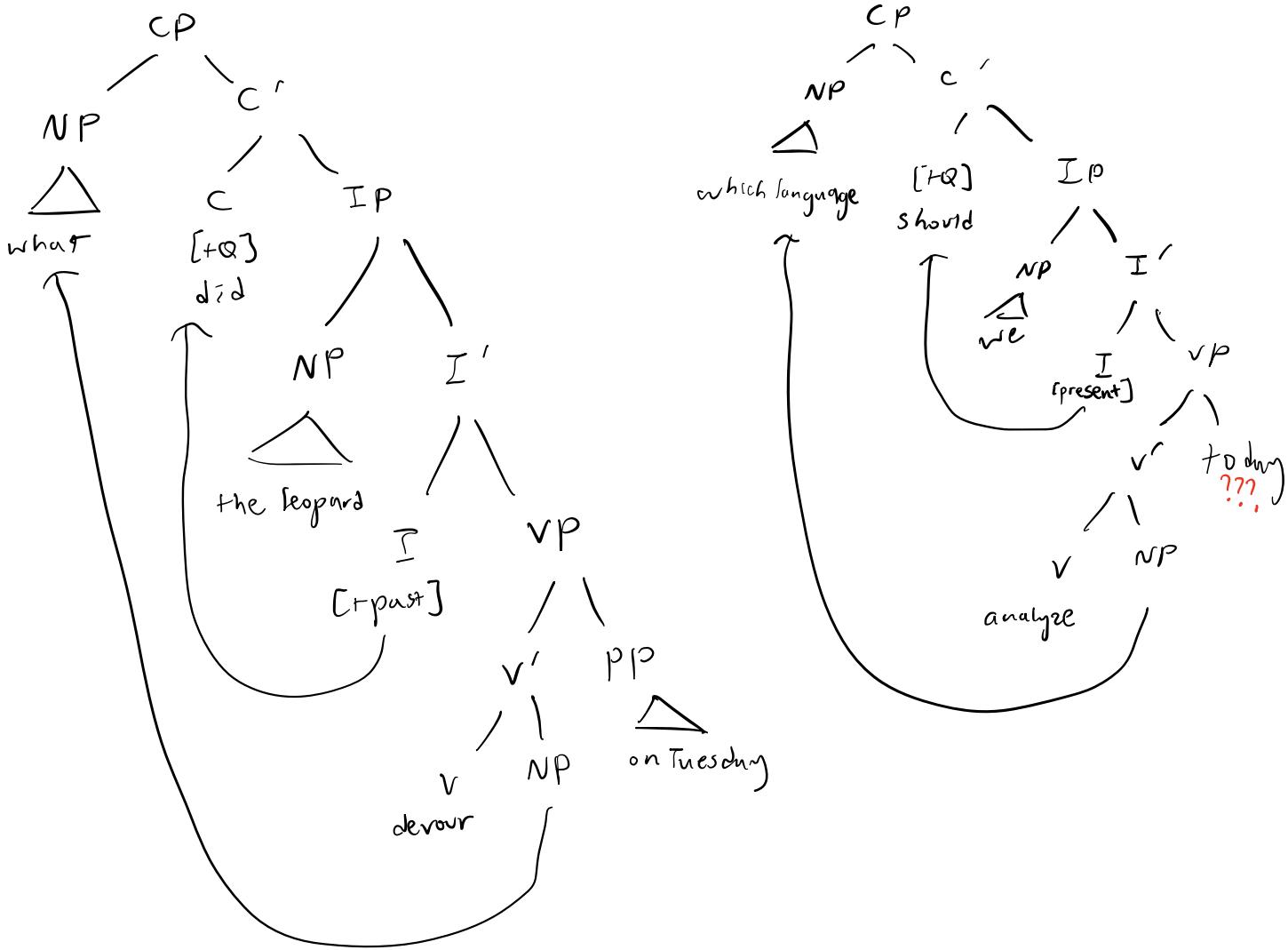
ex) He asked whether the hamster  
C will eat the tiny burritos.

### What Questions (which, what, who, how) "wh questions"

What did the leopard devour on Tuesday?



What did the leopard [devour \_\_\_\_] on Tuesday?



