#### Unit 9

# Auxiliaries and Functional Categories

Tense, Mood, Aspect and Voice

## Learning Objectives

- Using theta grids, explain the restrictions that various kinds of C,T, and D nodes impose on their complements.
- Learn to distinguish the various tense, aspect, voice, and mood properties of English verbal constructions.
- Learn to identify the modals and various auxiliaries.
- Identify participles, gerunds, bare forms, preterites, and present tense forms of verbs.
- Demonstrate the similarities and differences between main verbs, auxiliaries, and modals.
- Draw trees showing stacked VPs.
- Discuss the properties of do-support.

# Selection of and by functional categories

# Selection of Complementizers

- I. I think that Art likes his beer.
- 2. I think Art likes his beer.
- 3. \*I think for Art to like his beer.
- 4. \*I think Art to like his beer.
- 5. \*I think if Art likes his beer.
- 6. I ordered that Art drink his beer.
- 7. I ordered Art drink his beer.
- 8. !I ordered for Art to drink his beer.
- 9. I ordered Art to drink his beer.
- 10. \*I ordered if Art drink his beer
- II. \*I inquired that Art like his beer.
- 12. \*I inquired Art likes his beer.
- 13. \*I inquired for Art to like his beer.
- 14. \*I inquired Art to like his beer.
- 15. I inquired if Art likes his beer.

think: \*nonfinite, \*if

order: \*if

inquire: \*that, \*Ø, \*nonfinite

## Complementizers

| C              | [Q] | [Finite] |
|----------------|-----|----------|
| that           |     | +        |
| Ø (finite)     | _   | +        |
| for            | _   | _        |
| Ø (non-finite) | _   |          |
| if/whether     | +   | _        |

### Theta Grids For Cs

#### Think

| Agent | CP           |
|-------|--------------|
| DP    | [–Q,+finite] |
|       |              |

think: \*nonfinite, \*if

#### Order

| Agent | CP   |
|-------|------|
| DP    | [–Q] |
|       |      |

order:\*if

#### Inquire

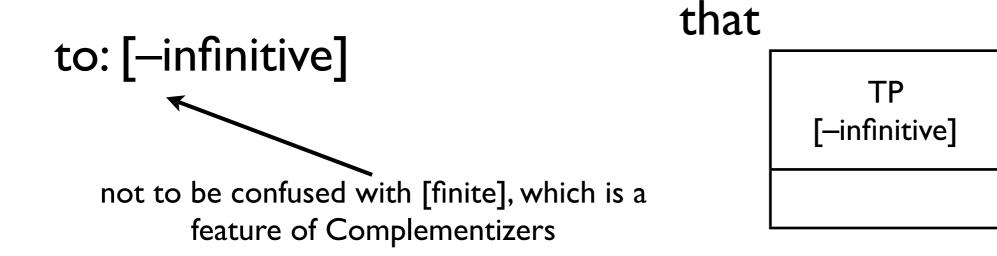
| <u>Agent</u> | СР           |  |
|--------------|--------------|--|
| DP           | [+Q,+Finite] |  |
|              |              |  |

inquire: \*that, \*Ø, \*nonfinite

Note: this theta grid is wrong in the textbook, change -Q to +Q

# Selection by complementizers

- I. \*Heidi thinks that Andy to eat salmon-flavored candy bars.
- 2. Heidi thinks that Andy is eating salmon-flavored candy bars.
- 3. Heidi thinks that Andy has eaten salmon-flavored candy bars.
- 4. Heidi thinks that Andy should eat salmon-flavored candy bars.
- 5. Heidi thinks that Andy will eat salmon-flavored candy bars.
- 6. Heidi thinks that Andy eats salmon-flavored candy bars.
- 7. Heidi thinks that the salmon-flavored candy bars were eaten



## Selection by D

- the muffin
- a muffin
- the muffins
- \*a muffin
- \*the Andrew
- \*the him

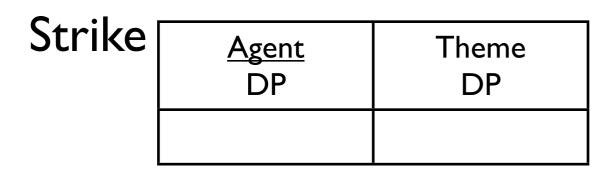
#### a/an

```
NP
[-plural, -proper, -pronoun]
```

