

# Generative Syntax

## Lecture # 2

### X'-Theory, Arguments & Adjuncts, Movement

**S' = Complementizer Phrase (CP)**

**S = Tense Phrase (TP)** (также называется Inflection Phrase, IP)

old rule: 1) a. S' --> COMP S  
b. S --> NP (aux) VP

new rule:

2) a. CP --> Spec C'  
b. C' --> C TP  
c. TP --> NP T'  
d. T' --> T VP

(под X-Штрих теорией, (2) как отдельные правила **не нужны**)

### английские модальные глаголы

--не берут инфинитивную частицу **to**

--не спрягаются

--не имеют прошедшего времени

--не стоят без смыслового глагола

--занимают место вне глагольной группы

3) \*[to can], \*[to must], \*[to should], \*[to will], \*[to could], \*[to might]

4) \*He cans. \*She shoulds. \*He mights. \*She wills.

5) \*He canned. \*They shoulded. \*We mighted

6) a. John will [not go to school] but Bill will [Ø].

b. John will [go to school] although Bill shouldn't [Ø].

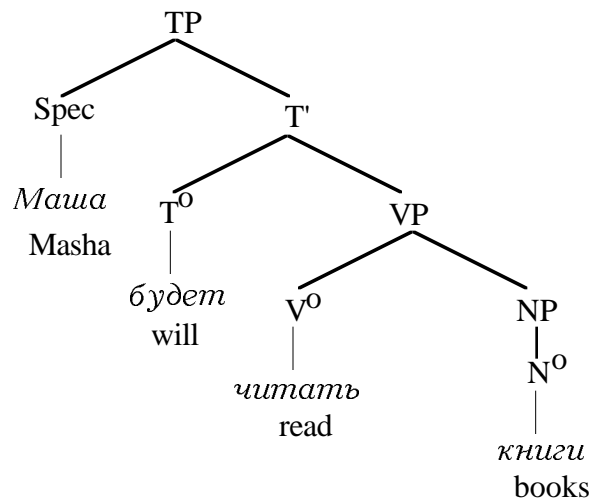
Модальные глаголы, частица **to**, и (грамм) время являются вершинами TP

7) i) TP --> NP T'

ii) T' --> T<sup>0</sup> VP

8) a. Masha will read books. (Маша будет читать книги.)

б.



Теперь ВСЕ группы действуют по правилам X-Штрих Теории!!

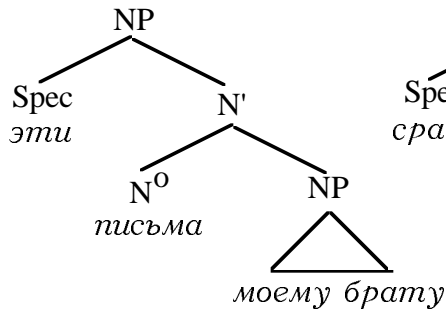
Упражнение: Нарисуйте синтаксические деревья следующих предложений (под X-Штрих Теорией с функциональными категориями)

a. Хомский будет читать лекцию о синтаксисе.

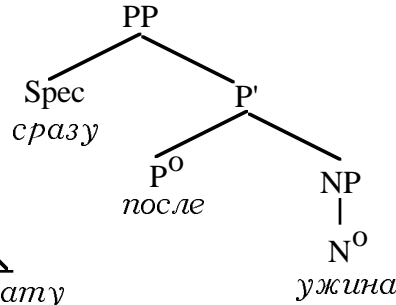
б. Клинтон сказал, что Хомский читает хорошие лекции о синтаксисе

**Спецификаторы:** (a subject position in every phrase)

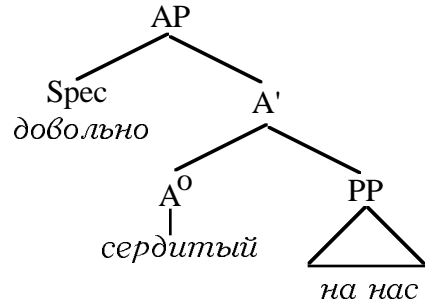
9) а. NP



б. PP



в. AP

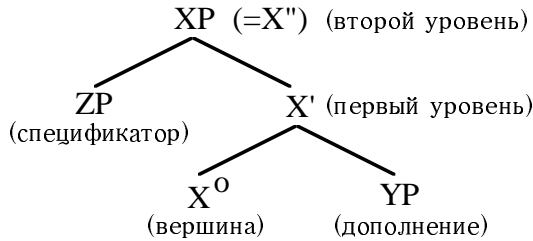


• Спецификаторы и комплементы = два вида **аргумента**

10) а. Два универсальных правила структуры составляющих:  
(линейное направление **не** фиксировано)

