VP and the theta criterion

The verb is the head of a VP

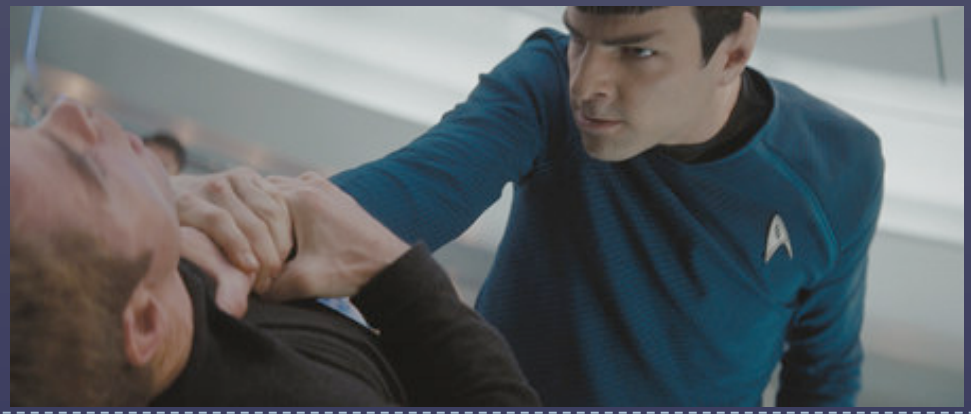
The verb…

A. determines the number of objects in the sentence.
B. determines the grammatical category of its objects.
C. places semantic restrictions on the subject and object(s).

There are different types of verbs

Intransitive/1 place predicate

1. Spock rarely smiles.
2. Spock smiles rarely.
3. Kirk is thinking.
4. Kirk is thinking in his chair.



- Verb phrases

There are different types of verbs

Transitive/2 place predicate

5. The crew is wearing [$_{DP}$ spaces
6. Kirk decided [$_{CP}$ that the crew spacesuits].

7. The hero heard [$_{CP}$ th maniacally].
8. The hero heard [$_{DP}$ th laughter].

There are different types of verbs

- Di-transitive/3 place predicate

Kirk put [$_{DP}$ the phaser] [$_{PP}$ on the table].
Kirk gave [$_{DP}$ Spock] [$_{DP}$ a phaser].

Arguments

D: An argument is a participant in an action and is not optional

- The verb (head of VP) selects the number of arguments in the sentence.
- The verb determines the phrase type (DP, PP, CP) of its arguments.

Why are these sentences bad?

- The crew repaired the ship.
- *The crew repaired.

- Kirk gave Spock a ph
- *Kirk gave a phaser.

Not enough arguments!

*The crew repaired that I like the ship.

- Verb phrases

V imposes semantic restrictions on its arguments

Intransitive

- #The ship is smiling.

Transitive

- #The ship is wearing a spacesuit.

Ditransitive

- #Kirk gave a phaser to the ship.

Theta roles

Agent – the argument that performs an action
Force – entity that instigates an action, but not consciously or voluntarily.
Experiencer – the argument that feels or perceives an event
Theme – the argument undergoing an action or a movement
Patient – the argument that undergoes a visible, physical change in state.
Goal – the end point for a movement
Recipient – the typically animate destination of some moving object.
Proposition – theta role assigned to phrases (CPs) that express something true or false.
Source – the starting point for a movement (*from*)
Location – the place where an action occurs (*in*)

- Theta role assignment

What theta roles are assigned?

a. Spock rarely smiles.
b. The crew is wearing spacesuits.
c. Kirk decided that the crew should wear spacesuits.
d. Kirk put the phaser on the table.

Arguments and theta roles

smiles- selects 1 argument

- agent = performs the action

wear - selects 2 arguments

- agent = performs the action
- theme = undergoes the action

give, bring - selects 3 arguments

- agent = performs the action
- theme = undergoes the action
- recipient/goal = the endpoint of movement

More on theta role assignment

- Verbs can assign theta roles.

  Kirk gave [a phaser] [to Spock].
  DP subject *DP object* *PP indirect object*
  agent **theme** **recipient**

- Other heads, such as prepositions, can assign theta roles.