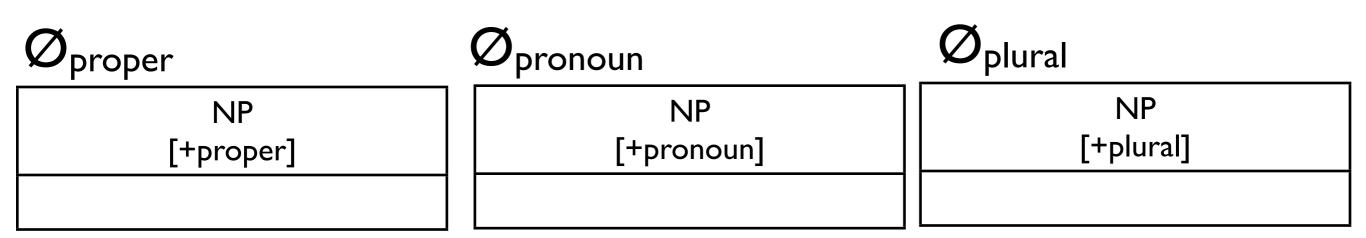
#### the

```
NP
[-proper, -pronoun]
```

### Do all NPs have DPs?



- I. The man struck the rock.
- 2. Andrew struck it.
- 3. Raindrops struck rooftops

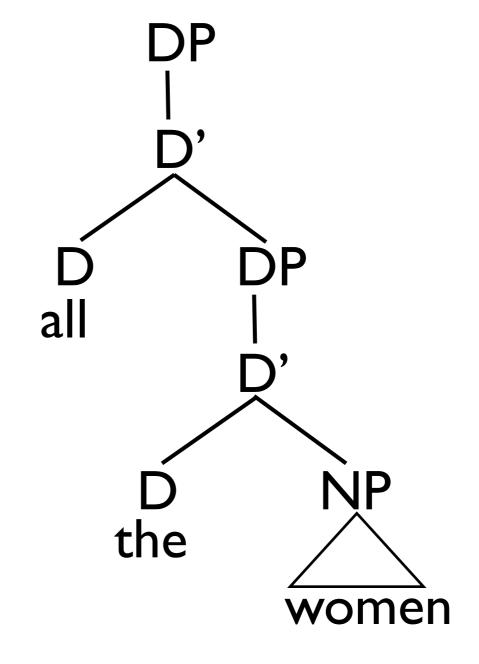


an alternative has pronouns and proper names being category D themselves.

### All

• all the women

AII DP



## Distinguishing Tense, Aspect, Voice, and Mood

### Tense

- Event Time: the time the action being described occurs.
- Assertion Time: the time of speaking of the sentence.
- Tense:
  - past tense ET < AT</li>
  - present tense ET = AT
  - future tense AT > ET

marked by preterite (danced, ran)

marked by -s in 3rd person (dances)

marked by will (will dance)

## Aspect

- Aspect is defined relative to a Reference Time (RT)
  - Perfect aspect: RT > ET: I had fallen
  - Progressive aspect RT and ET overlap: I was falling.

There are many other aspectual distinctions, but these are the two that are marked in English

## Marking Aspect

#### Participle

- sometimes called a "past participle" but that name is confusing since it can occur in all tenses.
- eaten, danced, drunk, hit
- watch out for the -ed forms, they are not necessarily past tense, e.g. He will have danced.

#### Gerund

- sometimes called a "present participle". Note not restricted to nominal uses.
- eating, dancing, drinking, hitting

## Marking Aspect

- Perfect Aspect: HAVE + PARTICIPLE
  - I had eaten (past perfect)
  - I have eaten (present perfect)
  - I will have eaten (future perfect)
- Progressive Aspect: BE + GERUND
  - I was eating (past progressive)
  - I am eating (present progressive)
  - I will be eating (future progressive)

# Aspects can be combined

- I had been eating (past perfect progressive)
- I have been eating (present perfect progressive)
- I will have been eating (future perfect progressive)
- been is the participle form of be (so have + been gives us perfect)
- Been + eating = progressive.
- have been eating = perfect progressive