- i) • XP --> (ZP) X' (спецификатор и узел первого уровня)
- ii) • X' --> X' (WP) (узел первого уровня и адьюнкт)
- iii) • X' --> X<sup>0</sup> (YP) (вершина и комплемент)

б. Общая структура фраз (без адьюнктов):



**Адьюнкты** (the structure of non-arguments)

• Все элементы, которые выполняют чисто определяющую роль и не являются **аргументами**, называются **адьюнктами** (adjuncts). Примеры:

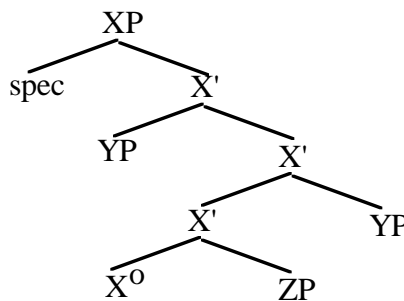
- отношения между наречием и глагольной группой
- отношения между (AP) и существительным, которое AP определяет
- отношение между предложной группой (PP) и NP/VP

11) **X-Штрих Теория (X-bar theory)**

**X'-theory:**

- i) XP --> (spec) X'
- ii) X' --> (YP) X'
- iii) X' --> X' (WP)
- iv) X' --> X<sup>0</sup>(ZP)

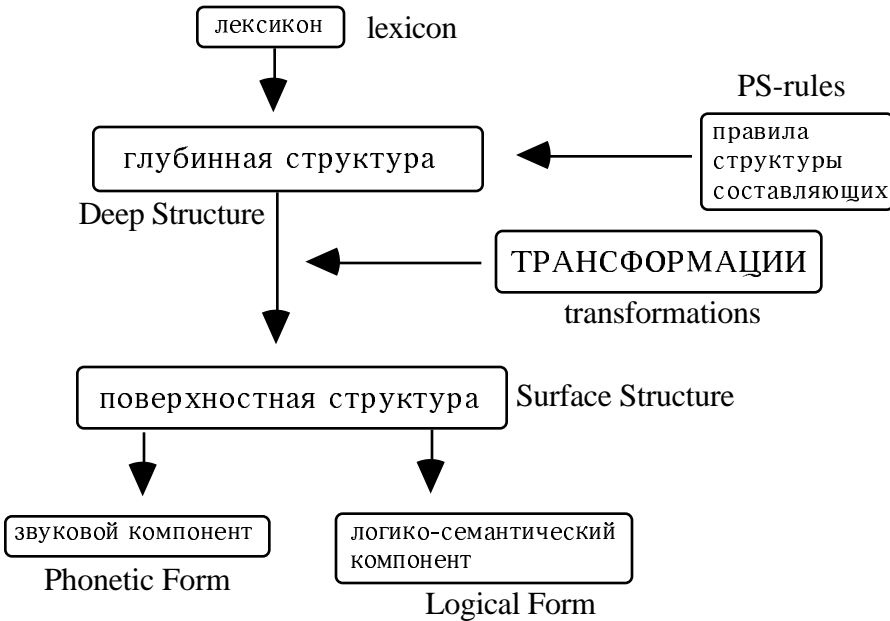
(spec is another XP)





Old approach: Трансформация, это операция над одним синтаксическим деревом, которая его превращает в другое

16) Схема ранней трансформационной грамматики:  
(from Standard Theory --> Government & Binding Theory)



New approach: Two syntactic operations: "Merge" and "Move"

17) **Questions about Question Formation** (= "WH-movement")

