Chapter 4:  
Tense, Aspect,  
Modality and Negation  
19 November 2009
Modality

- Speaker’s attitude/ judgment toward the proposition

- Almost no effect on the propositional frame (argument structure: participant role, verb type, transitivity, lexical semantics)
Two Types of Judgment

- **Epistemic**: About truth, probability, certainty

- **Evaluative (Deontic)**: About desire, intent, preference, obligation
Epistemic Modalities:

- **Presupposition:** assumed to be true, unchallengeable
  The guy *you dated* was very nice.

- **Realis Assertion:** Strongly asserted but challengeable
  No, he’s a jerk.

- **Irrealis Assertion:** weakly asserted as possible or likely
  He will/plans to break up with me.

- **Negation:** Strongly asserted as false.
  He was not a gentleman at all.
Grammatical Construction and Presuppositions

1. Adverbial clauses with realis tense-aspect:
   - Because he has gone away...
   - Since
   - Although
   - In spite of the fact that
   - Due to the fact that
   - When He left....
   - While he is studying....
2. Participial adverbial clause
   - Having finished reading,....
   - Studying at his room,....

3. Relative clause / Wh-question / Cleft-focus
   - The girl I taught last year is in the swimming team.
   - Who did you teach last year?
   - It was Ann that I taught last year, not Amy.

4. Factive PCU Verbs
   - I regretted that she was not invited.
   - I know that he was in Taichung.

5. Nominalized clauses
   - His coming to class surprised everyone.
   - I was surprised by her moving out.
Grammatical Distribution of Modalities

1. Irrealis and Non-declarative Speech Acts
   - Command/Request/Suggestion
     - *Turn on the radio!*
     - *Could you please turn on the radio?*
     - *Let’s turn on the radio.*
     - *(They are all future projecting.)*
   - Yes-No Question
     - *Did you turn on the radio?*
     - *(Low epistemic certainty)*
2. Correlation between Realis/Irrealis and Tense-aspect

- Past: R
- Present: R
- Perfective: R
- Future: IRR
- Habitual: R or IRR
3. Modality and Adverbs

- Epistemic Adverbs:
  - *Maybe, probably, possibly, likely, supposedly, presumably, surely, undoubtedly*

- Deontic Adverbs:
  - *Preferably, hopefully, ideally*
4. Adverbs and Tense-aspect

- Irrealis adverbs override the realis tense-aspect:
  - Maybe she left.
  - Hopefully they are studying for midterms.

- Some adverbs can only occur with certain tense:
  - I’d like to have your homework preferably by Friday.
  - *I had your homework preferably by Friday.
5. Modality and Modal Aux

- Modal Aux
  - 1. Must be irrealis
  - 2. Involves either (epistemic) probability or (deontic) ability, permission or obligation.

6. Relation between epistemic and deontic:

- If deontic, then epistemic (BUT not vice versa)
- If preference/intent/obligation, then uncertainty (BUT not vice versa)
  - since all these evaluations are future-projecting.
7. Modal Aux usually codes more than one modalities:

- Can/May
  1. Ability: *After taking a class, he can/may use computers now.*
  2. Permission: *If you have a student ID, you can/may use the computer.*
  3. Probability: *Computers can/be dangerous.*

- Should/Must
  1. Obligation: *She should/must come to class.*
  2. Probability: *He should/must be here by now.*
8. Modal Aux and Past Tense:

<table>
<thead>
<tr>
<th>Present</th>
<th>Past</th>
<th>(older pairing)</th>
</tr>
</thead>
<tbody>
<tr>
<td>can</td>
<td>could</td>
<td></td>
</tr>
<tr>
<td>shall</td>
<td>should</td>
<td></td>
</tr>
<tr>
<td>will</td>
<td>would</td>
<td></td>
</tr>
<tr>
<td>may</td>
<td>might</td>
<td></td>
</tr>
</tbody>
</table>
Ongoing change in English

- Past modals are re-analyzed as another modal with a different sense.
- Past is signaled by Modal + Have

<table>
<thead>
<tr>
<th>Present</th>
<th>Past</th>
</tr>
</thead>
<tbody>
<tr>
<td>She could do it</td>
<td>could have done it</td>
</tr>
<tr>
<td>She may do it.</td>
<td>may have done it</td>
</tr>
<tr>
<td>She must do it.</td>
<td>must have done it</td>
</tr>
<tr>
<td>She might do it.</td>
<td>might have done it</td>
</tr>
<tr>
<td>She would do it.</td>
<td>would have done it</td>
</tr>
<tr>
<td>She should do it.</td>
<td>should have done it</td>
</tr>
<tr>
<td>*She can do it.</td>
<td>*She can have done it</td>
</tr>
</tbody>
</table>

- Reason: ‘can vs. could’ (present vs. past) is still preserved.
‘Modal+have’ has a shift in the semantic range:

- **Could (or may):**
  - Ability, permission, probability
- **‘Could/may have’:** only ability and probability
  - *If she tried hard, she could have done it.*
- **Counter-factual** (irrealis marker + past/perfect)
  - Could
  - Should + have
  - Would
  - Might
9. Irrealis and Verb complement

Some Verbs create an irrealis modals scope

- **1. Modality V**
  - I wanted to go to Paris.
  - I planned to quit.

- **2. Manipulative V**
  - I wanted him to quit.
  - He asked her to go out.