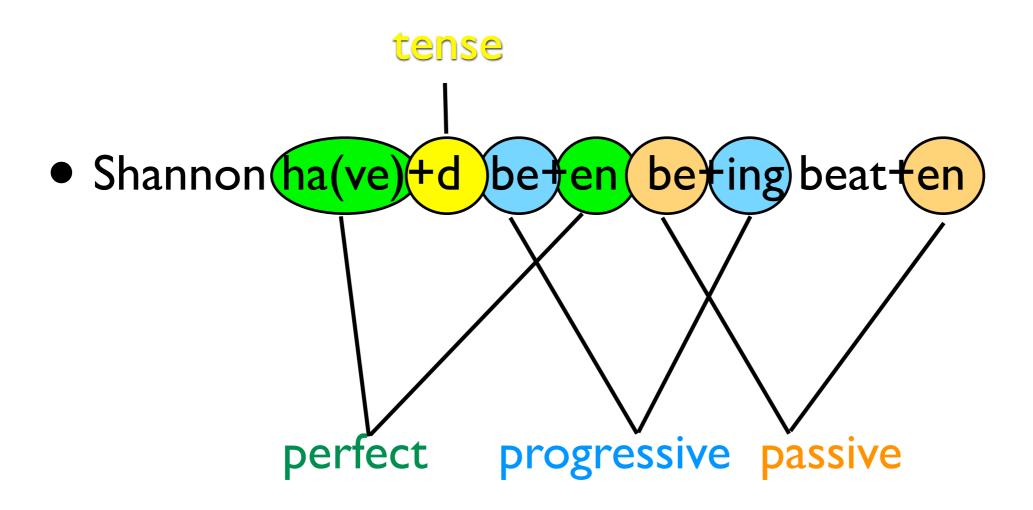
### Voice

- Voice represents changes to the number and position of arguments.
  - Active: theme is in object position: Calvin ate the beef-waffles
  - Passive: theme is in subject position: The beef waffles were eaten by Calvin.
- Active in English is unmarked, Passive is marked by BE+PARTICIPLE

# Marking voice and aspect

|             | auxiliary following verb |            |  |
|-------------|--------------------------|------------|--|
| þerfect     | have                     | participle |  |
| progressive | be                       | gerund     |  |
| þassive     | be                       | participle |  |

## Combining aspect & voice



#### Mood

- Speaker's perspective on the event
- possibility, probability, necessity, obligation, ability
- Modals are one mean of expressing mood (other means include adverbs or embedding verbs)
- Modals: can, could, may, might, would, shall, should, must, ought

### Modals

- There can only be one modal
  - \*Jeff must can eat the muffin.
- Always precede all other auxiliaries
  - Jeff must have eaten the deep-fried muffin
  - \*Jeff has must eaten the deep-fried muffin
- Always precedes not
  - Jeff must not have eaten the muffin
  - \*Jeff not must have eaten the muffin
- Is followed by the bare form of the verb and are not inflected for person themselves
  - \*Jeff musts eat a deep fried muffin
  - \*Jeff must eats a deep fried muffin

The exception is "might could" in some dialects of English, which is probably a compound

## The [FORM] Feature

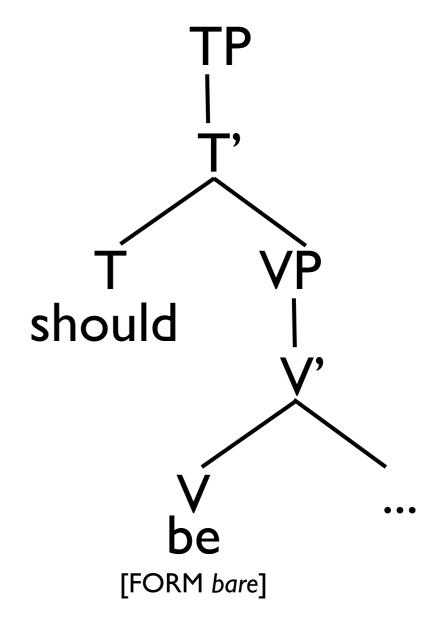
| [FORM bare] | [FORM participle] | [FORM gerund] | [FORM preterite] | [FORM present] |
|-------------|-------------------|---------------|------------------|----------------|
| eat         | eaten             | eating        | ate              | eat/eats       |
| dance       | danced            | dancing       | danced           | dance/dances   |
| bite        | bitten            | biting        | bit              | bite/bites     |
| take        | taken             | taking        | took             | take/takes     |
| lay         | laid              | laying        | laid             | lay/lays       |
| be          | been              | being         | was/were         | is/am/are      |
| have        | had               | having        | had              | have/has       |

