## EGG Intro to Syntax PART 2 Handout 2: Head direction. August 7, 2018

First, lets review subordinate clauses:

1)	a. Putin knows Obama.	b. Putin knows [CP that Obama is a kickboxer].
2)	a. Putin heard Obama.	b. Putin heard [ <sub>CP</sub> that Obama is a kickboxer].
3)	a. Putin believes Obama.	b. Putin believes [ <sub>CP</sub> that Obama is a kickboxer].
4)	a. Putin tricked Obama.	b. *Putin tricked [ <sub>CP</sub> that Obama is a kickboxer].

- [that Obama is a kickboxer] is a "subordinate" or "embedded" clause.
- Is [*that Obama is a kickboxer*] a constituent? \_\_\_\_\_\_ How can we tell?

5) a. [That Obama is a kickboxer] everybody knowsb. John denies [that Obama is a kickboxer] but everyone knows it is true

- Internal structure of embedded clauses: ( $C^0$  = "complementizer", CP = "complementizer phrase"
- Where does CP get *introduced* into the structure? (What does it depend on?)

→ In the old days, we would need new PS rules to generate subordinate clauses: 6) a. VP --> V<sup>0</sup> (NP) b. VP --> V<sup>0</sup> CP 7) a. CP → C<sup>0</sup> TP (TP = S) b. C<sup>0</sup>: *that*, *if*, ...

• More about embedded clauses:

- 8) a. Anya knows [**that** Fred works for the CIA].
  - b. Anya thinks [that Fred works for the CIA].
  - c. Anya wondered [if Fred works for the CIA].
  - d. Anya asked her friends [if Fred works for the CIA].
- 9) a. \*Anya thinks [**if** Fred works for the CIA].
  - b. \* Anya wondered [that Fred works for the CIA].
- 10) a. \*Anya eats [**that** Fred works for the CIA].
  - b. \*Anya chased Gorbachev [that Fred works for the CIA].
  - c. \*Anya gave Natasha the cat [**that** Fred works for the CIA].
  - d. \*Anya put the book on the table [that Fred works for the CIA].

PRACTICE! Draw trees of these sentences:

- 11) a. Mary doubts that syntax rules the world.
  - b. The students understand that Mary doubts that syntax rules the world.
  - c. I know that the students understand that Mary doubts that syntax rules the world.
- Can you think of evidence that CP is inside VP, as claimed in (6)b)? (Remember (4)!)
- Can you think of other places where CP occurs other than inside VP?

Adjuncts vs arguments

12)	a. students [with long hair] [from St. Petersburg] b. students [from St. Petersburg] [with long hair]	(interchangeable!)	
13)	a. students [with long hair] [from St. Petersburg] [without moral value] b. students [from St. Petersburg] [without moral values] [with long hair]		
14)	a. a students [of lingusitics] <sub>PP</sub> [with long hair] <sub>PP</sub> b. *a students [with long hair] <sub>PP</sub> [of linguistics] <sub>PP</sub>	(not interchangeable!)	
15)	a. members [of parliament] <sub>PP</sub> [with purple hair] <sub>PP</sub> b. *members [with purple hair] <sub>PP</sub> [of parliament] <sub>PP</sub>	(not interchangeable!)	
16)	<ul><li>a. pieces [of cake] [on a plastic plate].</li><li>b. *pieces [on a plastic plate] [of cake].</li></ul>	(not interchangeable!)	
• What's the generalization that covers (12)-(16)?			

• Some PPs can only occur ONCE with each Noun – in English these are PPs headed by of

There can only be one of these:

- 17) a. \*[ a student of linguistics of chemistry ]
  - b. \*[ a member of Parliament of the committee ]
- These are complements (argyments) (like objects of verbs) so we call them PPARG
- 18) \*a member [of Parliament]<sub>PP-ARG</sub> [of the committee]<sub>PP-ARG</sub>
- All others are  $PP_{MOD}$

**Practice:** Now draw the following NPs (assume that  $PP_{ARG}$  are complements and  $PP_{MOD}$  are complements)

- A. famous revolutionaries from aristocratic society
- B. portraits of the rebel leader
- C. members of the inner circle from Idaho
- D. beautiful people from the countryside

## "Head Direction"

• Consider word order in Korean phrases like NP and PP:

## <u>NP and PP</u>

19)	kuuy emma-ka his mother-NOM	(Korean)	
20)	nay chinkwu-ka my friend-NOM	(Korean)	
21)	polasayk meli purple hair		
22)	<i>yengkwuk uy wang-i</i> England of king-NOM "King of England"	(Korean)	
23)	<i>Enehakkwa uy haksayngtul-i</i> linguistics of students-NOM "student of linguistics"	(Korean)	
24)	<i>ku mawul uy</i> that town from "from that town"	(Korean)	
25)	polasayk meliuykwukhoyuyuywuenpurplehairwithparliamentofmember"member of parliament with purple hair" </td <td>(Korean)</td>	(Korean)	
26)	Se-gacengwen-eyittabird-NOMgarden-INis."The bird is in the garden."	(Korean)	
27)	chayk-ithakca-wi-eittabook-NOMtable-TOP-ONis."The book is on the table"is.	(Korean)	
• Wł	hat can we say about adjuncts?		
What can we say about determiners ?			
• Wł	hat can we say about PPs ?		