- **3. PCU V**
  - He thought that she loved him.
  - She imagined that he loved her.
Cognitive & Communicative Aspects of Tense-Aspect-Modality

1. Definition of Markedness
   - A. Structurally more complex
   - B. Less frequently occurring
   - C. Cognitively harder to process
## 2. Marked T-A-M

<table>
<thead>
<tr>
<th></th>
<th>Unmarked</th>
<th>Marked</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Modality</strong></td>
<td>realis</td>
<td>irrealis</td>
</tr>
<tr>
<td><strong>Perfectivity</strong></td>
<td>perfective</td>
<td>imperfective</td>
</tr>
<tr>
<td><strong>(Progressiveness)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completed</td>
<td>completed</td>
<td>incompletive</td>
</tr>
<tr>
<td>Boundedness</td>
<td>bounded</td>
<td>unbounded</td>
</tr>
<tr>
<td>Compactness</td>
<td>compact</td>
<td>durative</td>
</tr>
<tr>
<td><strong>Perfectness</strong></td>
<td>simple past</td>
<td>perfect</td>
</tr>
<tr>
<td>Sequentiality</td>
<td>in-sequence</td>
<td>off-sequence</td>
</tr>
<tr>
<td>Relevance</td>
<td>event-anchored</td>
<td>speech-anchored</td>
</tr>
</tbody>
</table>

- **Marked T-A-M**
- **Unmarked**
- **Marked**

- **Modality**
- **Perfectivity**
- **(Progressiveness)**
- **Perfectness**
- **Sequentiality**
- **Relevance**
3. Why??

More salient (more vivid and accessible in mind):

- Events that did occur in real time, or are occurring. (Mod.)
- Events that sharply bounded, compact, fast-changing. (Perf.)
- Events that are narrated in a coherent sequence (Seq.)
- Events that are viewed relevant to its own occurring time. (Rel.)

4. Scripts/Schemata

Routinized, culturally-shared sequence of events

eg. ‘cooking’, ‘going to a restaurant’
The Syntax of T-A-M

- I could have been writing letters...
- VP = (AUX) V (…) 
- AUX = (PAST) (MODAL) (HAVE) (BE)
- BUT:
  - He may come tomorrow.
  - He might come tomorrow.
  - He can still do it.
  - He could still do it.
  - He will have done it.
  - He would have done it.
  - He should/could have done it.
  - *He shall/can have done it.
- She must finish on time.
- She must have finished on time.

- Revised rule:
  AUX = (Modal)/(Past) + (Have) + (BE)
Recent Developments in English T-A-M

- ‘have’, ‘got’, ‘need’: are they Modal Aux or Modality V?
  - *She wants* to rest.
  - *She has* to rest.
  - *She’s got* to rest.
  - *She needs* to rest.

- **Semantically:**
  Modal Aux
  Marking deontic, irrealis modality

- **Syntactically:**
  Modality V
  True Modals: *She should* rest.
But (not completely compatible with all tenses/aspects):

- **a. with perfect aspect?**
  - She has wanted to rest.
  - She has had to rest.
  - She has needed to rest.
  - She’s got to rest.

- **b. with present tense?**
  - *She gets to rest.

- **c. with progressive?**
  - *She is wanting to rest.
  - ?She is having to rest.
  - *She is needing to leave.

- **d. with Modal:**
  - She may want to leave.
  - She may have to leave.
  - *She may have got to leave.
Homework 8

- How do we express the senses of ‘can’ and ‘must’ in Chinese?
  - What are the senses of ‘can’ and ‘must’ in English?
  - How are they translated in Chinese?
Negation

1. Negation and truth value (logic)
   - If P is true, then non-P is not true.
   - But: I am happy ≠ I am not unhappy. (?)

2. Negation and strength of assertion
   - Strongly asserted: Negation & Realis assertion
3. Negation and presupposition

- A: What’s new?
  B: Mary is pregnant.
- A: What’s new?
  B: Mary is not pregnant.

**Negation requires an Assumption**

The hearer has heard about, believes in, take for granted or at least familiar with the corresponding affirmative proposition.

4. Negation as a Speech-act

- A: You know what? (You don’t know.)
  B: She’s got a boy friend. (I know.)
- A: Nay, she’s not.
  (What you know is wrong, I know better.)
7. Scope of negation

a. Main clause negation does not affect subordinate clause:
   - I saw the guy who stood in the corner.
   - I didn't see the guy who stood in the corner.
   - I’m sorry he’s lovesick.
   - I'm not sorry he’s lovesick.

b. VP-negation vs. Narrow-scope negation:
   - Richard didn't kill the goat.
   - Richard didn't kill the goat, Sam did. (Subj focus)
   - Richard didn’t kill the goat, he killed the cow. (Obj)
   - Richard didn’t kill the goat, he just pushed it. (V)

Negation on adverbs:
   - He didn’t love her for her money.
   - He didn’t go out with her.
   - He didn’t go home frequently.
8. Syntax of Negation

- **Aux = NEG**
- \( \{ \text{Modal} \} \ (\text{have}) \ (\text{be}) \)
- \( \{ \text{Past} \} \ (\text{Past}) \ \text{DO} \)

9. Other Syntax behavior of negation

a. Main Clause vs. Subordinate Clause Negation:

- I don’t think she is in love.
- I think she is not in love.
- **Degree of certainty:** ‘Is she in love?’
  - I don’t think so, though it may be true.
  - My belief is that she is not in love.
b. Forms of Negation
- Syntactic negation: She’s not/isn’t happy.
- Morphological negation: She is un-happy.
- Semantic/Inherent negation: She is sad.

c. Negative operators: sensitive only to syntactic Neg
- I was happy and Miranda was too.
- I was unhappy and Miranda was too/*either.

d. NP-Negation
- He didn’t skip the class. (VP-Negation)
- No one skipped the class. (Subj-NP Negation)
- He skipped no class. (Obj-NP Negation)

e. Why ‘Don not’??
- Old English emphatic VP negation: I do not see.
  (Then, de-emphasized as regular form.)
- cf. I do like it.