  Kirk saw [Spock] [in the shuttle bay].
  DP subject *DP object* *not an indirect object = does not get a theta role from the verb*
  experiencer **theme** **location**

Your task will be to determiner if a DP is receiving a theta role from the verb or from somewhere else.

V assigns θ roles to specific positions

Spock is smiling.

DP subject

agent

The crew is wearing spacesuits.

DP subject *DP object*

agent **theme**

Kirk gave [a phaser] [to Spock].

DP subject *DP object* *PP indirect object*

agent **theme** **recipient**

What keeps things from going wrong?

- Theta role assignment

The theta criterion

The **theta criterion** states:

1) Each argument is assigned 1 and only 1 theta role
2) Each theta role is assigned to 1 and only 1 argument

*The crew repaired.
*Kirk gave a phaser.
#The ship is wearing a spacesuit.

Arguments

Arguments of the verb…

1) receive a theta role from the verb
2) are not optional
3) come in two varieties

-subject = part of TP

-object(s) = form a constituent with the verb

VP adjuncts

The **theta criterion** states:

1) Each argument is assigned 1 and only 1 theta role
2) Each theta role is assigned to 1 and only 1 argument

Some phrases do not get a theta roles from the verb and are therefore not arguments of the verb. These are called **adjuncts**.

Adjuncts behave different syntactically from arguments.

Adjuncts

Q: What is an adjunct?

D: An **adjunct** is element that is (usually) optional & that provides additional information regarding an event/activity, e.g. location, time, manner, etc.

Complements vs. adjuncts

1) DPs & CPs are complements. PPs are usually adjuncts (except with the verbs *bring, send, give, take, put*, etc.)

2) Complements must be adjacent to the verb:

- That girl will put a picture on your desk before tomorrow.
- *That girl will put before tomorrow a picture on your desk.
- *That girl will put a picture before tomorrow on your desk.

Complements vs. adjuncts

3) Verb + comp(s) can be replaced by *did so/do so* (& the adjunct can be left behind). A verb can't be replaced by *did so/do so* if the complements are left behind.

- That girl will put a picture on your desk before tomorrow.
- That girl will do so. (V+comps+adjunct)
- That girl will do so before tomorrow. (V+both comps)
- *That girl will do so on your desk before tomorrow. (V+1 comp)
- *That girl will do so a picture on your desk before tomorrow. (V)