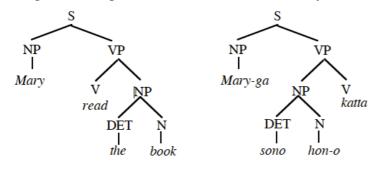
• Draw a tree of "King of England" in English and of the Koren equivalent (22):

king	of	England	yengkwuk	иу	wang-i
			(England	of	king <sub>NOM</sub> )

• Now consider word order in Korean and Japanese sentences:

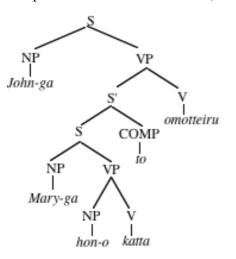
28)	[ <i>kuuy emma]-ka [kuuy cinkwu]-lul silhehanta</i> [his mother]-NOM [his friend]-ACC hates "His mother hates his friend."	(Korean) (SOV)
29)	[ <i>nay chinkwu]-ka chayk-ul satta.</i> [My friend]-NOM book-ACC buy <sub>PAST</sub> "John bought the book."	(Korean) (SOV)
30)	Russia sensayngnimtul-i congcong bulus-lul pwulunta Russian teachers-NOM often blues-ACC sing "Russian teachers often sing the blues."	(Korean) (SadvOV)
31)	<i>Mary-ga sono hon-o katta</i> Mary-NOM that book-ACC buy <sub>PAST</sub> "Mary bought that book."	(Japanese) (SOV)
32)	<i>i-keot-eun Mirani-uy chayk -ita</i> . This-thing Miran-GEN book-is. "This (thing) is Miran's book."	(Korean) (SPredV)

33) English and Japanes transitive clauses (1957 style)



- Consider the structure of Korean and Japanese subordinate clauses
- 34) (Japanese) John-ga [[Mary-ga sono hon-o *katta*] to] omotteiru John-NOM Mary-NOM that book-ACC that thinks buy<sub>PAST</sub> "John thinks that Mary bought the book."  $S_1[S_2 OV_2] C V$
- 35) Japanese subordinate clause: (1957 style)

Can you draw it Adger-style?



• Now compare equivalent sentences in 2 made-up languages: Zerbo-Kroatian and Corean:

36) a. Zerbo-Kroatian:			
moj prijatelj zna da je [kralj Engleske] otišao u			
my friend knows that aux king <sub>NOM</sub> England <sub>GEN</sub> went to Mo	scow		
<b>b.</b> Corean:	ko auta		
nay chinkwuka yengkwuk uy wangi moskoba ey kassta my friend-Nom England of king Moscow to went			
"My friend knows that the king of England went to Moscow."	that know		
My mend knows that the king of England went to Moscow.			
37) <b>a.</b> moj prijatelj iz tog grada preko reke pita (co	ont'd) →		
my friend <sub>NOM</sub> from that city across river wonders	,		
da li Jelcin pije votku	(ZK)		
C Yeltsin <sub>NOM</sub> drinks vodka-Acc			
<b>b.</b> kang kalocile ku mawul uy nay chinkwuka	$(\text{cont'd}) \rightarrow$		
river across that town from [my friend] <sub>NOM</sub>			
Yeltsini vodkalul masinun ci kwungkunhayhanta	( <b>C</b> )		
Yeltsin <sub>NOM</sub> vodka <sub>ACC</sub> drinks if wonders			
"My friend from that town across the river wonders if Yeltsin drinks vo	odka."		
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38) <b>a.</b> [član skupštine sa crvenom kosom] misli da	(cont'd)>		
[member <sub>NOM</sub> parliament <sub>GEN</sub> with purple hair] thinks that	t		
[njegova majka] mrzi [njegovog prijatelja]	(ZK)		
[his mother] <sub>NOM</sub> hates [his friend] <sub>ACC</sub>	()		
<b>b.</b> [casayk meli uy kwukhoe uy uywueni] [kuuy emmak	al (cont'd) >		
[purple hair with parliament of member] <sub>NOM</sub> [his mother]			
	JNOM		
[kuuy cinkwulul] hates ko sayngkakhanta [his friend] silehente thet thinks			
[his friend] <sub>ACC</sub> silehanta that thinks	(C)		

PRACTICE: Draw trees of Corean sentence (36)b (and the others)

"The member of parliament with purple hair thinks that his mother hates his friend."

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