**What moves?** What do WH-words replace?

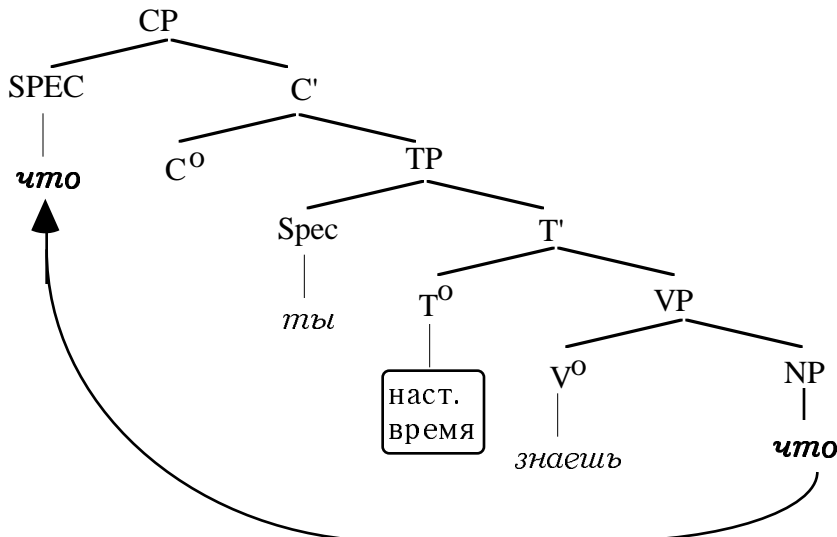
Where do they originate? (and how do we know?)

- 18) а. Я узнал, что они наняли Робинсона.  
б. \*Я узнал, что они наняли.

**Where does the WH word or phrase move to?**

- We need a phrase higher than TP for questions. Call it QP. QP = CP??
- WH movement = movement into SpecCP. Why Spec? (i) Because XP moves (ii) because the head spot is also needed

19) Structure of a simple WH-question:



20) **Упражнение:**

- a. Нарисуйте глубинную структуру (14)
- b. Стрелками, покажите результат трансформации WH-movement

**HEAD MOVEMENT:**

**I Subject-Verb English Yes/No Questions:**

- 21)
  - a. Will John sing?
  - b. Can you hear me?
- 22)
  - a. Do you understand me?
  - b. Did you see "Titanic"?

**English WH Questions:**

- 23)
  - a. What will John sing?
  - b. Where can I buy a newspaper?
- 24)
  - a. Where do you live?
  - b. What did you say?

**I. Verb Movement ( $V^0 \rightarrow T^0$ )**

English:

- 25)
  - a. The President often sees Mary.
  - \*b. The President sees often Mary.

French:

- 26)
  - a. Le président voit souvent Marie.  
the president sees often Mary
  - \*b. Le président souvent voit Marie.  
the president often sees Mary

- Are English and French adverbs attached in the same place? (Yes))
- Where are verbal adverbs attached? (Assume adjoined to VP)
- How do we account for the English vs French difference? (French has V raising!)

**II.  $I^0$  raising to  $C^0$ . ( $I^0 \rightarrow C^0$ )**

- 27)
  - a. [ He will tell the truth ]
  - b. Will [ he \_\_\_ tell the truth ] ?

4 arguments that **will** in (27b) begins in  $I^0$ :

i) The **gap** argument:

- 28) \*Will [ he can tell the truth ] ?

ii) Subcategorization: modals are always followed by certain VPs ( [ \_\_ VP ] )

- 29) a. Yeltsin can **go**. (\*going / \*went / \*gone / \*goes)  
b. Can [ Yeltsin \_\_ **go** ] (\*going / \*went / \*gone / \*goes)

iii) Indirect Speech:

- 30) a. Can [ Lebed \_\_ get his job back ]?  
b. I don't know whether [ Lebed can get his job back ]

iv) Have-contraction:

- 31) a. **I have** called all the candidates.  
b. **I've** called all the candidates.
- 32) a. **I should have** called all the candidates.  
b. Should [ **I** \_\_ **have** called all the candidates ] ?  
\*c. Should [ **I've** called all the candidates ] ?
- 33) a. **We will have** finished by 4:00.  
b. Will [ **we** \_\_ **have** finished by 4:00 ] ?  
\*c. Will [ **we've** finished by 4:00 ] ?

• So we can see that modals raise out of TP (across the subject). This predicts that the first auxiliary elements (*have* or *be*) also can raise out of IP. We know this is true:

- 34) a. Yeltsin [ **has** [ been working hard ] ]  
b. **Has** Yeltsin \_\_ [ been working hard ] ?
- 35) a. Lebed [ **is** [ \_\_\_\_ running for president ] ]  
b. **Is** Lebed [ \_\_\_\_ running for president ] ] ?

Q: Why do we think that these elements move to C<sup>0</sup>?