# Selection by Modals and will

- Modals & will can only take VPs as complements, explaining why there can only be one of those.
   They never selects for another TP. Any VP will do.
  - I must eat (main verb complement)
  - I must have eaten (perfect complement)
  - I must be eating (progressive complement)
  - The muffin must be eaten (passive complement)
  - \*I must could eat
  - \*I will must eat
- They also require that whatever semantic type of VP follows, it has to be in the bare form.
  - \*I must being eaten
  - \*I must eaten
  - \*He must eats

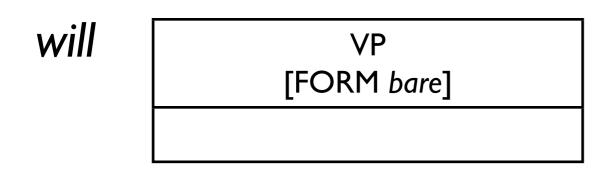
## Selection by T

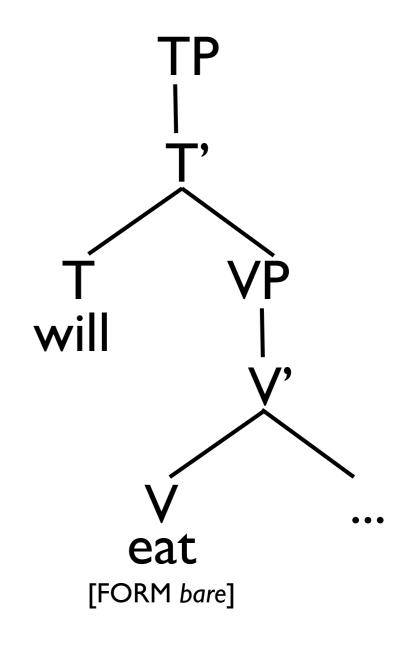
should VP [FORM bare]



## Selection by T

 Will, the future tense marker behaves like modal and takes a verb in its bare form



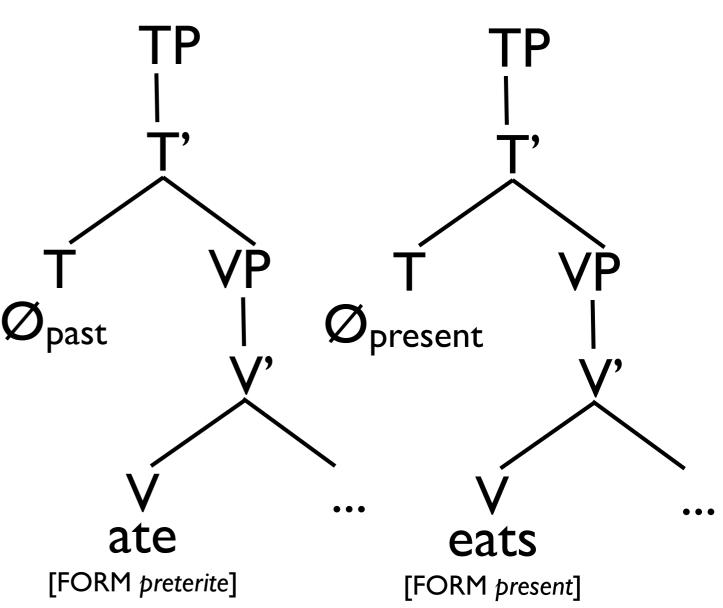


## Selection by T

• A similar analysis can be given to the  $\emptyset_{past}$  and  $\emptyset_{present}$  T heads, except that they select for preterite and present forms respectively

Ø<sub>past</sub> VP [FORM preterite]

Øpresent VP [FORM present]

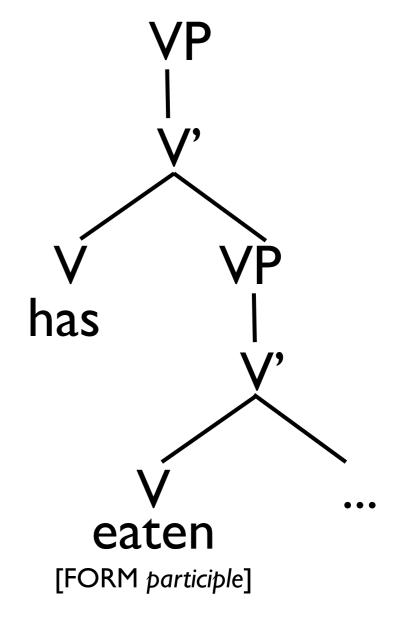


#### Perfects

- Perfects can take progressives and passives and main verbs as complements, but never modals nor other perfects
  - I have eaten (simple perfect.
  - I have been eating (perfect progressive)
  - The muffin has been eaten (perfect passive)
  - \*I have must gone.
  - \*I have had gone†.
- They also require that whatever semantic type of VP follows, it has to be in the participle form.

