Verb Forms
Handout

Part 1

English sentences often contain more than one verb. The verbs are italicized below:

(1) They *have seen* the full horror of the assignment.
(2) They *might see* the full horror of the assignment.
(3) They *might have seen* the full horror of the assignment.
(4) They *are seeing* the full horror of the assignment.
(5) They *could see* the full horror of the assignment.
(6) They *could be seeing* the full horror of the assignment.
(7) They *could have been seeing* the full horror of the assignment.

The last verb in this sequence is the one which names the activity described by the sentence. For this reason it is often called the **main verb**. All the verbs preceding it are called **auxiliary verbs** (note the spelling of *auxiliary*).

BEFORE GOING FURTHER, be sure you can identify the main verb in (8-9):

(8) They might be shouting.
(9) They might be in the park.

The largest number of auxiliaries is three (excluding passives):

(10) They *might have been* eating.

There are three auxiliary slots, and each slot is optional. The first slot is filled auxiliaries like *may, might, can, should*, etc. These are called **modals**:

(11) **MODALS**: *may, might, must, can, could, will, would, shall, should*

Notice that only one modal is allowed in a sentence:

(12) a. They *might* leave.
    b. *They might will* leave.

The second slot is filled with the auxiliary *have*; notice that the modal slot is optional, so *have* could be the first (and possibly only) auxiliary. However, *have* cannot come before a modal:

(13) a. They might *have left.*  
    b. They might *have been leaving.*  
    c. They *have left.*  
    d. *They have might leave.*
The third slot is filled with the auxiliary be. Since the modal and the have slots are optional, be can be the first (and only) auxiliary. Neither the modal not auxiliary have can follow be:

(14)  
   a. They might have been leaving.  
   b. They have been leaving.  
   c. They might be leaving.  
   d. They are leaving.  
   e. * They are might leave.  
   f. * They are having left.  

To summarize, the order of auxiliaries is:

(15)  
   (modal) (have) (be)  

In order to modify our grammar, we define three new syntactic categories: V_m, V_h, and V_b:

(16)  
   a. may, V_m  
   might, V_m  
   ...  
   b. have, V_h  
   c. be, V_b (note: on the third part of the midterm, this is renamed V_{b-A})  

Note that there are homophonous main verbs have and be:

(17)  
   a. They have a new computer.  
   b. They are happy.  

We now modify or phrase structure VP rule to incorporate auxiliaries:

(18)  
   VP → {(V_m) (V_h) V (NP) (AP) (PP), VP {PP, Adv}}  

Part 2

Most English verbs have six forms: three finite forms (present singular, present plural, past) and three nonfinite forms (the bare form, the -ING form, and the -EN form). Some examples are given below.

(19)  
   Pres. Sg.  |  Pres. Pl.  |  Past  |  Bare  |  -ING  |  -EN
   is/am    |      are   |  was/were |   be   |   being |   been  
   gives    |      give  |  gave    |   give |   giving |   given 
   sings    |      sing  |  sang    |   sing |   singing |  sung   
   runs     |      run   |  ran     |   run  |   running |  run
   walks    |      walk  |  walked  |   walk |   walking |  walked 
   buys     |      buy   |  bought  |   buy  |   buying |  bought 
   has      |      have  |  had     |   have |   having |   had
Every auxiliary verb requires the verb that immediately follows it, whether it is another auxiliary or the main verb, to occur in a particular form:

A. The verb (main verb or auxiliary) following a modal must be in the **bare** form:

(20)  
   a. She might *eat* the sweetbreads.  
   b. She might *have* eaten the sweetbreads.  
   c. She might *be* leaving.

B. The verb (main verb or auxiliary) following the auxiliary *have* must be in the **en** form:

(21)  
   a. He has *eaten* the sweetbreads.  
   b. He has *been* eating the sweetbreads.

C. The verb following the auxiliary *be* must be in the **ing** form:

(22)  
   Kim is *eating* the sweetbreads.

The first verb (auxiliary or main verb) following the first NP of the sentence is in a finite form – that is, **present singular** (if the NP is singular -23), **present plural** (if the NP is plural -24) or **past** (25):

(23)  
   a. She has eaten sweetbreads.  
   b. He eats sweetbreads.  

(24)  
   a. They are eating the sweetbreads.  
   b. They eat sweetbreads.  

(25)  
   a. Kim had eaten sweetbreads.  
   b. The students ate the sweetbreads.

In order to implement these verb form restrictions in our grammar, we define a new type of rule – **form rules** (also called **morpho-syntactic rules**). These rules are unlike the familiar **phrase structure rules**. Form rules do not create or alter phrase structure (trees). Instead they add morphological features to existing structure. These features can be interpreted as instructions to the morphological component telling it which morphological verb form is required – hence, they are part of the syntax-morphology interface. We need five form rules.

The first two deal with the finite verb forms – they tell us that the verb immediately following the NP can be present or past; they also say that the verb will be singular or plural, depending on whether the NP is singular or plural (note, this will usually only be important if the verb is present tense):

\[ V \rightarrow V_{[\text{past or present}]} / \text{NP } \]

1 Note that in these form rules, ‘V’ stands for the syntactic categories, V, V_m, V_h, and V_b
b. \( V \rightarrow V_{[\text{a number, } \beta \text{ person}]} \) / \( \text{NP}_{[\text{a number, } \beta \text{ person}]} \)

The next rule stipulates that the verb following a modal must be in the \textbf{BARE} form:

(27) \( V \rightarrow V_{[\text{BARE}]} \) / \( V_m \)

The form rule in (28) gives us an \textbf{EN} form after the auxiliary \textit{have}:

(28) \( V \rightarrow V_{[\text{EN}]} \) / \( V_h \)

Finally, (29) requires that the verb form after the auxiliary \textit{be} is \textbf{ING}:

(29) \( V \rightarrow V_{[\text{ING}]} \) / \( V_b \)

Given these form rules, we need to worry a bit about the organization of the grammar. We still have our phrase structure rules and our lexicon. These define syntactic trees (phrase structures). Once the tree is built and all the lexical items are inserted, the form rules apply, adding morphological features to the various verbs. These features are then instructions to the morphology and phonology, which then provide the appropriate verb forms:

(30) \[ S \]
\[ \text{phrase structure before FORM RULES} \]

\[ \text{NP}_{[\text{sg, 3rd}]} \]
\[ \text{VP} \]
\[ \text{pn} \]
\[ \text{She} \]
\[ V_h \]
\[ \text{have} \]
\[ V_b \]
\[ \text{be} \]
\[ V \]
\[ \text{sing} \]

(31) \[ S \]
\[ \text{phrase structure after FORM RULES} \]

\[ \text{NP}_{[\text{sg 3rd}]} \]
\[ \text{VP} \]
\[ \text{pn} \]
\[ \text{She} \]
\[ V_h[\text{pres, sg, 3rd}] \]
\[ \text{has} \]
\[ V_b[\text{EN}] \]
\[ \text{been} \]
\[ V_{[\text{ING}]} \]
\[ \text{singing} \]