A: The existence of an overt C<sup>0</sup> element appears to block movement:

- 36) a. He [ **would** [ come back on Sunday if he could ] ]  
b. **Would** [ he \_\_\_\_ [ come back on Sunday ...] ]
- 37) a. She wondered [ **would** [ he \_\_\_\_ [ come back on Sunday ] ] ]  
b. She wondered [ **whether** [ he would [ come back on Sunday ] ] ]  
\*c. She wondered [ **whether would** [ he \_\_\_\_ [ come back on Sunday ] ] ]

•• If we only allow elements in T<sup>0</sup> to raise to C<sup>0</sup>, then we *predict* that lexical verbs *cannot*:

- 38) a. Lebed [ **likes** politics ]  
b. Gorby [ **reads** lots of political manifestos ].
- 39) \*a. **Likes** Lebed [ \_\_\_\_ politics ] ?  
\*b. **Reads** Gorby [ \_\_\_\_ lots of political manifestos ].

•• We predict that French verbs can raise to C<sup>0</sup>:

- 40) a. Vous [ **parlez** [ \_\_\_\_ Anglais ] ]  
you speak English  
b. **Parlez-** [ vous \_\_\_\_ [ \_\_\_\_ Anglais ] ] ?  
speak you English

And, finally, **GERMAN** !!

41) a. Martin kann [ fussball spielen ]  
Martin can soccer play

b. Martin spielt fussball.  
Martin plays soccer

- Looks like  $V^0 \rightarrow T^0$
- It also looks like the normal V position is *after* the direct object  
 $V' \rightarrow (NP) V^0$

But things are not the same as with French verbs or English auxiliaries:

42) a. Today Martin can play soccer.  
 b. Today Martin has been playing soccer.  
 \*c. Today has [ Martin \_\_\_ been playing soccer ].

Q: Where should **today** go?

A: Adjoined to TP

43) French:

a. Aujourd'hui Martin joue au football  
 today Martin plays at soccer

\*b. Aujourd'hui joue Martin \_\_\_\_\_ au football  
 today plays Martin at soccer

• Back to German:

44) \*a. Heute Martin kann [ fussball spielen ]  
 today Martin can soccer play

b. Heute kann Martin \_\_\_\_\_ [ fussball spielen ]  
 today can Martin soccer play

45) \*a. Heute [Martin spielt fussball ]  
 today Martin plays soccer

b. Heute spielt [ Martin \_\_\_\_\_ fussball ]  
 today plays Martin soccer ]

• Now let's look at embedded clauses. Recall (41), repeated as (46):

46) a. Martin kann [ fussball spielen ]  
 Martin can soccer play

b. Martin spielt [ fussball \_\_\_\_\_ ]  
 Martin plays soccer

47) a. Ich weiss [ Martin kann [ fussball spielen ] ]  
 I know Martin can soccer play

b. Ich weiss [ Martin spielt [ fussball \_\_\_\_\_ ] ]  
 I know Martin plays soccer

However, when C is filled (with a complementizer), things look quite different:

- 48) a. Ich weiss dass [ Martin [ fussball spielen ] kann ]  
 I know that Martin soccer play can
- \*b. Ich weiss dass Martin kann [ fussball spielen ]  
 I know that Martin can soccer play

- We can't put the sentences in (46) inside a CP with an overt C<sup>0</sup>. Why not?
- Because in (46) and everywhere else in German, the element in T<sup>0</sup> raises to C<sup>0</sup> (if it can)
- In embedded clauses like (48) with an overt C, T<sup>0</sup> cannot raise.
- So the final position must be the underlying position for German T<sup>0</sup> !
- German IPs also are head-final (like German VPs)

- 49) a. Martin kann [ [ fussball spielen ] \_\_\_\_ ]  
 Martin can soccer play
- b. Martin spielt [ [ fussball \_\_\_\_ ] \_\_\_\_ ]  
 Martin plays soccer

Q: So what is the difference between German and English?

- German sentences are CPs!
- German has V<sup>0</sup>-->T<sup>0</sup> and T<sup>0</sup> -->C<sup>0</sup> raising.
- The underlying position of the verb is *after* its complement (NP) and the underlying position of T is after its complement (VP)

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Japanese!

- (1) a. Mary-ga sono hon-o katta  
 Mary-Nom that book-Acc bought  
 'Mary bought the book.'
- b. John-ga [Mary-ga sono hon-o katta to] omotteiru  
 John-Nom Mary-Nom that book-Acc bought that thinks  
 'John thinks that Mary bought the book.'
- c. John-ga [Bill-ga [Mary-ga nani-o katta to] itta ka] sitteiru  
 John-Nom Bill-Nom Mary-Nom what-Acc bought that said Q knows  
 'John knows what Bill said that Mary bought.'