

March 22, 2006

## CLASSES 16-18: ASPECT & MODALITY

### OVERVIEW

- tense: deals with events happening in time (in past and present)
- aspect: determines, among others, how an event unfolds in time
- mood: or rather modality, connects possible worlds to reality...

### ASPECT

(1) *some relations of S, T, E*

- a.  $T < S$
- b.  $T = S$
- c.  $E \subseteq T$
- d.  $T \subseteq E$

- next: explore *E/T relations* ("aspect"), roughly like  $E \approx T$  ("default")
- aspectual terminology: *aspect* ("form") vs. *aktionsart* ("description")

(2) *define these terms, find examples, and put them in the right order and relation!*  
 accomplishment achievement activity atelic event eventuality telic state

- *perfective aspect* ("perfect"):  $E < T < S$

(3) When I got there at 6 o'clock, Mary had already arrived an hour before.

(4)

		<b>Non-perfect</b>	<b>Perfect</b>
		Default $E \approx T$ ( $E_e \subseteq T$ / $T \subseteq E_s$ )	$E < T$
<b>Present</b>	$T = S$	<i>speaks</i> $T = S$ and $E_e \subseteq T$ or $T \subseteq E_s$	<i>has spoken</i> $T = S$ and $E < T$
<b>Past</b>	$T < S$	<i>spoke</i> $T < S$ and $E_e \subseteq T$ or $T \subseteq E_s$	<i>had spoken</i> $T < S$ and $E < T$

- (5) a. Mary has been in Belmont fort two days.  
 b. A: Has Mary ever been in Belmont for more than just one day?  
 B: Mary has been in Belmont for two days — that was a year ago.

- (6) a. ? Gutenberg has discovered the art of printing.  
 b. ? Einstein has visited Princeton.  
 c. \* Mary has walked to the market yesterday.

- *progressive* aspect (“Reichenbachian”):  $R \subseteq E$  (and  $R = S$ )
- fine for temporal relations, but what about the *event/state distinction*?

- (7) a. Shelby is running in the street.  
 b. Max was crossing the street, when he was hit by a bus.

- Dowty:  $R \subseteq E$  not enough – introduce modality (possible worlds; “inertia world”)

- (8) The progressive sentence *S* describes an event *E* in world *w* if and only if the non-progressive sentence *S'* describes *E* in all inertia worlds (for *E* in *w*).

### MODALITY

And this is a very nice introduction to a more thorough study of *possible worlds*...

- (9) a. nouns                    *possibility, necessity*  
 b. adjectives                *possible, necessary, probably*  
 c. adverbs                   *possibly, necessarily, probably*  
 d. main verbs                *require, know, hope*  
 e. modal verbs              *could, can, must, may, should, might*

- world-to-world relations (*accessibility relation*)

- (10) a. *deontic accessibility relations*  
 pick out worlds which are “good” according to some measure  
 b. *epistemic accessibility relations*  
 pick out worlds for which relevant information known

- modals also differ in how many worlds are relevant

- (11) a. The book may be in Professor Wong’s office.  
 b. The book must be in Professor Wong’s office.

- both modal verbs are epistemic (or at least, may be in this case), but:  
 - *may* is a possibility modal, while *must* is a necessity modal
- similar distinction for deontic modals (possibility / necessity)

- (12) You may / must depart at 5:00 p.m.