### Perfects

have<sub>perf</sub> VP
[-perfect, FORM participle]



†there is a dialect of English that allows two auxiliary haves in a row: If I had have eaten -- this is a different have. It is a modal roughly equivalent to would.

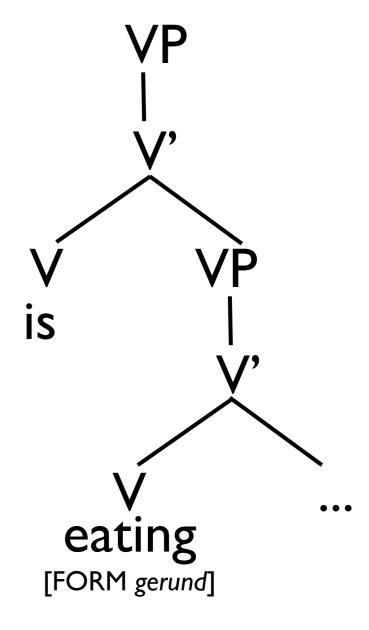
## Progressives

- Progressives can take passives and main verbs as complements, but never modals, perfect have, nor other progressive be auxiliaries
  - I am eating (simple progressive)
  - The muffin is being eaten (progressive passive)
  - \*I have must gone.
  - \*I have had gone.
  - \*I am being eating.
- They also require that whatever semantic type of VP follows, it has to be in the gerund form.

## Progressives

beprog

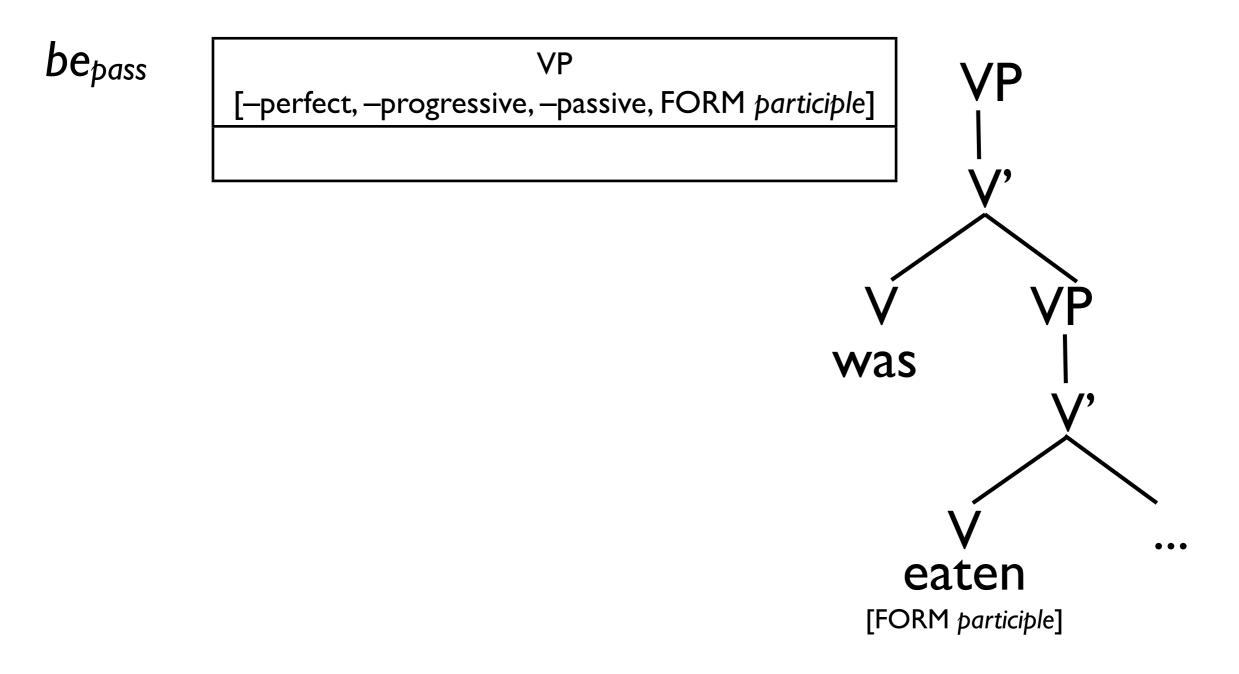
VP
[-perfect, -progressive, FORM gerund]