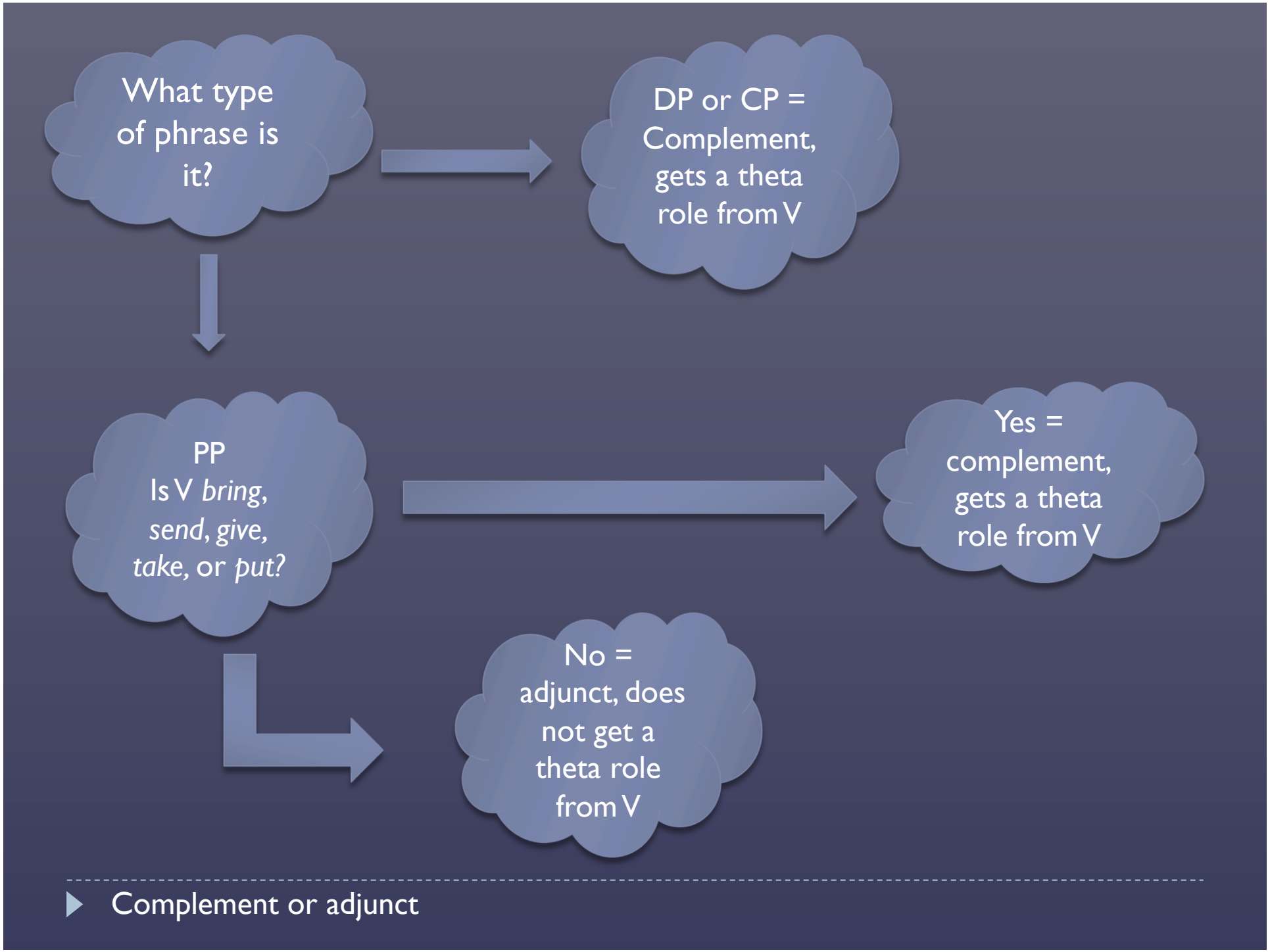
Complements vs. Adjuncts

Why draw complements an adjuncts differently?

- Show how theta roles are assigned (from V vs. from P)
- Show constituency (indicated by color):

Kirk [gave [a phaser] [to Spock]].
DP subject *DP object* *PP indirect object*
agent **theme** **goal**

Kirk [[saw [Spock]] [in the shuttle bay]].
DP subject *DP object* *not an indirect object = does not get a theta role from the verb*
agent **theme** **location**

