
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/ I 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} spacesuits].
- 6. Kirk decided [_{CP} that the crew was wearing spacesuits].
- 7. The hero heard [_{CP} that the crew was laughing maniacally].
- 8. The hero heard [_{DP} the crew's laughter].



► Verb phrases

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].



► Verb phrases

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.

▶ Verb phrases

Why are these sentences bad?

- ▶ The crew repaired the ship.
- ▶ *The crew repaired.
- ▶ Kirk gave Spock a phaser.
- ▶ *Kirk gave a phaser.

Not enough arguments!



*The crew repaired that I like the ship.

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- ▶ 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

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- ▶ Theta role assignment

More on theta role assignment

- ▶ Verbs can assign theta roles.

Kirk gave [a phaser] [to Spock].

DP subject

agent

DP object

theme

PP indirect object

recipient

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

Kirk saw [Spock] [in the shuttle bay].

DP subject

experiencer

DP object

theme

not an indirect object = does not get a theta role from the verb

location

Your task will be to determine 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



The crew is wearing spacesuits.

DP subject

DP object



Kirk gave [a phaser] [to Spock].

DP subject

DP object

PP indirect object



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 structure

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.

▶ VP structure

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.

▶ VP structure

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)

▶ VP structure

Complements vs. Adjuncts

Why draw complements and 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

agent

DP object

theme

PP indirect object

goal

Kirk [[**saw** [**Spock**]] [**in the shuttle bay**]].

DP subject

agent

DP object

theme

not an indirect object = does not get a theta role from the verb

location



What type
of phrase
is it?

DP or CP =
Complement,
gets a theta
role from V

PP
Is V *bring*,
send, *give*,
take, or *put*?

Yes =
complement,
gets a theta
role from V

No =
adjunct, does
not get a
theta role
from V

► Complement or adjunct

What is that crazy bar level?

Is this a complete tense phrase?

No! We need a subject.

TP

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.

The ship I will sail

▶ VP structure

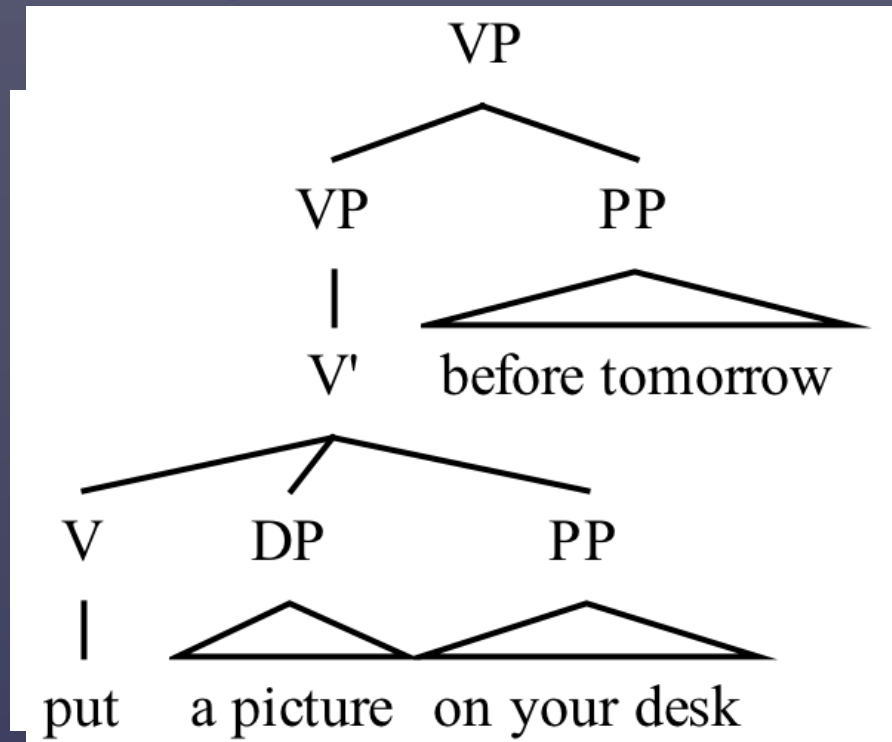
V' (V bar)

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.



- ▶ VP structure