### Passives

- Passives can take only main verbs as complements, but never modals, perfect have, progressive be auxiliaries, or other passive be auxiliaries
  - The muffin(simple passive)
  - \*The muffin is been eaten
  - \*I have must gone.
  - \*I have had gone.
  - \*I am being eating.
- They also require that the following verb has to be in the *participle* form.

### **Passives**



# Explaining the strict ordering

- The selectional restrictions of each type of element (e.g. [-perfect]) determines what can appear as their complement.
  - Modals/Will > Perfect Aux > Progressive Aux > Passive Aux > Verb.

## Multiple Auxiliaries: Stacked VPs should etc. been

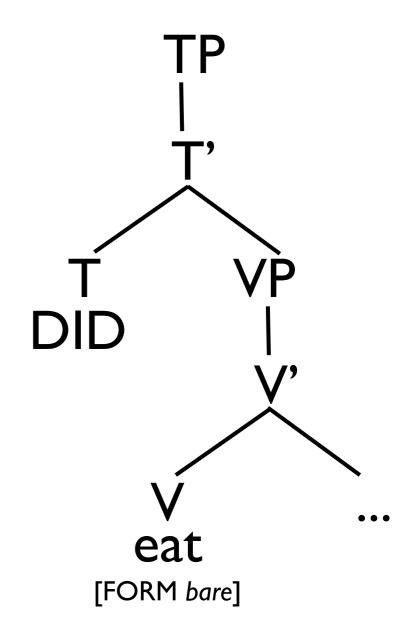
Shannon should have been being fed at the table.

## Do Support

- You have eaten the apples ~ Have you eaten the apples?
- I ate the apples ~ \*Ate you the apples? ~ Did you eat the apples?
- You DID eat the apples!
- I eat apples ~ I do not eat apples
- Appears in yes/no questions when there is no other auxiliary
- Appears in emphatic constructions
- Appears with negatives when there is no other auxiliary

## **Do**emphatic

Do<sub>emph</sub> VP [FORM bare]

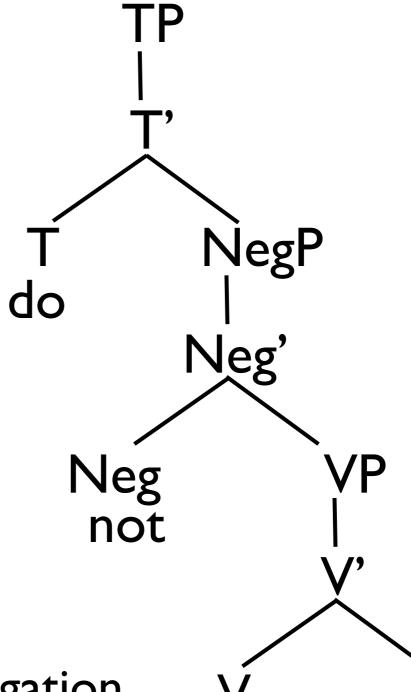




do<sub>neg</sub> NegP

not

VP [FORM bare]



 $\emptyset_{past}$  and  $\emptyset_{pres}$  don't select for negation.

eat [FORM bare]

### Questions

• Do support for questions is more complicated. We'll return to this in later units.

- Selection of complementizers by main verbs [±Q], [±finite]
- Selection of TP by C, [±infinitive]
- Selection of NP by types of D [±proper, ±pronoun, ±plural]
- Null (Ø) D heads explain selection of proper names, pronouns etc by Verbs that otherwise require a DP

- Tense: Past, Present, Future
- Aspect: Perfect, Progressive
- Voice: Active, Passive
- Mood: Necessity, Obligation, Possibility, Ability

- Perfect = HAVE + participle
- Progressive = BE + Gerund
- Passive = BE + participle
- Modals are T nodes that select VPs
- Theta grids using the [FORM] feature guarantee the co occurrence of auxiliaries with forms, as well as strict ordering.

- Do support for negation and emphatics is accomplished with theta grids.
- Do support for questions will be dealt with in later chapters.