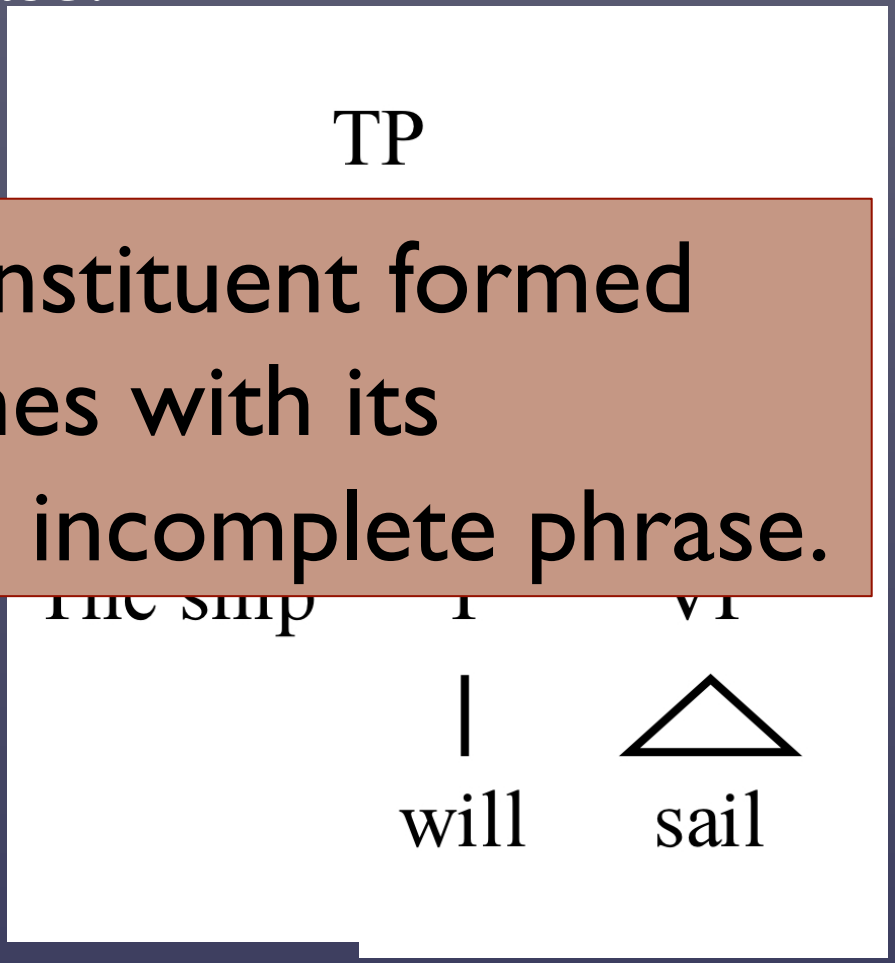


- Complement or adjunct

What is that crazy bar level?

Is this a complete tense phrase?

No! We need a subject.



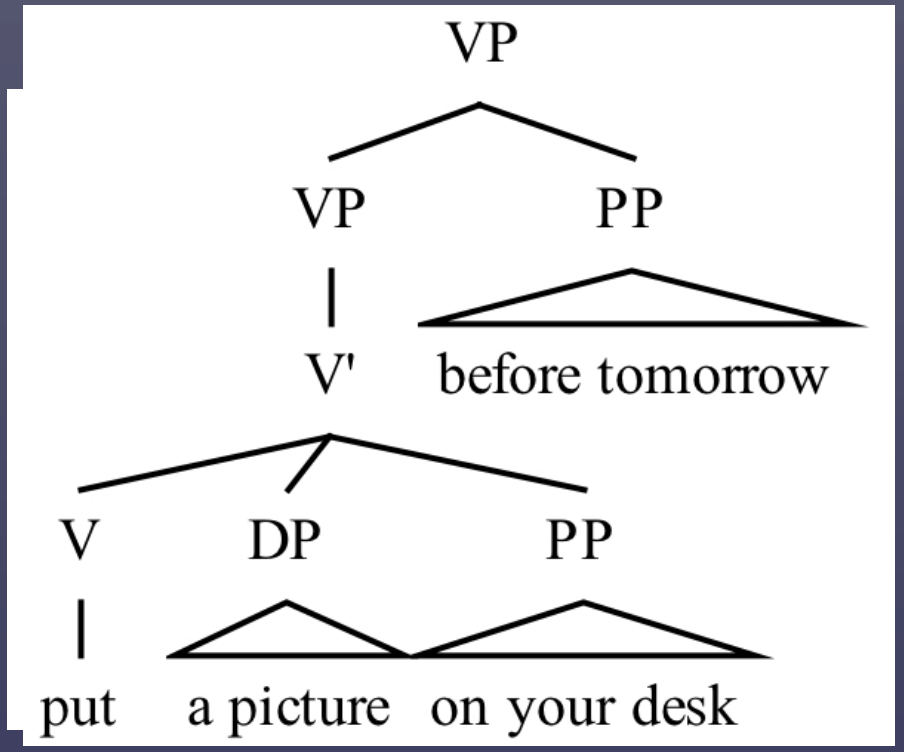
The bar level is the constituent formed when the head combines with its complement(s). It is an incomplete phrase.

complete TP. It is an incomplete TP.

V' (V bar)

Is this a complete VP?

- That girl will [$_{VP}$ put a picture on your desk].

What about?

- That girl will [$_{VP}$ put a picture on your desk] before tomorrow.