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vocal folds with varying degrees of closure

completely open - respiration

whispering/sighing - aspiration

close together/normal voice - modal voice

tightly closed - glottal stop

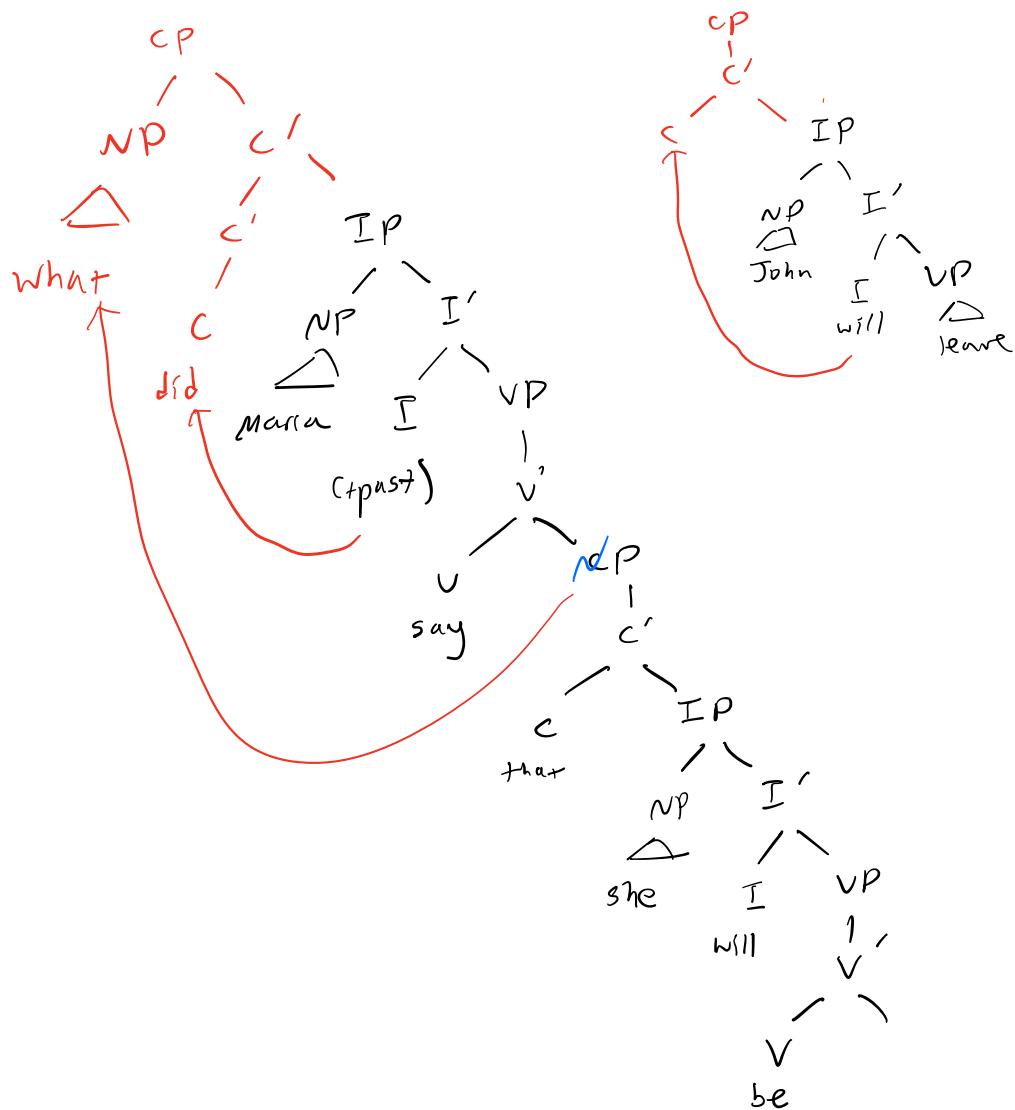
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bucciness, highness, rounding, tenseness

WTF are consonants, place of articulation (passive/active), manner of articulation (constriction), glottis state (voiced/voiceless)

	Front	Central	Back
High (tense)	i, <u>y</u>	+	u, <u>u</u>
(lax)	I, Y -		ʊ
Mid (tense)	e, <u>ø</u> -		ə, ɔ
(lax)	ɛ, œ -	ə	ʌ, ɔ
Low (tense)	a		ɑ
(lax)	æ		

RECITATION → 10/27/23 11AM



LECTURE 14 10/30/23 11AM

fun stuff about Halloween??

→ then some more consonant stuff... (read up later!!)

## PRACTICE for QUIZ 2

