

# Verb subcategorization 1

- **Problem:** Constraints on verbs and their complements.

*Nadia told / instructed / \*said / \*informed Ross to sit down.*

*Nadia \*told / \*instructed / said / \*informed to sit down.*

*Nadia told / \*instructed / \*said / informed Ross of the requirement to sit down.*

*Nadia gave / donated her painting to the museum.*

*Nadia gave / \*donated the museum her painting.*

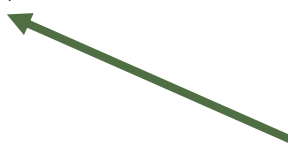
*Nadia put / ate the cake in the kitchen.*

*Nadia \*put / ate the cake.*

# Verb subcategorization 2

- VPs are much more complex than just V with optional NP and/or PP.
  - Can include more than one NP.
  - Can include clauses of various types:  
*that Ross fed the marmoset*  
*to pay him the money*
- **Subcat**: A feature on a verb indicating the kinds of verb phrase it allows:  
\_np, \_np\_np, \_inf, \_np\_inf, ...

Write this way to distinguish from constituents.



# Verb tense and aspect 1

- **Tense and aspect** markings on verb:
  - Locate the event in time (relative to another time).
  - Mark the event as complete/finished or in progress.

*Nadia rides the horse.* — In progress now.

*Nadia rode the horse.* — Completed before now.

*Nadia had ridden the horse.* — Completed before before now.

*Nadia was riding the horse.* — In progress before now.

⋮

# Verb tense and aspect 2

- Tense: past or present
- Aspect: simple, progressive, or perfect

<i>Nadia ...</i>		Auxiliary verb		In progress		Complete	
	Simple	Progressive		Perfect			
Present	<i>rides</i>	<i>is</i>	<i>riding</i>	<i>has</i>	<i>ridden</i>		
Past	<i>rode</i>	<i>was</i>	<i>riding</i>	<i>had</i>	<i>ridden</i>		
		Present participle		Past participle		<i>... the horse</i>	

# Verb tense and aspect 3

- Tense: past or present
- Aspect: simple, progressive, or perfect

<i>Nadia ...</i>		Auxiliary verbs	
	Simple		Perfect progressive (continuous)
Present	<i>rides</i>	<i>has been</i>	<i>riding</i>
Past	<i>rode</i>	<i>had been</i>	<i>riding</i>

... *the horse*

# Modal verbs

- **Modal verbs:** Auxiliary verbs that express degrees of certainty, obligation, possibility, prediction, etc.

*Nadia*

*{could, should, must, ought to, might, will, ...}*

*{ride, be riding, have ridden, have been riding}*

*the horse.*

# English auxiliary system

- Structure (so far):  
[MODAL] [HAVE] [BE] MAIN-VERB
- General pattern:  
VP  $\rightarrow$  AUX VP  
AUX  $\rightarrow$  MODAL | HAVE | BE
  - Use features to capture necessary agreements.

# Voice 1

- **Voice:** System of assigning thematic roles to syntactic positions.
  - English has **active** and **passive** voices.
- Passive expressed with *be*+past participle.  
Other auxiliaries may also apply, including progressive *be*.
- *Nadia was kissed.*                      *Nadia was being kissed.*  
*Nadia had been kissed.*              *Nadia had been being kissed.*  
*Nadia could be kissed.*              *Nadia could have been being*  
*kissed.*
- Structure:  
[MODAL] [HAVE] [BE<sub>1</sub>] [BE<sub>2</sub>] MAIN-VERB



# Voice 2

*The goalie kicked the ball.*

**ACTIVE**

Event: *kicked*

Role: Agent  
(doer)

Role: Theme  
(thing affected)

Thing: *the goalie*    Thing: *the ball*

kick (agent=goalie, theme=ball)

# Voice 3

*The ball was kicked.*

**PASSIVE**

Event: *kicked*

Role: Theme  
(thing affected)

Thing: *the ball*

kick (agent=?, theme=ball)

# Voice 4

*The ball was kicked by the goalie.* **PASSIVE**

Event: *kicked*

Role: Theme  
(thing affected)

Role: Agent  
(doer)

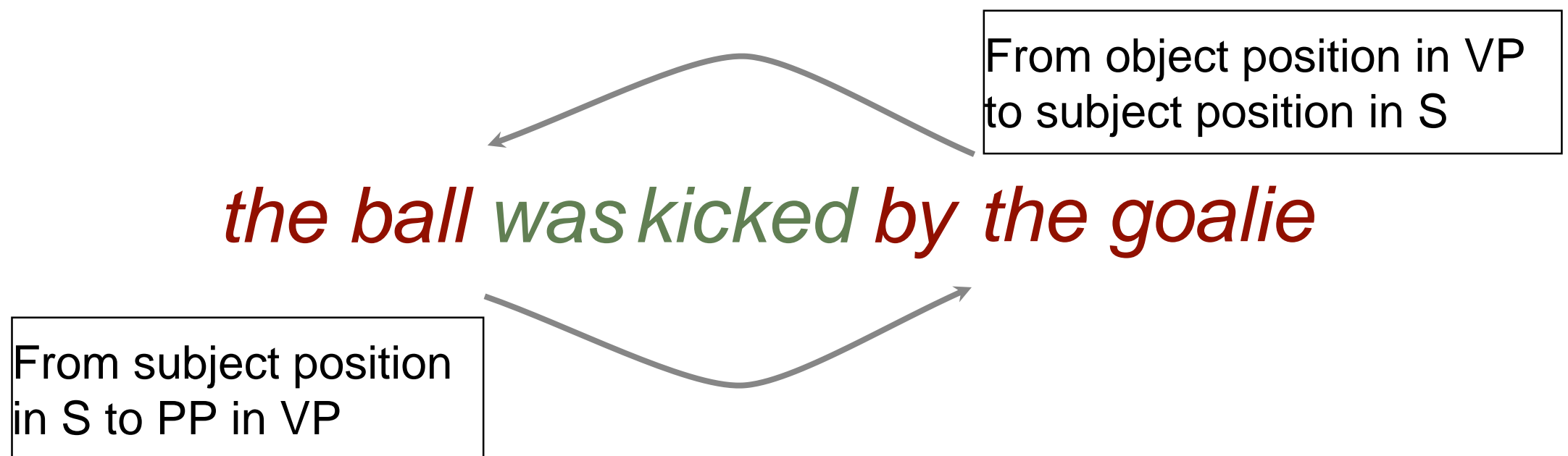
Thing: *the ball*    Thing: *the goalie*

kick (agent=goalie, theme=ball)

# Passive as *Diathetic alternation*

*the goalie*      *kicked*      *the ball*

# Passive as *Diathetic alternation*



But the semantic representation doesn't change

# Some useful features

- **VForm**: The tense/aspect form of a verb:  
passive, pastprt, ...
- **CompForm**: The tense/aspect form of the  
complement of an auxiliary.